## 156th Meeting of State Level Expert Appraisal Committee (SEAC-1)

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Proposed API Manufacturing unit of M/s Chinchem Laboratories Pvt. Ltd.

**Is a Violation Case:** No

**General Information:** Venue: Maharashtra Economic Development Council, Board Room, 3rd Floor, Y. B. Chavan Centre, Gen. Jagannathrao Bhosale Marg, Near Mantralaya, Mumbai- 400 020.

| | |
|---|---|
| **1.Name of Project** | M/s Chinchem Laboratories Pvt. Ltd. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Dr. Nikhil Dhoot |
| **4.Name of Consultant** | M/s Sadekar Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Not applicable |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New Project ( Green Field Project) |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | NA |
| **8.Location of the project** | G-18, Lote-Parshuram Industrial Area MIDC |
| **9.Taluka** | Khed |
| **10.Village** | Dhamandevi |
| **11.Area of the project** | Lote Parshuram MIDC |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** Plan is not yet approved |
| | **Approved Built-up Area:** 6300 |
| **13.Note on the initiated work (If applicable)** | NA |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Possession receipt from MIDC |
| **15.Total Plot Area (sq. m.)** | 20000 sq.m. |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** Not applicable |
| | **b) Non FSI area (sq. m.):** Not applicable |
| | **c) Total BUA area (sq. m.):** Not applicable |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** |
| | **Approved Non FSI area (sq. m.):** |
| | **Date of Approval:** |
| **19.Total ground coverage (m2)** | Not applicable |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | Not applicable |
| **21.Estimated cost of the project** | 270000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| **23.Number of tenants and shops** | Not applicable |
| **24.Number of expected residents / users** | Not applicable |

| | |
|---|---|
| **25.Tenant density per hectare** | Not applicable |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 8 meter |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Not applicable |
| **29.Existing structure (s) if any** | Not applicable |
| **30.Details of the demolition with disposal (If applicable)** | Not applicable |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Isosorbide-5-Mononitrate | 0 | 5.0 | 5.0 |
| 2 | Diluted Isosorbide-5-Mononitrate | 0 | 10.0 | 10.0 |
| 3 | Diluted Isosorbide Dinitrate | 0 | 15.0 | 15.0 |
| 4 | Diluted Nitroglycerin | 0 | 25.0 | 25.0 |
| 5 | Isosorbide | 0 | 5.0 | 5.0 |
| 6 | Dimethyl Isosorbide | 0 | 5.0 | 5.0 |
| 7 | Carbimazole | 0 | 2.5 | 2.5 |
| 8 | Methimazole | 0 | 2.5 | 2.5 |
| 9 | Acetic Acid (By-product) | 0 | 2.08 | 2.08 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | Not applicable |
| | **Fresh water (CMD):** | Not applicable |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | Not applicable |
| | **Fire fighting - Underground water tank(CMD):** | Not applicable |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| **Wet season:** | **Source of water** | Not applicable |
| | **Fresh water (CMD):** | Not applicable |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | Not applicable |
| | **Fire fighting - Underground water tank(CMD):** | Not applicable |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| **Details of Swimming pool (If any)** | Not applicable | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | 0 | 1.8 | 1.8 | 0 | 0.36 | 0.36 | 0 | 1.44 | 1.44 |
| Industrial Process | 0 | 51 | 51 | 0 | 0 | 0 | 0 | 63.04 | 63.04 |
| Cooling tower & thermopack | 0 | 241.31 | 241.31 | 0 | 207.64 | 207.64 | 0 | 33.67 | 33.67 |
| Gardening | 0 | 19.47 | 19.47 | 0 | 19.47 | 19.47 | 0 | 0 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Fresh water requirement | 0 | 313.58 | 313.58 | 0 | 227.47 | 227.47 | 0 | 98.15 | 98.15 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | NA |
| | **Size and no of RWH tank(s) and Quantity:** | NA |
| | **Location of the RWH tank(s):** | NA |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | NA |
| | **Budgetary allocation (O & M cost) :** | NA |
| | **Details of UGT tanks if any :** | Underground Fire Hydrant Tank- 300 KL and Process water storage tank - 100 KL will be constructed |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Storm water drainage will be provided |
| | **Quantity of storm water:** | 66.6 KL/Hr |
| | **Size of SWD:** | -- |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 1.44 |
| | **STP technology:** | Sewage generated from domestic activity will be treated in Septic tank and overflow from septic tank will be connected to the Aeration tank of ETP. |
| | **Capacity of STP (CMD):** | NA |
| | **Location & area of the STP:** | NA |
| | **Budgetary allocation (Capital cost):** | NA |
| | **Budgetary allocation (O & M cost):** | NA |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | 220.5 MT construction waste will get generated during construction phase of the unit |
| | **Disposal of the construction waste debris:** | Construction waste will be disposed through local body. |
| **Waste generation in the operation Phase:** | **Dry waste:** | NA |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | NA |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Dedicated area for HW storage will be provided as per plot layout |
| | **Area for the storage of waste & other material:** | -- |
| | **Area for machinery:** | -- |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 5 |
| | **O & M cost:** | 10 |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 3.6 | In between 6.5-8.5 | In between 6.5-8.5 |
| 2 | COD | mg/l | 90000 | <250 | <250 |
| 3 | BOD | mg/l | 30000 | <100 | <100 |
| 4 | TDS | mg/l | 195000 | <2100 | <2100 |
| 5 | TSS | mg/l | 7000 | <100 | <100 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 98.15 CMD |
| Capacity of the ETP: | HCOD/HTDS treatment: Pre Primary + Primary Treatment followed by Stripper MEE with ATFD of 77 CMD capacity And MEE condensate + LCOD/LTDS treatment : 95 CMD |
| Amount of treated effluent recycled : | 67 CMD |
| Amount of water send to the CETP: | It will be ZLD project |
| Membership of CETP (if require): | NA Provisional membership will be taken |
| Note on ETP technology to be used | HCOD/HTDS effluent from process will be treated by giving pre primary + Primary treatment followed by Stripper MEE with ATFD. while the LCOD/ LTDS effluent will be treated in conventional ETP. The condensate from MEE and sewage effluent will be connected to the aeration system of conventional ETP and it will be treated along with LCOD effluent. After tertiary treatment it will get passed through two stage RO system and the reject from RO will be connected to evaporator of MEE |
| Disposal of the ETP sludge | ETP sludge will be disposed through CHWTSDF, Taloja |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Distillation Residue | 20.3 | T/M | 0 | 22.20 | 22.20 | CHWTSDF, Taloja |
| 2 | Spent Carbon | 28.3 | T/M | 0 | 1.99 | 1.99 | CHWTSDF, Taloja |
| 3 | Chemical Sludge from Wastewater treatment | 35.3 | T/M | 0 | 3.0 | 3.0 | CHWTSDF, Taloja |
| 4 | Process Residue | 28.1 | T/M | 0 | 1.95 | 1.95 | CHWTSDF, Taloja |
| 5 | MEE Residue | 37.3 | T/D | 0 | 13 | 13 | CHWTSDF, Taloja |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6 | Discarded containers barrels/liners/ plastic bags/ PPE etc | 33.1 | Nos/M | 0 | 1000 | 1000 | CHWTSDF, Taloja / MPCB authorized recycler |
| 7 | Recovered Mix Solvents from Process effluent stream using Stripper MEE | 28.2 | T/M | 0 | 21 | 21 | CHWTSDF, Taloja |
| 8 | Spent Oil | 5.1 | Lit/M | 0 | 200 | 200 | MPCB authorized recycler |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | 0.5 TPH boiler X 2 Nos. | LDO : 0.235 KLD | 1 | 30 | 0.6 | 110 |
| 2 | 2.0 TPH boiler | LDO : 2.122 KLD | 2 | 30 | 0.6 | 110 |
| 3 | Thermopack of 250000 Kcal/ hr X 2 Nos | LDO : 0.7 KLD | 3 | 30 | 0.6 | 110 |
| 4 | Scrubber -1 | -- | 4 | 11 | 0.4 | 32 |
| 5 | Scrubber -2 | -- | 5 | 11 | 0.4 | 32 |
| 6 | Scrubber -3 | -- | 6 | 11 | 0.4 | 32 |
| 7 | Scrubber -4 | -- | 7 | 11 | 0.4 | 32 |
| 8 | Scrubber -5 | -- | 8 | 11 | 0.4 | 32 |
| 9 | D.G. set 400 KVA | HSD: 89.5 L/Hr | 9 | 4 meter above roof | 0.12 | 50 |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | LDO | 0 | 3.06 KL/D | 3.06 KL/D |
| 2 | HSD | 0 | 89.5 L/Hr | 89.5 L/Hr |
| 41.Source of Fuel | | Local Vendor | | |
| 42.Mode of Transportation of fuel to site | | By road | | |

## 43.Green Belt Development

| | |
|---|---|
| **Total RG area :** | 3894 sq.m. |
| **No of trees to be cut :** | NA |
| **Number of trees to be planted :** | 566 |
| **List of proposed native trees :** | Aegle marmelos, Terminalia bellerica, Mangifera indica, Derris indica, Terminalia arjuna,Neolamarckia cadamba, Bombax ceiba, Azadirachta indica, Terminalia paniculata, Terminalia elliptica, Schleichera oleosa, Plumeria rubra, Ixora coccinea, Heterophragma quadriloculare, Oroxylum indicum, Nerium oleander, Catunaregum spinosa, Butea monosperma, Cassia fistula, Tabernaemontana alternifolia, Bougainvillea spectabiis, |
| **Timeline for completion of plantation :** | 1 year after grant of Environmental Clearance |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Ixora coccinea | Rukmini/Bakavali | 20 | A native shrub blooming throughout the year usually visited by nectar feeding birds & butterflies. |
| 2 | Heterophragma quadriloculare | Waras | 25 | A native deciduous tree visited by nectar feeding birds. Large leaf area helps in settling of dust. |
| 3 | Oroxylum indicum | Tetu | 25 | A native ornamental tree. |
| 4 | Nerium oleander | Kaner | 35 | A native hardy species, drought resistant with fragrant flowers. |
| 5 | Catunaregum spinosa | Gela | 30 | Mountain Pomegranate is an armed shrub or small native evergreen tree |
| 6 | Butea monosperma | Palash | 30 | A native brilliantly flowering tree fed by local birds fairly common |
| 7 | Cassia fistula | Bahava | 20 | Native ornamental tree having flowers attracting bees and butterflies |
| 8 | Tabernaemontana alternifolia | Naag kuda | 20 | A small evergreen native tree |
| 9 | Bougainvillea spectabiis | Booganvel | 8 | An ornamental tree blooming throughout the year |
| 10 | Plumeria rubra | Chafa | 20 | An evergreen brilliantly flowering shrub |
| 11 | Schleichera oleosa | Kusum | 33 | A native tree found in abundance in Sahyadris. |
| 12 | Terminalia elliptica | Ain | 30 | A native evergreen broad leaved tree common in the Sahyadris. |
| 13 | Terminalia paniculata | Kindal | 25 | Kindal is a tropical tree with a large natural distribution in Western Ghats |
| 14 | Azadirachta indica | Neem | 85 | A native evergreen tree known for plantation in polluted area. |
| 15 | Bombax ceiba | Sawar | 10 | A native tree with large showy flowers visited by birds. |
| 16 | Neolamarckia cadamba | Kadamba | 10 | A native evergreen tree with thick canopy. |
| 17 | Terminalia arjuna | Arjun | 20 | A native evergreen tree with large canopy |
| 18 | Derris indica | Karanja | 30 | A native tree blooming throughout the year |
| 19 | Mangifera indica | Amba | 40 | A native evergreen tree with large canopy & large leaf area which helps in dust settling |
| 20 | Terminalia bellerica | Baheda | 30 | A native medicinally important tree |
| 21 | Aegle marmelos | Bael | 20 | A native evergreen tree |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 300 KW |
| | **DG set as Power back-up during construction phase** | NA |
| | **During Operation phase (Connected load):** | 400 KW |
| | **During Operation phase (Demand load):** | 400 KW |
| | **Transformer:** | 625 KVA |
| | **DG set as Power back-up during operation phase:** | 400 KVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

## 48.Energy saving by non-conventional method:

NA

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | NA | NA |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Process Emissions | NA | Total 5 Acid/Alkali Scrubbers will be provided with stack height of 11 m height |
| Boiler and Thermopack | NA | 3 number of Stacks of 30 meter height will be provided |
| D.G. set | NA | Stack of 4 meter height above roof will be provided |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Air Environment | Dust supression | 2 |
| 2 | Water Environment | Arrangement of sanitary facility like mobile toilets etc | 5 |

| | | | |
|---|---|---|---|
| 3 | Solid Hazardous waste | Handling, transportation and disposal of Construction waste through local body | 5 |
| 4 | Noise Environment | PUC certified vehicles etc, PPE | 1 |

## b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Air Environment | Construction of 3 stacks and installation of 5 nos of process scrubbers with stack height of 11m height | 117.7 | 15.2 |
| 2 | Water Environment | Purchase of Stripper MEE with ATFD, construction of ETP and installation of RO system | 360 | 21.8 |
| 3 | Noise Environment | Noise Pollution Control, Installation of anti-vibration pads, & Enclosures. | 2 | 0.5 |
| 4 | Environment Monitoring & Management | Monitoring | 0 | 3.5 |
| 5 | Occupational Health | Glares, Breathing Masks,Gloves, Boots, Helmets, Ear Plugs etc. & annual health-medical checkup of workers, Occupational Health (training, OHC center) | 5 | 2 |
| 6 | Green Belt | Development and maintenance of green belt | 10.3 | 2.16 |
| 7 | Solid waste Management | Solid Waste Management | 5 | 10 |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| 40% Methyl methacrylate | Liquid | Drum | 19.5 | 19.5 | 58.4 | Local | By Road |
| 70% HNO3 | Liquid | Tank | 5 | 5 | 13.96 | Local | By Road |
| 70% Sorbitol | Liquid | Tank | 25 | 25 | 72.5 | Local | By Road |
| 98% HNO3 | Liquid | Tank | 3.5 | 3.5 | 9.74 | Local | By Road |
| Acetic Anhydride | Liquid | Drum | 10.5 | 10.5 | 30.94 | Local | By Raod |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Acetone | Liquid | Carboy | 15.5 | 15.5 | 46.08 | Local | By Road |
| Ammonium Thiocynate | Solid | Bags | 2.5 | 2.5 | 6.4 | Local | By Road |
| Bromine | Liquid | Bottles | 11.3 | 11.3 | 67.7 | Local | By Road |
| Charcoal | Solid | Bags | 0.98 | 0.98 | 0.98 | Local | By Road |
| Dimethyl Sulphate | Liquid | Drum | 5 | 5 | 15 | Local | By Road |
| Ethyl chloroformate | Liquid | Drum | 1 | 1 | 2.9 | Local | By Road |
| Glycerin | Liquid | Carboy | 0.4 | 0.4 | 1.13 | Local | By Road |
| Isosorbide-2-Acet | Liquid | Drum | 6 | 6 | 16.77 | Local | By Road |
| KOH | Solid | Bags | 15 | 15 | 45 | Local | By Road |
| Lactose | Solid | Bags | 14.5 | 14.5 | 43.75 | Local | By Road |
| Methanol | Liquid | Tank | 20 | 20 | 132.7 | Local | By Road |
| Methylene Chloride | Liquid | Drum | 2.5 | 2.5 | 7.35 | Local | By Road |
| p-Toulene Sulphonic Acid | Solid | Bags | 0.58 | 0.58 | 0.58 | Local | By Road |
| Pyridine | Liquid | Drum | 0.5 | 0.5 | 2.15 | Local | By Road |
| Soda Ash | Solid | Bags | 4 | 4 | 11.6 | Local | By Road |
| Sodium acetate anhydrous | Solid | Bags | 0.5 | 0.5 | 1.4 | Local | By Road |
| Sodium Hydroxide | Solid | Bags | 2 | 2 | 6.3 | Local | By Road |
| Sodium Methoxide | Solid | Bags | 0.46 | 0.46 | 0.46 | Local | By Road |
| Sulphuric Acid | Liquid | Tank | 10 | 10 | 28.2 | Local | By Road |
| Toluene | Liquid | Tank | 20 | 20 | 160 | Local | By Road |
| Vinyl Acetate Monomer | Liquid | Drum | 12 | 12 | 36 | Local | By Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | -- |
| **Parking details:** | **Number and area of basement:** | -- |
| | **Number and area of podia:** | -- |
| | **Total Parking area:** | 2400 |
| | **Area per car:** | -- |
| | **Area per car:** | -- |
| | **Number of 2-Wheelers as approved by competent authority:** | -- |
| | **Number of 4-Wheelers as approved by competent authority:** | -- |
| | **Public Transport:** | -- |
| | **Width of all Internal roads (m):** | -- |

| | | |
|---|---|---|
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | 5(f) Cat : B1 |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | -- |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | Not Applicable |
| **Water Budget** | Not Applicable |
| **Waste Water Treatment** | Not Applicable |
| **Drainage pattern of the project** | Not Applicable |
| **Ground water parameters** | Not Applicable |
| **Solid Waste Management** | Not Applicable |
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP submitted their application for the grant of TOR under category 5(f)B1 as per EIA Notification, 2006. PP presented draft TOR based on standard TOR issued by MoEF& CC published in April, 2015.

As the industry is located in the notified industrial area/estate (MIDC), Public Hearing is exempted under the provisions as per Para 7 III Stage (3) (b) of the EIA Notification, 2006.

ToR was granted in the 138th meeting of SEAC held on 01.06.2017 as per standard ToR and additional ToR points as mentioned below,

1. PP to submit their plan to achieve 33% of green belt as per National Forest Policy.

2. PP to submit copies of On Site and Off Site Emergency Preparedness Plan duly accepted by competent authority.

3. PP to include detailed material balance charts for each product showing consumption of raw material, sources of pollution and mitigation measures to control the pollution and justified use of resources along with quantities in the EIA report.

4. PP to include detailed water balance chart in EIA report along with quantities of waste water generation and its disposal.

5. PP to submit an affidavit for achieving Zero Liquid Discharge and not discharging any additional load on CETP or in any other source outside the limits of factory premises.

6. Committee observed that most of the raw material goes into the effluent stream which results in the wastage of resource and sue of additional energy to treat it; PP advised to look into the process of all the products and try to use maximum raw materials to convert into the product so that energy and resources can be saved; PP to include their report in the EIA.

Now PP submitted EIA/EMP report.

The proposal was considered in the 153rd meeting of SEAC where in the proposal was deferred till the complinace of following points.

1. PP to submit point wise compliance of additional ToR points.

2. It was observed that approximate 10% of mononitrate used as a raw material goes in to the eflfeunt; PP to submit mechanism to prevent it to mix with effluent so as to achieve optimum prodcut and less load on the ETP.

3. PP to include Piping and Instrumentation diagrams in the HAZOP reprot.

4. PP to submit copy of CHWTSDF membership.

5. PP to submit product wise solvent consumption, product wise solvent recovery and quantity of excess solvent along with its disposal method.

6. PP to prepare CER plan in consultation with the District Authority.

Now PP submitted the compliance of above points.

## DECISION OF SEAC

After detailed deliberations with the PP and their accredited consultant SEAC decided to defer the proposal till PP submits compliance of following points.

**Specific Conditions by SEAC:**

**1)** Committee observed that most of the raw material goes into the effluent stream which results in the wastage of resource and use of additional energy to treat it; PP advised to look into the process of all the products and try to use maximum raw materials to convert into the product so that energy and resources can be saved; PP to include their report in the EIA.
**2)** PP to prepare CER plan in consultation with the District Authority.

## FINAL RECOMMENDATION

SEAC-I decided to defer the proposal till PP submits the additional information as per above conditions within 30 days

## 156th Meeting of State Level Expert Appraisal Committee (SEAC-1)

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Environmental Clearance for proposed Production Capacity enhancement of Unilex Colours And Chemicals Ltd.

**Is a Violation Case:** No

| | |
|---|---|
| **1.Name of Project** | Unilex Colours And Chemicals Ltd. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. Narendra K.P. |
| **4.Name of Consultant** | Sadekar Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Not applicable |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Expansion in existing project |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | No |
| **8.Location of the project** | Plot No. E-10/2 |
| **9.Taluka** | Palghar |
| **10.Village** | Salwad |
| **Correspondence Name:** | Mr. Narendra K. P. |
| **Room Number:** | 106/107 |
| **Floor:** | 1st |
| **Building Name:** | Advent Atria |
| **Road/Street Name:** | Chincholi Bunder Road |
| **Locality:** | Malad (W) |
| **City:** | Mumbai |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** NA |
| | **Approved Built-up Area:** 949.91 |
| **13.Note on the initiated work (If applicable)** | NA |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | NA |
| **15.Total Plot Area (sq. m.)** | 1275.00 sq.m. |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** Not applicable |
| | **b) Non FSI area (sq. m.):** Not applicable |
| | **c) Total BUA area (sq. m.):** 949.91 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** |
| | **Approved Non FSI area (sq. m.):** |
| | **Date of Approval:** |
| **19.Total ground coverage (m2)** | Not applicable |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | Not applicable |
| **21.Estimated cost of the project** | 20000000.00 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| **23.Number of tenants and shops** | Not applicable |
| **24.Number of expected residents / users** | Not applicable |
| **25.Tenant density per hectare** | Not applicable |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 10 meter |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Internal roads of 5 m width are provided |
| **29.Existing structure (s) if any** | Yes |
| **30.Details of the demolition with disposal (If applicable)** | Not applicable |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Beta Blue | 24.80 | 100.00 | 124.80 |
| 2 | Pigment Yellow - 12, 13, 14, 74, 83, 168, 191/Pigment Red - 3, 4, 8 , 112, 48.2, 48.3, 12, 53.1, 57.1, 146,170/Pigment Orange - 05, 13, 34/Lemon Chrome/Middle Chrome/Pigment Green-7/Pigment Blue/Violet-27 | 00 | 40.0 | 40.0 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| Dry season: | **Source of water** | Not applicable |
| | **Fresh water (CMD):** | Not applicable |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | Not applicable |
| | **Fire fighting - Underground water tank(CMD):** | Not applicable |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| Wet season: | **Source of water** | Not applicable |
| | **Fresh water (CMD):** | Not applicable |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | Not applicable |
| | **Fire fighting - Underground water tank(CMD):** | Not applicable |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| **Details of Swimming pool (If any)** | Not applicable | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | 1.0 | 1.5 | 2.5 | 0.2 | 0.3 | 0.5 | 0.8 | 1.2 | 2.0 |
| Industrial Process | 13.0 | 58.87 | 71.87 | 0.3 | 50.7 | 51.0 | 12.7 | 8.17 | 20.87 |
| Cooling tower & thermopack | 6.0 | 12.0 | 18.0 | 5.0 | 10.3 | 15.3 | 1.0 | 1.7 | 2.7 |
| Gardening | 0.5 | 0.5 | 1.0 | 0.5 | 0.5 | 1.0 | 0 | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | NA |
| | **Size and no of RWH tank(s) and Quantity:** | NA |
| | **Location of the RWH tank(s):** | NA |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | NA |
| | **Budgetary allocation (O & M cost) :** | NA |
| | **Details of UGT tanks if any :** | Fire fighting water tank of 50.0 KL capacity |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Storm water drains of adequate capacity will be provided |
| | **Quantity of storm water:** | 0.98 m3/hr. |
| | **Size of SWD:** | The SWD will be designed as per the quantity of storm water to be received during the rainy season |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 2.0 |
| | **STP technology:** | Sewage waste water will be treated in aeration tank of the effluent treatment plant |
| | **Capacity of STP (CMD):** | NA |
| | **Location & area of the STP:** | NA |
| | **Budgetary allocation (Capital cost):** | NA |
| | **Budgetary allocation (O & M cost):** | NA |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | No construction activities are involved hence such waste generation is not envisaged |
| | **Disposal of the construction waste debris:** | No construction activities are involved hence generation and disposal of such wastes is not envisaged |
| **Waste generation in the operation Phase:** | **Dry waste:** | Office waste such as papers and other domestic waste |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | ETP sludge: 14.0 MT/A, Mechanical Evaporator Residue: 133.7 kg/day, Empty bags: 2.5 kg/M, Empty drums: 25 no./M, Empty Carboys: 35 no./M |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Through local muinicipal waste disposal system |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | ETP Sludge & Mechanical Evaporator Residue to Mumbai Waste Management Ltd. - CHWTSDF at Taloja and Empty bags, Empty drums, Empty carboys will be sold to authorized recycler |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Dedicated hazardous waste storage area will be provided as per the project plot layout paln |
| | **Area for the storage of waste & other material:** | 5.0 sq.m. |
| | **Area for machinery:** | NA |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 1,50,000.00 |
| | **O & M cost:** | 30,000.00 |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 6.75 | 7.05 | 6-8.5 |
| 2 | TDS | mg/l | 1987.00 | 1901.00 | <2100 |
| 3 | BOD | mg/l | 194.00 | 39.00 | <100 |
| 4 | COD | mg/l | 600.00 | 136.00 | <250 |
| 5 | O&G | mg/l | 4.0 | BDL | <10 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 23.57 |
| Capacity of the ETP: | 20.0 CMD |
| Amount of treated effluent recycled : | 13.37 CMD |
| Amount of water send to the CETP: | 10.2 CMD |
| Membership of CETP (if require): | Company is having membership of TIMA CETP Co-Op. Society Ltd. |
| Note on ETP technology to be used | Existing: The domestic waste water is subjected to soak pit & the effluent from boiler, cooling tower blow down & process effluent is treated in ETP of 20 CMD capacity comprising of primary treatment scheme & treated effluent is further sent to CETP. Proposed: The domestic waste water will be subjected to soak pit & the effluent from boiler & cooling tower blow down will be treated in ETP of 20 CMD capacity comprising of primary treatment scheme & treated effluent will be sent to CETP and the |
| Disposal of the ETP sludge | Mumbai Waste Management Ltd. - CHWTSDF at Taloja |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | ETP sludge | 35.3 | kg/annum | 2.8 | 11.2 | 14.0 | Mumbai Waste Management Ltd. - CHWTSDF at Taloja |
| 2 | Mechanical Evaporator Residue | 37.3 | kg/day | -- | 133.7 | 133.7 | Mumbai Waste Management Ltd. - CHWTSDF at Taloja |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | Empty bags | 33.1 | kg/month | 0.5 | 2.0 | 2.5 | Sale to authorized recycler |
| 4 | Empty drums | 33.1 | number/month | 5.0 | 20.0 | 25.0 | Sale to authorized recycler |
| 5 | Empty carboys | 33.1 | number/month | 7.0 | 28.0 | 35.0 | Sale to authorized recycler |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | 4 lakh kilo calorie/hour Thermic fluid heater | Coal - 1792.00 kg/day | 1 | 20.0 | 0.5 | 230.0 |
| 2 | 850 kg/hour steam boiler | Coal - 1716.9 kg/day | 2 | 20.0 | 0.5 | 230.0 |
| 3 | HCl. scrubber | -- | 3 | 4.0 (Above roof level) | 0.3 | -- |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Indonesian coal | 1505.7 kg/day | 2003.2 | 3508.9 kg/day |
| 41.Source of Fuel | | Local vendor - Gurukrupa Enterpirses, Surat | | |
| 42.Mode of Transportation of fuel to site | | Road | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 3037 sq.m. (Adjacent to the project plot) |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 62 |
| | **List of proposed native trees :** | Cassia fistula, Bombax ceiba, Asltonia shcolaris, Macaranga peltata, Schleichera oleosa, Microcos paniculata, Terminalia elliptica, Terminalia paniculata, Terminalia bellirica, Cordia dichotoma, Helicteres isora, Holoptelea integrifolia, Butea monosperma, Oroxylum indicum, Erythrina suberosa, Azadirachta indica, Trema orientalis, Callicarpa tomentosa, Neolamarckia cadamba, Pterospermum acerifolium |
| | **Timeline for completion of plantation :** | 1 year after grant of environmental clearance |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Cassia fistula | Bahava | 33 | Native tree of forest tracts of Sahyadri ranges having flowers attracting bees and butterflies |
| 2 | Bombax ceiba | Sawar | 29 | A native deciduous tree with fragrant flowers attracting large number of birds & insects |
| 3 | Asltonia shcolaris | Saptaparni | 23 | A native evergreen tree with fragrant flowers & leaves having comparatively higher dust settling index |

| | | | | |
|---|---|---|---|---|
| 4 | Macaranga peltata | Chandwar | 23 | A native tree found in abundance across the plains of Sahyadri ranges |
| 5 | Schleichera oleosa | Kusum | 23 | A native deciduous trees of forest tracts of Sahyadri ranges |
| 6 | Microcos paniculata | Shirali | 23 | A native evergreen medium sized tree of forest tracts of Sahyadri ranges |
| 7 | Terminalia elliptica | Ain | 23 | A native evergreen tree of forest tracts of Sahyadri ranges |
| 8 | Terminalia paniculata | Kindal | 23 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 9 | Terminalia bellirica | Baheda | 23 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 10 | Cordia dichotoma | Shelu | 23 | A native deciduous tree of forest tracts of Sahyadri ranges attracting large number of insects |
| 11 | Helicteres isora | Murudsheng | 23 | A native deciduous medium sized tree of forest tracts of Sahyadri ranges visited by large number of birds |
| 12 | Holoptelea integrifolia | Ainsadada | 23 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 13 | Butea monosperma | Palash | 23 | A native brilliantly flowering tree abundant the Palghar District visited by large number of birds |
| 14 | Oroxylum indicum | Tetu | 23 | A native ornamental tree |
| 15 | Erythrina suberosa | Pangara | 23 | A native deciduous medium sized tree of forest tracts of Sahyadri ranges visited by large number of birds |
| 16 | Azadirachta indica | Kadulimb | 23 | A native evergreen tree capable of surviving in comparatively polluted environs |
| 17 | Dalbergia sissoo | Shisham | 23 | A native evergreen tree attracting large number of insects |
| 18 | Trema orientalis | Ghol | 23 | A native deciduous medium sized tree with hairy leaves having comparatively higher dust settling index |
| 19 | Callicarpa tomentosa | Aiser | 23 | A native evergreen medium sized tree of forest tracts of Sahyadri ranges with hairy thick leaves having comparatively higher dust settling index |
| 20 | Neolamarckia cadamba | Kadamba | 23 | A native evergreen tree with tremendous blooms attracting large number of insects |
| 21 | Pterospermum acerifolium | Karnikar | 23 | A native evergreen tree with large & hairy leaves having comparatively high dust settling index generally used for ornamental plantation |
| **45.Total quantity of plants on ground** | | | | |

**46.Number and list of shrubs and bushes species to be planted in the podium RG:**

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | Maharashtra State Electricity Distribution Company Limited (MSEDCL) |
| | **During Construction Phase: (Demand Load)** | NA |
| | **DG set as Power back-up during construction phase** | NA |
| | **During Operation phase (Connected load):** | 456 KW |
| | **During Operation phase (Demand load):** | 405 kVA |
| | **Transformer:** | 500 kVA |
| | **DG set as Power back-up during operation phase:** | -- |
| | **Fuel used:** | NA |
| | **Details of high tension line passing through the plot if any:** | NA |

## 48.Energy saving by non-conventional method:

NA

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | NA | NA |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| 0.6 TPH Steam boiler | Stack of 20.0 m & Multi cyclone separator followed by scrubber | -- |
| 2 lakh kilo calorie/hour Thermic fluid heater | Stack of 20.0 m & Multi cyclone separator | -- |
| 4 lakh kilo calorie/hour Thermic fluid heater | -- | Stack of 20.0 m height & Multi cyclone separator followed by Bag filter |
| 850 kg/hour steam boiler | -- | Stack of 20.0 m height & Multi cyclone separator followed by Bag filter |
| Process emisiions | -- | 1 no. Hcl. Scrubber with a stack of 4.0 m above roof level |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | NA | NA | NA |

### b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Air | Installation of stacks of 20.0 m height & Multi cyclone separator followed by Bag filter for 4 lakh kilo calorie/hour Thermic fluid heater & 850 kg/hour steam boiler and 1 no. HCl. scrubber | 20.00 | 1.0 |
| 2 | Water | Installation of Mechanical Evaporator of 15.0 KL | 15.00 | 0.50 |
| 3 | Noise | Development of acoustic enclosures & installation of shock absorbers & vibration absorbing pads | 5.0 | 0.10 |
| 4 | Occupational health | Purchase of PPE's and health check ups | 4.5 | 0.50 |
| 5 | Green belt | Development of green belt | 7.09 | 1.44 |
| 6 | Solid waste | Development of hazardous waste storage area & purchase of solid waste storage bags, containers | 1.5 | 0.30 |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| CPC | Solid | Shed | 25.0 | 25.0 | 125.00 | Local | Road |
| Caustic Soda | Solid | Shed | 3.0 | 3.0 | 4.0 | Local | Road |
| Gum rosin | Solid | Shed | 4.0 | 4.0 | 4.5 | Local | Road |
| Xylene | Liquid | Shed | 200.00 l | 200.00 l | 200.00 l | Local | Road |
| Isobutyl alcohol | Liquid | Shed | 400.00 l | 400.00 l | 400.00 l | Local | Road |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Additive -Pthalamide | Solid | Shed | 1.0 | 1.0 | 1.5 | Local | Road |
| Hydrochloric acid | Liquid | Shed | 1000.00 l | 1000.00 l | 1000.00 l | Local | Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | NA |
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 153 sq.m. |
| | **Area per car:** | NA |
| | **Area per car:** | NA |
| | **Number of 2-Wheelers as approved by competent authority:** | NA |
| | **Number of 4-Wheelers as approved by competent authority:** | NA |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | 5.0 |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | B1 |
| | **Court cases pending if any** | No |

| | | |
|---|---|---|
| | **Other Relevant Informations** | 1. The existing steam boiler of 0.6 TPH & thermic fluid heater of 2 lakh kilo calorie/hour will be sale out after expansion.<br><br>2. ETP treatment scheme: Existing: The domestic waste water is subjected to soak pit & the effluent from boiler, cooling tower blow down & process effluent is treated in ETP of 20 CMD capacity comprising of primary treatment scheme & treated effluent is further sent to CETP. Proposed: The domestic waste water will be subjected to soak pit & the effluent from boiler & cooling tower blow down will be treated in ETP of 20 CMD capacity comprising of primary treatment scheme & treated effluent will be sent to CETP and the effluent from manufacturing process will be totally recycled through Mechanical Evaporator. The industry will continue to dispose effluent (boiler& cooling tower blow down) to CETP as per the valid CTO. The effluent form manufacturing process will be totally recycled so that there is no additional load subjected to CETP disposal from the proposed expansion project.<br><br>3. Green Belt related: The 33% of project plot area is 420.75 sq. m. however green belt will be provided in area of 3037.00 sq. m. adjacent to the project plot. |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | PP submitted EIA report to the committee. Various aspects of the Environment are discussed in the report. PP has conducted base line data collection for Air, Water, Soil & Noise parameters as per EIA Notification, 2006 amended from time to time. As per data submitted by the PP in the EIA report environmental parameters are found within the prescribed limits on site. |
| **Water Budget** | PP submitted water budget calculations in the EIA report and also indicated water requirement at Sr. No 33 of the Consolidated Statement. |
| **Waste Water Treatment** | PP proposes Zero Liquid Discharge for effluent treatment. |
| **Drainage pattern of the project** | PP provided the storm water drains considering the contour on site. |
| **Ground water parameters** | As per data submitted by PP, ground water parameters are within the prescribed limits at project site. |
| **Solid Waste Management** | Hazardous wastes will be disposed off at CHWTSDF site and sale to authorized vendors. |
| **Air Quality & Noise Level issues** | As per data submitted by PP, Air Quality and Noise parameters are within the prescribed limits at project site. |
| **Energy Management** | The electrical demand for proposed project is 405 kVA which will be supplied by MSEDCL. PP to provide DG set back up to all pollution control equipment's and emergency facilities. |
| **Traffic circulation system and risk assessment** | PP proposes to provide an area of 153 Sq.m. for parking of the vehicles along with six meter wide internal roads with nine meter turning radius. |
| **Landscape Plan** | PP proposes to provide 33% green belt on site. |
| **Disaster management system and risk assessment** | PP carried out HAZOP and Risk Assessment study and prepared on site emergency plan. |
| **Socioeconomic impact assessment** | PP has carried out socio economic impact study and included in the EIA report. |
| **Environmental Management Plan** | PP prepared EMP cost of Rs. 54.09 Lakhs as a capital cost and Rs. 3.87 Lakhs as O & M cost to maintain environmental parameters. |

| | |
|---|---|
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP submitted their application for the grant of TOR under category 5(f)B1 as per EIA Notification, 2006. PP presented draft TOR based on standard TOR issued by MoEF & CC published in April, 2015.

PP to collect base line data as per Office Memorandum issued by MoEF&CC dated 27.08.2017.

ToR was granted in the 146th meeting of SEAC-1 held on 30.01.2018.

PP submitted EIA/EMP reprot.

The proposal was considered in the 154th meeting of SEAC where in the proposal was deferred till the compliance of following points.

1. PP to submit design of Zero Liquid Discharge Effluent Treatment Plant.

2. PP to submit a technical report on how the proposed expansion with respect to the production quantity will be accommodated in the existing facility along with structural stability certificate of existing buildings/structures on the site.

3. PP to submit clarification on the better energy efficiency of the proposed equipment's in the expansion.

Now PP submitted the compliance of above points.



## DECISION OF SEAC

After detailed deliberations with the PP and their accredited consultant SEAC decided to recommend the proposal to SEIAA for prior environment clearance subject to following conditions.

**Specific Conditions by SEAC:**

**1)** PP to explore possibility to replace ball milling operation with alternate operation so as to reduce energy consumption.
**2)** PP to prepare and implement CER plan in consultation with the District Authorities.

## FINAL RECOMMENDATION

SEAC-I have decided to recommend the proposal to SEIAA for Prior Environmental clearance subject to above conditions

## 156th Meeting of State Level Expert Appraisal Committee (SEAC-1)

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for New unit of Synthetic Organic Chemical intermediates manufacturing unitof M/s Altra Pure Chem

**Is a Violation Case:** No

| | |
|---|---|
| **1.Name of Project** | Altra Pure Chem |
| **2.Type of institution** | TOR |
| **3.Name of Project Proponent** | Mr. Mithun Patil |
| **4.Name of Consultant** | M/s Sadekar Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Industrial |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New Project |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | NA |
| **8.Location of the project** | N-67, Additional Anand Nagar MIDC |
| **9.Taluka** | Ambernath |
| **10.Village** | Ambernath |
| **Correspondence Name:** | Mithun Patil |
| **Room Number:** | S. No. 234, H. No. 04, |
| **Floor:** | Plot No. 45, |
| **Building Name:** | Jindal Compound, |
| **Road/Street Name:** | Additional MIDC Zone, |
| **Locality:** | Bhopar Village, Manpada, |
| **City:** | Dombivali (E) |
| **11.Area of the project** | Maharashtra Industrial Corporation Development |
| **12.IOD/IOA/Concession/Plan Approval Number** | Comes under Judiciary of MIDC, awaiting for approval |
| | **IOD/IOA/Concession/Plan Approval Number:** NA |
| | **Approved Built-up Area:** 7150 |
| **13.Note on the initiated work (If applicable)** | Not applicable |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not applicable |
| **15.Total Plot Area (sq. m.)** | 6,500 m2 |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** Not applicable |
| | **b) Non FSI area (sq. m.):** Not applicable |
| | **c) Total BUA area (sq. m.):** 7150 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** Not applicable |
| | **Approved Non FSI area (sq. m.):** Not applicable |
| | **Date of Approval:** 01-01-1900 |
| **19.Total ground coverage (m2)** | Not applicable |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | -- |
| **21.Estimated cost of the project** | 250000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| **23.Number of tenants and shops** | Not applicable |
| **24.Number of expected residents / users** | Not applicable |
| **25.Tenant density per hectare** | Not applicable |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | Ambernath Fire Station (6m) |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Radius - 9m Road Width - 6m |
| **29.Existing structure (s) if any** | Not applicable |
| **30.Details of the demolition with disposal (If applicable)** | Not applicable |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Bi Phenyl Alcohol | -- | 100 | 100 |
| 2 | 6 Methyl Nicotinate | -- | 10 | 10 |
| 3 | By-Products | -- | -- | -- |
| 4 | Bromine | -- | 37.0 | 37.0 |
| 5 | Nitric Acid (28%) | -- | 36.8 | 36.8 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| Dry season: | **Source of water** | MIDC |
| | **Fresh water (CMD):** | 209.43 |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | 204.93 |
| | **Fire fighting - Underground water tank(CMD):** | 200 |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| Wet season: | **Source of water** | MIDC |
| | **Fresh water (CMD):** | 193.93 |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | 193.93 |
| | **Fire fighting - Underground water tank(CMD):** | 200 |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| **Details of Swimming pool (If any)** | Not applicable | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | -- | 2.50 | 2.50 | -- | 0.50 | 0.50 | -- | 2.00 | 2.00 |
| Industrial Process | -- | 48.10 | 48.10 | -- | -- | -- | -- | 60.70 | 60.70 |
| Domestic | -- | 143.33 | 143.33 | -- | 94.43 | 94.43 | -- | 24.90 | 24.90 |
| Domestic | -- | 11.00 | 11.00 | -- | 11.00 | 11.00 | -- | 0.00 | 0.00 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 8m bgl |
| | **Size and no of RWH tank(s) and Quantity:** | Rooftop water will be diverted and used as cooling tower makeup |
| | **Location of the RWH tank(s):** | Not applicable |
| | **Quantity of recharge pits:** | Not applicable |
| | **Size of recharge pits :** | Not applicable |
| | **Budgetary allocation (Capital cost) :** | Not applicable |
| | **Budgetary allocation (O & M cost) :** | Not applicable |
| | **Details of UGT tanks if any :** | Domestic UG tank Capacity: 50m3/day<br>Firefighting: 200m3/day |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | South East to North West |
| | **Quantity of storm water:** | 7.02 m3/hr |
| | **Size of SWD:** | A trench of 2ft x 2ft |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 2.50 m3/day |
| | **STP technology:** | Septic Tank followed by ETP aeration tank |
| | **Capacity of STP (CMD):** | NA |
| | **Location & area of the STP:** | NA |
| | **Budgetary allocation (Capital cost):** | NA |
| | **Budgetary allocation (O & M cost):** | NA |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Negligible |
| | **Disposal of the construction waste debris:** | NA |
| **Waste generation in the operation Phase:** | **Dry waste:** | NA |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | MEE Salt – 71.7 T/M; ETP Sludge – 10 T/M; Empty Drums, Carboys, Containers – 10 No/M |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Authorized party |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | Sale to authorized party approved by MPCB or CHWTSDF or sold as raw material |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Domestic waste sludge from septic tank will be removed and used as manure at regular interval |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | East of plot |
| | **Area for the storage of waste & other material:** | 10 m2 |
| | **Area for machinery:** | NA |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 3.5-6.5 | 6.5-8.5 | 5.5-9.5 |
| 2 | TDS | mg/l | 70,000-75,000 | 1,500-2,000 | < 2,100 |
| 3 | BOD | mg/l | 5,000-5,500 | 10-30 | < 100 |
| 4 | COD | mg/l | 15,000-25,000 | 50-100 | < 250 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 87.6 m3/day |
| Capacity of the ETP: | 105 m3/day |
| Amount of treated effluent recycled : | 75.66 m3/day |
| Amount of water send to the CETP: | NA |
| Membership of CETP (if require): | NA |
| Note on ETP technology to be used | Industrial waste water streams will be segregated as HCOD-HTDS and LCOD-HTDS. Industrial waste water (HCOD-HTDS) generated will be treated primarily in stripper, MEE and ATFD. Septic tank will be provided for sewage treatment. Other waste water (LCOD-HTDS) along with MEE condensate will be subjected to ETP followed by RO. Permeate will be recycled to achieve Zero Liquid Discharge. |
| Disposal of the ETP sludge | CHWTSDF, Taloja |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | MEE Salt | 37.3 | tons/ month | -- | 71.7 | 71.7 | CHWTSDF/sold as raw material |
| 2 | ETP Sludge | 35.3 | tons/ month | -- | 10 | 10 | CHWTSDF |
| 3 | Empty Drums, Carboys, Containers | - | nos/ month | -- | 10 | 10 | Recycle through MPCB Authorized Vendor |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | Process | NA | 1 | 11 | 0.650 | 115 |
| 2 | Boiler & Thermic Heater | PNG/FO | 1 | 30 | 0.450 | 260 |
| 3 | DG | HSD | 1 | 4.5 | 0.300 | 130 |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | PNG or FO | -- | 350Nm3 or 308 Kg/hr | 350Nm3 or 308 Kg/hr |
| 2 | HSD | -- | 80 l/hr | 80 l/hr |
| 41.Source of Fuel | | Local Purchase | | |
| 42.Mode of Transportation of fuel to site | | By Road | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 2,161 m2 |
| | **No of trees to be cut :** | 00 |
| | **Number of trees to be planted :** | 120 |
| | **List of proposed native trees :** | Cassia fistula, Bombax ceiba, Asltonia shcolaris, Macaranga peltata, Schleichera oleosa, Microcos paniculata, Terminalia elliptica, Terminalia paniculata, Terminalia bellirica, Cordia dichotoma, Helicteres isora, Holoptelea integrifolia |
| | **Timeline for completion of plantation :** | Project Completion |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Cassia fistula | Bahava | 10 | Native tree of forest tracts of Sahyadri ranges having flowers attracting bees and butterflies |
| 2 | Bombax ceiba | Sawar | 10 | A native deciduous tree with fragrant flowers attracting large number of birds & insects |
| 3 | Asltonia shcolaris | Saptaparni | 10 | A native evergreen tree with fragrant flowers & leaves having comparatively higher dust settling index |
| 4 | Macaranga peltata | Chandwar | 10 | A native tree found in abundance across the plains of Sahyadri ranges |
| 5 | Schleichera oleosa | Kusum | 10 | A native deciduous trees of forest tracts of Sahyadri ranges |
| 6 | Microcos paniculata | Shirali | 10 | A native evergreen medium sized tree of forest tracts of Sahyadri ranges |
| 7 | Terminalia elliptica | Ain | 10 | A native evergreen tree of forest tracts of Sahyadri ranges |

| | | | | |
|---|---|---|---|---|
| 8 | Terminalia paniculata | Kindal | 10 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 9 | Terminalia bellirica | Baheda | 10 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 10 | Cordia dichotoma | Shelu | 10 | A native deciduous tree of forest tracts of Sahyadri ranges attracting large number of insects |
| 11 | Helicteres isora | Murudsheng | 10 | A native deciduous medium sized tree of forest tracts of Sahyadri ranges visited by large number of birds |
| 12 | Holoptelea integrifolia | Ainsadada | 10 | A native deciduous tree of forest tracts of Sahyadri ranges |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 100 kVA |
| | **DG set as Power back-up during construction phase** | 100 kVA |
| | **During Operation phase (Connected load):** | 750 kW (Total plant) |
| | **During Operation phase (Demand load):** | 500 kVA (Total plant) |
| | **Transformer:** | NA |
| | **DG set as Power back-up during operation phase:** | 500 kVA x 01 no |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

## 48.Energy saving by non-conventional method:

Not applicable

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | NA | NA |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|

| | | |
|---|---|---|
| Effluent Treatment Plant | -- | Conventional ETP along with stripper, MEE+ATFD followed by RO; Sewage passed through Septic Tank and taken to secondary of ETP |
| DG set | -- | Stack (500 kVA x 01) ht – 4.5 m above ground |
| Boiler (PNG / FO Fired)& Thermopack | -- | Common Stack – 3000Kg/hr Steam Boiler Stack &One Thermic fluid heater 10 lac Kcal/hr(ht - 30m) |
| Process Scrubber | -- | Alkali scrubber (ht - 11m) |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Air Pollution | Dust suppression, PUC testing | 1.0 |
| 2 | Water Pollution | Mobile toilets | 0.5 |
| 3 | Noise Pollution | DG set with acoustic enclosure | 1.5 |
| 4 | Occupational Health | PPE, health checkups, camps, first aid kit | 0.5 |

### b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Air | Scrubber, Boiler stack, DG stack | 50.0 | 0.5 |
| 2 | Water | ETP, MEE-ATFD + Stripper, RO | 605.0 | 6.05 |
| 3 | Noise | DG with acoustic enclosure, enclosure for process air blower | 3.0 | 0.3 |
| 4 | Occupational Health | PPE, health checkups, camps, first aid kit | 1.0 | 1.5 |
| 5 | Green Belt | Plantation | 6.0 | 0.8 |
| 6 | Solid waste | Solid waste (hazardous & non-hazardous) handling, & disposal | 50.0 | 0.5 |
| 7 | Disaster Management Plan | Fire-fighting arrangements, hydrant lone and points, smoke detectors, firefighting tank | 20.0 | 2.0 |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| 2, 6 Dichloro Tolune | Liquid | Drums | 20 kl | 20 kl | 125 kl | Local Purchase | By Road |
| Bromobenzene | Liquid | Drums | 15 kl | 15 kl | 120 kl | Local Purchase | By Road |
| Magnesium Tablets | Solid | Bags | 05 | 05 | 34 | Local Purchase | By Road |
| Tetrahydrofuran | Liquid | Drums | 20 kl | 20 kl | 356 kl | Local Purchase | By Road |
| Toluene | Liquid | Drums | 20 kl | 20 kl | 362 kl | Local Purchase | By Road |
| Di Methyl Formamide | Liquid | Drums | 10 kl | 20 kl | 47 kl | Local Purchase | By Road |
| Potassium Borohydride | Solid | Bags | 05 | 05 | 08 | Local Purchase | By Road |
| Catalyst | Liquid | Drums | 02 kl | 20 kl | 01 kl | Local Purchase | By Road |
| Hydrochloric acid | Liquid | Tank | 20 kl | 20 kl | 166 kl | Local Purchase | By Road |
| 2-Methyl 5-Ethyl Pyridine | Liquid | Drums | 10 kl | 10 kl | 11.8 kl | Local Purchase | By Road |
| Sulphuric acid | Liquid | Tank | 20 kl | 20 kl | 25 kl | Local Purchase | By Road |
| Nitric acid | Liquid | Tank | 20 kl | 20 kl | 54 kl | Local Purchase | By Road |
| Methanol | Liquid | Drums | 25 kl | 20 kl | 8.9 kl | Local Purchase | By Road |
| Trichloroethylene | Liquid | Drums | 10 kl | 20 kl | 64.8 kl | Local Purchase | By Road |
| Soda ash | Solid | Bags | 10 | 20 kl | 23.6 | Local Purchase | By Road |
| Catalyst | Solid | Bags | 1 | 1 | 1 | Local Purchase | By Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Project will confluent on 25m wide road |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 715 |
| | **Area per car:** | 2.5m x 2.0m |
| | **Area per car:** | 2.5m x 2.0m |
| | **Number of 2-Wheelers as approved by competent authority:** | -- |
| | **Number of 4-Wheelers as approved by competent authority:** | -- |
| | **Public Transport:** | Auto, Truck plaza available within MIDC area |
| | **Width of all Internal roads (m):** | 6.0 m |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | 5(f) B1 |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | Not applicable |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 31-08-2018 |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | Not Applicable |
| **Water Budget** | Not Applicable |
| **Waste Water Treatment** | Not Applicable |
| **Drainage pattern of the project** | Not Applicable |
| **Ground water parameters** | Not Applicable |
| **Solid Waste Management** | Not Applicable |

| | |
|---|---|
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP submitted their application for the grant of TOR under category 5(f)B1 as per EIA Notification, 2006. PP presented draft TOR based on standard TOR issued by MoEF & CC published in April, 2015.

As the industry is located in the notified industrial area/estate (MIDC), Public Hearing is exempted under the provisions as per para 7 III Stage (3) (b) of the EIA Notification, 2006.

## DECISION OF SEAC

Based on the presentation made by PP; committee decided to approve the TOR for the preparation of EIA/EMP report as per standard TOR and additional TOR points mentioned below.

PP to collect base line data as per Office Memorandum issued by MoEF&CC dated 27.08.2017.

The validity of the TOR will be for three years as per OM issued by MoEF and CC on 29.08.2017.

PP to submit Form - 2 along with EIA/EMP report as per OM issued by MoEF&CC on 20.04.2018.

PP to submit their plan to utilize CER (Corporate Environment Responsibility) along with timelines as per OM issued by MoEF&CC dated 01.05.2018.

**Specific Conditions by SEAC:**

**1)** PP to submit certificate of incorporation of the company, list of directors and memorandum of articles.
**2)** PP to carry out life cycle analysis of the activities carried out on site with respect to the sustainability index, green house and ozone depletion potential etc
**3)** PP to carry out HAZOP and QRA and submit Disaster Management Plan considering the Grignard Reaction Hazards and chemical hazards associated in the reactions.
**4)** PP to include detailed material balance charts for each product showing consumption of raw material, sources of pollution and mitigation measures to control the pollution and justified use of resources along with quantities in the EIA report.
**5)** PP to include details of fugitive emission control measures proposed along with their drawings and design calculations in the EIA report.
**6)** PP to submit hazardous chemical handling protocol
**7)** PP to use new and renewable energy for the illumination of office building and street lights.
**8)** PP to conduct socio economic study and submit implementation plan along with time schedule.

## FINAL RECOMMENDATION

The Committee decided to Grant ToR subject to the above observations,PP requested to prepare and submit EIA report as per EIA Notification, 2006 and amendments thereof.

## 156th Meeting of State Level Expert Appraisal Committee (SEAC-1)

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Environmental Clearance for proposed expansion project of M/s Siddhivinayak Chemicals for production capacity enhancement.

**Is a Violation Case:** No

| | |
|---|---|
| **1.Name of Project** | M/s Siddhivinayak Chemicals. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. Utsav Jhonsa |
| **4.Name of Consultant** | M/s Sadekar Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Expansion, Schedule 5 (f), Category - B1 under EIA Notification 2006. |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Expansion in existing project. |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | No. |
| **8.Location of the project** | Plot no – A-33, MIDC Kurkumbh, Tal- Daund, Dist- Pune, Maharashtra. 413802 |
| **9.Taluka** | Daund |
| **10.Village** | Kurkumbh |
| **Correspondence Name:** | Mr. Utsav Jhonsa |
| **Room Number:** | E/210 |
| **Floor:** | 2nd Floor |
| **Building Name:** | Kailas Industrial Complex. |
| **Road/Street Name:** | Veer Savarkar Marg |
| **Locality:** | Park site |
| **City:** | Vikhroli (W), Mumbai |
| **11.Area of the project** | MIDC – Kurkumbh |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** NA |
| | **Approved Built-up Area:** |
| **13.Note on the initiated work (If applicable)** | NA |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | NA |
| **15.Total Plot Area (sq. m.)** | 2065 sq. m. |
| **16.Deductions** | NA |
| **17.Net Plot area** | NA |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** NA |
| | **b) Non FSI area (sq. m.):** NA |
| | **c) Total BUA area (sq. m.):** 1069 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** NA |
| | **Approved Non FSI area (sq. m.):** NA |
| | **Date of Approval:** 26-09-2017 |
| **19.Total ground coverage (m2)** | NA |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | NA |
| **21.Estimated cost of the project** | 50000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | NA | NA | NA |

| | |
|---|---|
| **23.Number of tenants and shops** | NA |
| **24.Number of expected residents / users** | NA |
| **25.Tenant density per hectare** | NA |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | The nearest fire station is the Fire station in MIDC Kurkumbh. The road to the project side is 6 meters wide. |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Turning radius of 9 meters is provided within the plot premises. |
| **29.Existing structure (s) if any** | Manufacturing plant , associated utilities, raw material storage area and admin building are present on project plot |
| **30.Details of the demolition with disposal (If applicable)** | The existing shed of MS, covering area of 106.68 sq.m will be demolished. The scrap material after demolition will be sold to the scrap vendor. |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Tenoxicam Intermediate | 80 | Production will be Stopped | Production will be Stopped |
| 2 | Linezolid Intermediate | 260 | Production will be Stopped | Production will be Stopped |
| 3 | Linezolid | - | 300 | 300 |
| 4 | Desloratadine | - | 100 | 100 |
| 5 | 3, 4 Dihydroxy Benzaldehyde | - | 500 | 500 |
| 6 | Febuxostat | - | 300 | 300 |
| 7 | Flavoxate HCL | - | 200 | 200 |
| 8 | Fluvoxamine Maleate | - | 100 | 100 |
| 9 | Montelukast | - | 200 | 200 |
| 10 | Pregabalin | - | 500 | 500 |
| 11 | Rosuvastatin Calcium | - | 200 | 200 |
| 12 | Rupatadine Fumarate | - | 100 | 100 |
| 13 | Tapentadol Hydrochloride | - | 100 | 100 |
| 14 | Tolfanamic Acid | - | 1000 | 1000 |
| 15 | Lornoxicam | - | 250 | 250 |

| | | | | |
|---|---|---|---|---|
| 16 | Zolpidic Acid | - | 500 | 500 |
| 17 | Total | 340 (Production will be Stopped) | 4350 | 4350 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | NA |
| | **Fresh water (CMD):** | NA |
| | **Recycled water - Flushing (CMD):** | NA |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | NA |
| | **Fire fighting - Underground water tank(CMD):** | NA |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | NA |
| **Wet season:** | **Source of water** | NA |
| | **Fresh water (CMD):** | NA |
| | **Recycled water - Flushing (CMD):** | NA |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | NA |
| | **Fire fighting - Underground water tank(CMD):** | NA |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | NA |
| **Details of Swimming pool (If any)** | Not applicable | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | 0.855 | 0.27 | 1.125 | 0.0855 | 0.027 | 0.1125 | 0.7695 | 0.243 | 1.0125 |
| Industrial Process | 1 | 5.75 | 6.75 | 0 | 0 | 0 | 1 | 6.67 | 7.67 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Cooling tower & thermopack | 10 | 27.11 | 37.11 | 7.722 | 15.9072 | 23.63 | 0.3091 | 5.01 | 5.3192 |
| Gardening | 1.14 | 0.86 | 2 | 1.14 | 0.86 | 2 | 0 | 0 | 0 |
| Fresh water requirement | 12.995 | 33.99 | 46.985 | 8.3983 | 16.7942 | 25.7425 | 2.0786 | 11.923 | 14.00 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Average premonsoon water level of Daund is 7.48 mbgl |
| | **Size and no of RWH tank(s) and Quantity:** | The rain water collected from roof top will be connected to the RWH tank of capacity 10 CMD. |
| | **Location of the RWH tank(s):** | Next to UG Tank. |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | 1,00,000 |
| | **Budgetary allocation (O & M cost) :** | 5,000 |
| | **Details of UGT tanks if any :** | Fire Fighting tank of 40 CMD capacity & U. G. Tank of 30 CMD capacity are provided. |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Storm water drains of adequate capacity will be provided along the east & west boundaries of the plot. |
| | **Quantity of storm water:** | Maximum 63 m3/hr of storm water will be generated. |
| | **Size of SWD:** | The SWD having dimension of 0.5 m width X 1m height X 59m and 0.5 m width X 1m height X 35 m along the east & west and north boundaries of the plot respectively . |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 1.0125 |
| | **STP technology:** | Sewage waste water will be collected in septic tank and further treated in the aeration tank of the effluent treatment plant. |
| | **Capacity of STP (CMD):** | NA |
| | **Location & area of the STP:** | NA |
| | **Budgetary allocation (Capital cost):** | NA |
| | **Budgetary allocation (O & M cost):** | NA |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Shed made up of M.S. will be demolished. The Scrap MS material will be sold out to the scrap vendor. |
| | **Disposal of the construction waste debris:** | NA |
| **Waste generation in the operation Phase:** | **Dry waste:** | Packing boards = 10 Kg/m |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | Residue & Waste = 1.25 T/M, ETP Sludge = 600 Kg/m, Spent Carbon = 604.6 Kg/m, Distillation Residue =1961.7 Kg/m, Discarded containers barrels/liners/ plastic bags/ PPE etc = 1000 nos/m, Spent solvent = 24.5 TPM |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Through local Municipal waste disposal system. |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | All the Hazardous waste generated within the company premises will be disposed to CHWTSDF, Ranjangaon. |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Dedicated Hazardous Waste storage area of 10 sq. m. will be provided as depicted in the project plot layout plan. |
| | **Area for the storage of waste & other material:** | Dedicated Hazardous Waste storage area of 10 sq. m. will be provided as depicted in the project plot layout plan |
| | **Area for machinery:** | NA |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | - | 5.8 | 7.2 | 5.5-8.5 |
| 2 | TDS | mg/l | 5128 | 3320 | <4000 |
| 3 | BOD | mg/l | 4500 | 190 | <3000 |
| 4 | COD | mg/l | 12000 | 780 | <6000 |
| 5 | O & G | mg/l | 6.6 | BDL | <10 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 14.00 CMD |
| Capacity of the ETP: | 15 CMD |
| Amount of treated effluent recycled : | Nil. Effluent after treatment in ETP will be further sent to CETP. |
| Amount of water send to the CETP: | 14.00 CMD |
| Membership of CETP (if require): | Company is having membership of CETP, Kurkumbh. (Kurkumbh Environment Protection co-operative Society Maryadit. |

| | |
|---|---|
| Note on ETP technology to be used | All the effluent generated within the company premises will be treated in the ETP of capacity 15 CMD comprising of Primary, Secondary & tertiary treatment. Domestic waste water will be subjected to aeration tank (Secondary treatment) of ETP. The effluent after treatment will be further sent to CETP, Kurkumbh. |
| Disposal of the ETP sludge | ETP sludge will be disposed off to CHWTSDF, Ranjangaon. |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Residue & waste | 28.1 | Kg/M | 1.25 | - | 1.25 | CHWTSDF /Co-processing |
| 2 | ETP Sludge | 35.3 | kg/M | 50 | 550 | 600 | CHWTSDF /Co-processing |
| 3 | Spent Carbon | 28.3 | Kg/M | - | 604.6 | 604.6 | CHWTSDF /Co-processing |
| 4 | Distillation Residue | 20.3 | Kg/M | - | 1961.7 | 1961.7 | CHWTSDF /Co-processing |
| 5 | Discarded containers barrels/liners/ plastic bags/ PPE etc | 33.1 | Nos./M | - | 1000 | 1000 | To the authorized recycler |
| 6 | Spent solvent | 28.6 | MT/M | - | 24.5 | 24.5 | To the authorized recycler |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | 850 kg/hour steam boiler | LDO 0.904 Kl/day | 1 | 20 | 0.4 | 124 |
| 2 | 2 lakh kcal Thermic Fluid Heater | LDO 0.624 Kl/day | 1 | 20 | 0.4 | 124 |
| 3 | 100 kVA Diesel Generator | High Speed Diesel – 10 l/day | 2 | 3.0 (above roof level) | 0.1 | 156 |
| 4 | Scrubber | - | 3 | 15m (above roof level) | 0.2 | 30 |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | LDO | 0.20 KLD | 1.328 KLD | 1.528 KLD |
| 2 | High speed diesel | 10 l/day | 0 | 10 l/day |
| 41.Source of Fuel | | LDO : Local Supplier, High speed diesel: Local HP vendor | | |
| 42.Mode of Transportation of fuel to site | | By Road | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 681.45 sq. m. |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 103 |
| | **List of proposed native trees :** | Cassia fistula, Bombax ceiba, Asltonia shcolaris, Macaranga peltata, Schleichera oleosa, Microcos paniculata, Terminalia elliptica, Terminalia paniculata, Terminalia bellirica, Cordia dichotoma, Helicteres isora, Holoptelea integrifolia, Butea monosperma, Oroxylum indicum, Erythrina suberosa, Azadirachta indica, Trema orientalis, Pongamia pinnata, Neolamarckia cadamba, Pterospermum acerifolium, Dalbergia sissoo, Pongamia pinnata |
| | **Timeline for completion of plantation :** | 2 years after grant of environmental clearance |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Cassia fistula | Bahava | 05 | Native tree of forest tracts of Sahyadri ranges having flowers attracting bees and butterflies |
| 2 | Bombax ceiba | Sawar | 05 | A native deciduous tree with fragrant flowers attracting large number of birds & insects |
| 3 | Asltonia shcolaris | Saptaparni | 05 | A native evergreen tree with fragrant flowers & leaves having comparatively higher dust settling index |
| 4 | Macaranga peltata | Chandwar | 05 | A native tree found in abundance across the plains of Sahyadri ranges |
| 5 | Schleichera oleosa | Kusum | 05 | A native deciduous trees of forest tracts of Sahyadri ranges |
| 6 | Microcos paniculata | Shirali | 05 | A native evergreen medium sized tree of forest tracts of Sahyadri ranges |
| 7 | Terminalia elliptica | Ain | 05 | A native evergreen tree of forest tracts of Sahyadri ranges |
| 8 | Terminalia paniculata | Kindal | 05 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 9 | Terminalia bellirica | Baheda | 05 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 10 | Cordia dichotoma | Shelu | 05 | A native deciduous tree of forest tracts of Sahyadri ranges attracting large number of insects |
| 11 | Helicteres isora | Murudsheng | 05 | A native deciduous medium sized tree of forest tracts of Sahyadri ranges visited by large number of birds |
| 12 | Holoptelea integrifolia | Ainsadada | 05 | A native deciduous tree of forest tracts of Sahyadri ranges |
| 13 | Butea monosperma | Palash | 05 | A native brilliantly flowering tree abundant the Palghar District visited by large number of birds |
| 14 | Oroxylum indicum | Tetu | 05 | A native ornamental tree |

| | | | | |
|---|---|---|---|---|
| 15 | Erythrina suberosa | Pangara | 05 | A native deciduous medium sized tree of forest tracts of Sahyadri ranges visited by large number of birds |
| 16 | Azadirachta indica | Kadulimb | 05 | A native evergreen tree capable of surviving in comparatively polluted environs |
| 17 | Dalbergia sissoo | Shisham | 05 | A native evergreen tree attracting large number of insects |
| 18 | Trema orientalis | Ghol | 05 | A native deciduous medium sized tree with hairy leaves having comparatively higher dust settling index |
| 19 | Pongamia pinnata | Karanj | 05 | A native deciduous tree well suited to intense heat and sunlight and drought tolerant |
| 20 | Neolamarckia cadamba | Kadamba | 04 | A native evergreen tree with tremendous blooms attracting large number of insects |
| 21 | Pterospermum acerifolium | Karnikar | 04 | A native evergreen tree with large & hairy leaves having comparatively high dust settling index generally used for ornamental plantation |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | Maharashtra State Electricity Distribution Company Limited (MSEDCL) |
| | **During Construction Phase: (Demand Load)** | 50 KVA |
| | **DG set as Power back-up during construction phase** | NA |
| | **During Operation phase (Connected load):** | 184 KW |
| | **During Operation phase (Demand load):** | 90 KVA |
| | **Transformer:** | 184 KW |
| | **DG set as Power back-up during operation phase:** | 1 x 100 KVA |
| | **Fuel used:** | High Speed Diesel |
| | **Details of high tension line passing through the plot if any:** | NA |

## 48.Energy saving by non-conventional method:

8 nos of Solar street lights will be installed within the plot premises

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | NA | NA |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Air | Common stack of 11 m height for 0.6 TPH Boiler and 2 Lakh Kcal/hr Thermopack, to ensure effective dispersion of pollutants. 1 no of Alkali scrubber to scrub the process emissions. 1 m stack height for D. G set of 100 KVA capacity . | Common stack of 20 meters height attached to both boiler and thermopack. Alkali scrubber of 100 CFM capacity having stack height of 15m (above roof level). 1 m stack height for D. G set of 100 KVA capacity will be upgraded to 3 meters. |
| Water | ETP of 2 CMD capacity comprising of Primary, Secondary and Tertiary Treatment. | Existing ETP of 2 CMD capacity will be upgraded to 15 CMD capacity for treating additional effluent load after expansion. The ETP will comprise of Primary, Secondary and Tertiary Treatment. |
| Noise | Acoustic enclosures have been provided to D.G Sets. Preventive maintainance of all the noise generating equipments is being done | Existing pollution control systems are sufficient for the proposed expansion. A thick green belt will be provided on the periphery of the plant premises. |
| Soild hazardous waste | The hazardous waste is stored in a seperate demarcated area, the recyclables are sent to authorized vendors and the rest are sent to CHWTSDF for disposal | Existing pollution control systems are sufficient for the proposed expansion |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Dust Generation due to demolition and construction of Raw material storage area and Process area. | Installation of barriers around the construction / demolition area, sprinkling of water for dust suppression, PPE's to workers exposed to dust pollution. | 0.25 |
| 2 | Water Pollution due to release of untreated sewage | Sewage effluent will be collected in septic tank and further will be treated in the aeration tank of ETP. | 0.1 |
| 3 | Noise pollution due to operation of heavy machinery and equipment | Installation of barriers around the construction / demolition area, PPE's to workers exposed to noise pollution. | 0.25 |

| | | | |
|---|---|---|---|
| 4 | Construction debris and construction waste | The waste with saleable value like metal scrap will be sold off, construction debris will be utilized within the plot for leveling purpose. | 0.2 |

## b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Air | Upgradation of existing common stack of boiler & thermopack to 20 m height. | 3 | 0.5 |
| 2 | Water | Up gradation of existing ETP to 15 CMD capacity . | 35 | 3 |
| 3 | Noise | Development of acoustic enclosures and installation of shock absorbers & vibration absorbing pads. | 1 | 0.5 |
| 4 | Occupational Health | Purchase of PPE's and health check ups. | 0.5 | 0.5 |
| 5 | Green Belt | Development of green belt. | 1.50 | 0.8 |
| 6 | Solid Waste | Purchase of solid waste storage bags, containers. | 1.50 | 1 |
| 7 | Rain water harvesting | Provision of RWH system along with above ground collection tank of 10 CMD. | 1 | 0.05 |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| 3,4 DFNB | Liquid | Enclosed shed | 0.2 | 0.2 | 0.45887 | Import | By air/sea and road |
| Morpholine | Liquid | Enclosed shed | 0.2 | 0.2 | 0.30286 | Local | By Road |
| Sodium Carbonate | Solid | Enclosed shed | 0.2 | 0.2 | 0.87782 | Local | By Road |
| Ethyl Acetate | Liquid | Enclosed shed | 1.8 | 1.8 | 11.69076 | Local | By Road |
| 5% Pd/c | Solid | Enclosed shed | 0.005 | 0.005 | 0.00687 | Local | By Road |
| Hydrogen Gas | Gas | Enclosed shed | 0.002 | 0.002 | 1.28763 | Local | By Road |
| Methanol | Liquid | Enclosed shed | 1.58 | 1.58 | 36.01166 | Local | By Road |
| R-Epichlorohydrin | Liquid | Enclosed shed | 0.2 | 0.2 | 0.28909 | Import | By air/sea and road |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DMF | Liquid | Enclosed shed | 1.9 | 1.9 | 9.29326 | Local | By Road |
| Potassium pthalimide | Solid | Enclosed shed | 0.2 | 0.2 | 0.53321 | Local | By Road |
| Ethylene Chloride | Liquid | Enclosed shed | 2.5 | 2.5 | 20.25493 | Local | By Road |
| Triphosgin | Solid | Enclosed shed | 0.07 | 0.07 | 0.27367 | Local | By Road |
| Tri Ethyl Amine | Liquid | Enclosed shed | 0.2 | 0.2 | 0.75554 | Local | By Road |
| Sodium Bicarbonate | Solid | Enclosed shed | 0.025 | 0.025 | 0.02737 | Local | By Road |
| Hydrazine Hydrate | Liquid | Enclosed shed | 0.2 | 0.2 | 0.76717 | Local | By Road |
| Activated Carbon | Solid | Enclosed shed | 0.1 | 0.1 | 0.26665 | Local | By Road |
| Methylene Chloride | Liquid | Enclosed shed | 2.66 | 2.66 | 15.83067 | Local | By Road |
| Acetic Anhydride | Liquid | Enclosed shed | 0.2 | 0.2 | 0.46552 | Local | By Road |
| Liquor Ammonia | Liquid | Enclosed shed | 0.2 | 0.2 | 1.70153 | Local | By Road |
| Thiophene Ester | Solid | Enclosed shed | 0.075 | 0.075 | 0.37226 | Import | By air/sea and road |
| Magnesium Metal | Solid | Enclosed shed | 0.05 | 0.05 | 0.13401 | Local | By Road |
| HCL | Liquid | Enclosed shed | 0.35 | 0.35 | 6.86534 | Local | By Road |
| Acetone | Liquid | Enclosed shed | 0.316 | 0.316 | 0.71734 | Local | By Road |
| Dimethyl Sulphate | Liquid | Enclosed shed | 0.2 | 0.2 | 0.17705 | Local | By Road |
| Sodium Hydroxide | Solid | Enclosed shed | 0.2 | 0.2 | 1.67192 | Local | By Road |
| Xylene | Liquid | Enclosed shed | 1.76 | 1.76 | 25.88333 | Local | By Road |
| 2 Amino Pyridine | Solid | Enclosed shed | 0.05 | 0.05 | 0.10833 | Local | By Road |
| Potassium Carbonate | Solid | Enclosed shed | 0.2 | 0.2 | 1.00093 | Local | By Road |
| 2 amino 5 methyl pyridine | Solid | Enclosed shed | 0.1 | 0.1 | 0.2572 | Local | By Road |
| Aluminum Chloride | Solid | Enclosed shed | 0.05 | 0.05 | 0.12058 | Local | By Road |
| 4 Methyl Acetophenone | Solid | Enclosed shed | 0.2 | 0.2 | 0.43724 | Local | By Road |
| Bromine | Liquid | Enclosed shed | 0.05 | 0.05 | 0.46811 | Local | By Road |
| Toluene | Liquid | Enclosed shed | 1.734 | 1.734 | 5.32891 | Local | By Road |
| Oxalyl Chloride | Liquid | Enclosed shed | 0.2 | 0.2 | 0.35185 | Local | By Road |
| Acetic Acid | Liquid | Enclosed shed | 0.175 | 0.175 | 0.6616 | Local | By Road |
| DEG | Liquid | Enclosed shed | 0.6 | 0.6 | 3.05 | Local | By Road |
| Potassium Hydroxide | Solid | Enclosed shed | 0.2 | 0.2 | 0.2879 | Local | By Road |
| Loratadine | Solid | Enclosed shed | 0.05 | 0.05 | 0.11574 | Local | By Road |
| 3 Chloromethyl 5 methyl pyridine HCL | Solid | Enclosed shed | 0.05 | 0.05 | 0.06296 | Local | By Road |
| TBAB | Solid | Enclosed shed | 0.005 | 0.005 | 0.00463 | Local | By Road |
| Potassium Dihydrogen Phosphate Fumaric Acid | Solid | Enclosed shed | 0.01 | 0.01 | 0.01019 | Local | By Road |
| Vanillin | Liquid | Enclosed shed | 0.2 | 0.2 | 0.76923 | Local | By Road |
| Pyridine | Liquid | Enclosed shed | 0.2 | 0.2 | 1.04615 | Local | By Road |
| N-1(3-cyano) | Solid | Enclosed shed | 0.1 | 0.1 | 0.27174 | Local | By Road |
| Barium Hydroxide | Solid | Enclosed shed | 0.05 | 0.05 | 0.14946 | Local | By Road |
| 3- methylflavone | Solid | Enclosed shed | 0.05 | 0.05 | 0.09091 | Local | By Road |
| Piperidine Ethanol | Liquid | Enclosed shed | 0.05 | 0.05 | 0.05818 | Local | By Road |
| Thionyl Chloride | Liquid | Enclosed shed | 0.2 | 0.2 | 0.07455 | Local | By Road |
| IPA HCL | Liquid | Enclosed shed | 0.2 | 0.2 | 0.21528 | Local | By Road |
| N-1(Fluvoxamine Maleate ) | Solid | Enclosed shed | 0.05 | 0..05 | 0.08929 | Local | By Road |
| PEG 400 | Liquid | Enclosed shed | 0.2 | 0.2 | 0.35714 | Local | By Road |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2- Chloroethyl Amine | Liquid | Enclosed shed | 0.04 | 0.04 | 0.04464 | Local | By Road |
| Maleic Acid | Solid | Enclosed shed | 0.01 | 0.01 | 0.0125 | Local | By Road |
| Benzapropanol | Solid | Enclosed shed | 0.2 | 0.2 | 0.11765 | Local | By Road |
| I-mercapto methyl | Solid | Enclosed shed | 0.04 | 0.04 | 0.04118 | Local | By Road |
| Dimethyl Sulfoxide | Liquid | Enclosed shed | 0.2 | 0.2 | 0.51765 | Local | By Road |
| Sodium Methoxide | Solid | Enclosed shed | 0.2 | 0.2 | 0.22824 | Local | By Road |
| Di cyclohexylamine | Liquid | Enclosed shed | 0.05 | 0.05 | 0.05882 | Local | By Road |
| Hexane | Liquid | Enclosed shed | 0.2 | 0.2 | 0.37647 | Local | By Road |
| Ethanol | Liquid | Enclosed shed | 0.2 | 0.2 | 0.29176 | Local | By Road |
| N-Heptane | Liquid | Enclosed shed | 0.2 | 0.2 | 0.73882 | Local | By Road |
| N-1(Pregabalin) | Solid | Enclosed shed | 0.2 | 0.2 | 0.90909 | Local | By Road |
| Sodium Hypochlorite | Liquid | Enclosed shed | 0.05 | 0.05 | 3.16364 | Local | By Road |
| Isopropanol | Liquid | Enclosed shed | 0.4 | 0.4 | 1.84545 | Local | By Road |
| Tert. Butyl Rosuvastatin | Liquid | Enclosed shed | 0.05 | 0.05 | 0.24691 | Local | By Road |
| Calcium Chloride | Solid | Enclosed shed | 0.05 | 0.05 | 0.05926 | Local | By Road |
| N-1(Tapentadol Hydrochloride) | Solid | Enclosed shed | 0.05 | 0.05 | 0.13889 | Local | By Road |
| 2-Methyl THF | Liquid | Enclosed shed | 0.2 | 0.2 | 0.25 | Local | By Road |
| Trifloro Acetic Anhydride | Liquid | Enclosed shed | 0.05 | 0.05 | 0.16111 | Local | By Road |
| 10% Pd/C | Solid | Enclosed shed | 0.005 | 0.005 | 0.01667 | Local | By Road |
| IPA | Liquid | Enclosed shed | 0.4 | 0.4 | 1.83333 | Local | By Road |
| 3-CMA | Solid | Enclosed shed | 0.2 | 0.2 | 0.8 | Local | By Road |
| OCBA | Solid | Enclosed shed | 0.5 | 0.5 | 1.68 | Local | By Road |
| Copper Powder | Solid | Enclosed shed | 0.005 | 0.005 | 0.016 | Local | By Road |
| Fumaric Acid | Solid | Enclosed shed | 0.025 | 0.025 | 0.03333 | Local | By Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | NA |

| | | |
|---|---|---|
| Parking details: | Number and area of basement: | NA |
| | Number and area of podia: | NA |
| | Total Parking area: | 75.0 Sq.m |
| | Area per car: | NA |
| | Area per car: | NA |
| | Number of 2-Wheelers as approved by competent authority: | NA |
| | Number of 4-Wheelers as approved by competent authority: | NA |
| | Public Transport: | NA |
| | Width of all Internal roads (m): | 6.0 m |
| | CRZ/ RRZ clearance obtain, if any: | NA |
| | Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries | NA |
| | Category as per schedule of EIA Notification sheet | B1 |
| | Court cases pending if any | NA |
| | Other Relevant Informations | NA |
| | Have you previously submitted Application online on MOEF Website. | Yes |
| | Date of online submission | 01-01-1900 |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| Environmental Impacts of the project | Not Applicable |
| Water Budget | Not Applicable |
| Waste Water Treatment | Not Applicable |
| Drainage pattern of the project | Not Applicable |
| Ground water parameters | Not Applicable |
| Solid Waste Management | Not Applicable |

| | |
|---|---|
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP submitted their application for the grant of TOR under category 5(f)B1 as per EIA Notification, 2006. PP presented draft TOR based on standard TOR issued by MoEF & CC published in April, 2015.

As the industry is located in the notified industrial area/estate (MIDC), Public Hearing is exempted under the provisions as per para 7 III Stage (3) (b) of the EIA Notification, 2006

## DECISION OF SEAC

Based on the presentation made by PP; committee decided to approve the TOR for the preparation of EIA/EMP report as per standard TOR and additional TOR points mentioned below.

PP to collect base line data as per Office Memorandum issued by MoEF&CC dated 27.08.2017.

The validity of the TOR will be for three years as per OM issued by MoEF and CC on 29.08.2017.

PP to submit Form - 2 along with EIA/EMP report as per OM issued by MoEF&CC on 20.04.2018.

PP to submit their plan to utilize CER (Corporate Environment Responsibility) along with timelines as per OM issued by MoEF&CC dated 01.05.2018.

**Specific Conditions by SEAC:**

**1)** PP to submit certificate of incorporation of the company, list of directors and memorandum of articles.
**2)** PP to submit lay out plan showing internal roads with six meter width and nine meter turning radius, location of pollution control equipment, parking areas, 33% green belt with its dimensions, rain water harvesting structures (locations with dimensions ), storm water drain lines, along with index and area statement showing calculations for each area and cross sections of storm water drain and rain water harvesting pits etc.
**3)** PP to provide green belt as per OM issued by MoEF&CC dated 09.08.2018. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
**4)** PP to carry out life cycle analysis of the activities carried out on site with respect to the sustainability index, green house and ozone depletion potential etc
**5)** PP to include detailed material balance charts for each product showing consumption of raw material, sources of pollution and mitigation measures to control the pollution and justified use of resources along with quantities in the EIA report.
**6)** PP to include detailed water balance in the EIA report along with design details of effluent treatment plant.
**7)** PP to carry out HAZOP and QRA and submit Disaster Management Plan.
**8)** PP to submit a technical report on how the proposed expansion with respect to the production quantity will be accommodated in the existing facility along with structural stability certificate of existing buildings/structures on the site.
**9)** PP to submit an undertaking for not violating any requirements of EIA Notification, 2006.
**10)** PP to submit hazardous chemical handling protocol
**11)** PP to use new and renewable energy for the illumination of office building and street lights.
**12)** PP to provide lightening arrestor.
**13)** PP to conduct socio economic impact study.



## FINAL RECOMMENDATION

The Committee decided to Grant ToR subject to the above observations,PP requested to prepare and submit EIA report as per EIA Notification, 2006 and amendments thereof.

## 156th Meeting of State Level Expert Appraisal Committee (SEAC-1)

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Storage of Chlorine (50 T/Day)

**Is a Violation Case:** No

| | |
|---|---|
| **1.Name of Project** | Sterlite Technologies Ltd. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. S. Rajagopal |
| **4.Name of Consultant** | Gaurang Environmental Solutions |
| **5.Type of project** | NA |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New Project |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | NA |
| **8.Location of the project** | Plot No. D-198 & D-199, Shendra MIDC |
| **9.Taluka** | Aurangabad |
| **10.Village** | Shendra |
| **Correspondence Name:** | Sterlite Technologies Ltd , MIDC Shendra, Aurangabad. Maharashtra-India |
| **Room Number:** | Plot No.D-198 & D-199 |
| **Floor:** | NA |
| **Building Name:** | NA |
| **Road/Street Name:** | Shendra MIDC Road |
| **Locality:** | Shendra MIDC |
| **City:** | City Aurangabad |
| **11.Area of the project** | NA |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** NA |
| | **Approved Built-up Area:** 6522 |
| **13.Note on the initiated work (If applicable)** | NA |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | NA |
| **15.Total Plot Area (sq. m.)** | 22734 |
| **16.Deductions** | NA |
| **17.Net Plot area** | NA |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** NA |
| | **b) Non FSI area (sq. m.):** NA |
| | **c) Total BUA area (sq. m.):** 6522 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** NA |
| | **Approved Non FSI area (sq. m.):** NA |
| | **Date of Approval:** 03-08-2018 |
| **19.Total ground coverage (m2)** | NA |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | NA |
| **21.Estimated cost of the project** | 1150000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 1 | NA | NA | NA |

| | |
|---|---|
| **23.Number of tenants and shops** | NA |
| **24.Number of expected residents / users** | NA |
| **25.Tenant density per hectare** | NA |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 19 |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | 9 |
| **29.Existing structure (s) if any** | Na |
| **30.Details of the demolition with disposal (If applicable)** | NA |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Silicon Tetrachloride | 0 | 500 | 500 |
| 2 | Silicon Dioxide {By Product} | 0 | 20 | 20 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MIDC |
| | **Fresh water (CMD):** | 89 |
| | **Recycled water - Flushing (CMD):** | 72 |
| | **Recycled water - Gardening (CMD):** | 3 |
| | **Swimming pool make up (Cum):** | 0 |
| | **Total Water Requirement (CMD) :** | 167 |
| | **Fire fighting - Underground water tank(CMD):** | 0 |
| | **Fire fighting - Overhead water tank(CMD):** | 0 |
| | **Excess treated water** | 0 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | MIDC |
| | **Fresh water (CMD):** | 83 |
| | **Recycled water - Flushing (CMD):** | 72 |
| | **Recycled water - Gardening (CMD):** | 3 |
| | **Swimming pool make up (Cum):** | 0 |
| | **Total Water Requirement (CMD) :** | 155 |
| | **Fire fighting - Underground water tank(CMD):** | 0 |
| | **Fire fighting - Overhead water tank(CMD):** | 0 |
| | **Excess treated water** | 0 |
| **Details of Swimming pool (If any)** | NA | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | 0 | 4 | 4 | 0 | 1 | 1 | 0 | 3 | 3 |
| Industrial Process | 0 | 41 | 41 | 0 | 5 | 5 | 0 | 36 | 36 |
| Cooling tower & thermopack | 0 | 110 | 110 | 0 | 74 | 74 | 0 | 36 | 36 |
| Gardening | 0 | 6 | 6 | 0 | 6 | 6 | 0 | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 10 |
| | **Size and no of RWH tank(s) and Quantity:** | Will be submitted in detail in EIA Report |
| | **Location of the RWH tank(s):** | Will be submitted in detail in EIA Report |
| | **Quantity of recharge pits:** | Will be submitted in detail in EIA Report |
| | **Size of recharge pits :** | Will be submitted in detail in EIA Report |
| | **Budgetary allocation (Capital cost) :** | Rs. 10 Lacs |
| | **Budgetary allocation (O & M cost) :** | Rs. 1 Lacs |
| | **Details of UGT tanks if any :** | Will be submitted in detail in EIA Report |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | The plot is sloping in West-South direction. Natural drain is available along the side of roads. |
| | **Quantity of storm water:** | 1136.7 m3 at pick rainfall |
| | **Size of SWD:** | 1 m * 1 m * 1.25 m Depth along the plot boundary |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 3.2 |
| | **STP technology:** | Septic Tank followed by Soak Pit |
| | **Capacity of STP (CMD):** | 1 No 5 KLD |
| | **Location & area of the STP:** | Near ETP |
| | **Budgetary allocation (Capital cost):** | Rs 25 Lacs |
| | **Budgetary allocation (O & M cost):** | Rs 2.5 Lacs |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Civil Construction Waste, Packing Waste, Steel Waste |
| | **Disposal of the construction waste debris:** | To be stored in dedicated storage yard and will be sold to authorized vendor |
| **Waste generation in the operation Phase:** | **Dry waste:** | Office waste: 50 Kg/Month, Polythene bags: 100 Kg/Month, Corrugated boxes: 240 Kg/Month |
| | **Wet waste:** | Canteen Waste: 100 Kg/Month |
| | **Hazardous waste:** | Sludge From Water Treatment: 120 T/Month, Waste Oil: 100 Liter/Month, Process Residue: 20 T/Month, Discarded containers barrels used for HW and chemical 100 No/M, Silicon Residue 20 T/m |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 100 kg/Month |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Sale to Authorized Vendor |
| | **Wet waste:** | Sale to Authorized Vendor |
| | **Hazardous waste:** | To CHWTSDF |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Sale to Authorized Vendor |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Shendra MIDC |
| | **Area for the storage of waste & other material:** | 4465 sqm |
| | **Area for machinery:** | 1247 sqm |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 1150000000 |
| | **O & M cost:** | 5000000 |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | From Cooling Tower, Boiler | RO | high TDS and neutral pH | As Per MPCB Norms | BOD<30, COD<150, TDS<2100 |
| 2 | Scrubber Waste Water | ETP/MEE | salts of sodium silicate and | As Per MPCB Norms | BOD<30, COD<150, TDS<2100 |
| 3 | For sludge handling | Filter Press/ Centrifuge | Salts | As Per MPCB Norms | BOD<30, COD<150, TDS<2100 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 75 |
| Capacity of the ETP: | 90 |
| Amount of treated effluent recycled : | 75 |
| Amount of water send to the CETP: | NA |
| Membership of CETP (if require): | NA |
| Note on ETP technology to be used | ZLD-Process( CT & Boiler)Blow down after passing through RO, all reject will be send along Scrubber water to Clarifier where after sedimentation further purification will be done in MEE. |
| Disposal of the ETP sludge | Disposal to CHWTSDF/Sale. |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | ETP Sludge | 35.3 | T/Month | 0 | 20 | 20 | CHWTSDF |
| 2 | MEE Salt | 35.3 | T/Month | 0 | 100 | 100 | CHWTSDF |
| 3 | Waste Oil | 5.1 | Lit/Month | 0 | 100 | 100 | Sale to Authorised Vendor |
| 4 | Process Residue | 27.1 | T/Annum | 0 | 20 | 20 | CHWTSDF |
| 5 | Disposal of barrel | 33.1 | No./Month | 0 | 10 | 10 | Sale to Authorised Vendor |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | Boiler 1 | CNG 185 kg/Hr | 1 | 30 | 0.5 | 140 |
| 2 | Boiler 2 | CNG 185 kg/Hr | 1 | 30 | 0.5 | 140 |
| 3 | Process Vent Scrubber | NA | 1 | 30 | 0.5 | 40 |
| 4 | Emergency Vent Scrubber | NA | 1 | 30 | 0.3 | 40 |
| 5 | Emergency Chlorine Scrubber | NA | 1 | 20 | 0.3 | 40 |
| 6 | DG Set | HSD 107 LPH | 1 | 30 | 0.15 | 140 |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | CNG | 0 | 5000 Ncum/Day | 5000 Ncum/Day |
| 2 | HSD | 0 | 107 LPH | 107 LPH |

| | |
|---|---|
| 41.Source of Fuel | Local Vendor |
| 42.Mode of Transportation of fuel to site | By Road |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 7607 |
| | **No of trees to be cut :** | 0 |
| | **Number of trees to be planted :** | 1000 |
| | **List of proposed native trees :** | Neem, Nandrulk , Sita Ashok, Shirish , Royal Palm, Palas, Maharukh, Laxmi Taru |
| | **Timeline for completion of plantation :** | 3 years |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Azadirachta indica | Neem | 65 | Medicinal Value |
| 2 | Ficus microcarpa | Nandruk | 50 | Medicinal Value |
| 3 | Saraca asoca | Sita Ashok | 75 | Beautification |
| 4 | Roystonea regia | Royal Palm | 70 | Beautification |
| 5 | Albizzi alebek | Shirish | 80 | Large Tree |
| 6 | Buteamono sperma | Palas | 85 | Beautification |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 50 KW |
| | **DG set as Power back-up during construction phase** | 500 KVA |
| | **During Operation phase (Connected load):** | 0.5 MW |
| | **During Operation phase (Demand load):** | 0.5 MW |
| | **Transformer:** | Yes |
| | **DG set as Power back-up during operation phase:** | 500 KVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | No |

## 48.Energy saving by non-conventional method:

Solar system will be provided at Administration Building & also use for Street Light.

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Street Light | 5 |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Boiler 1 | 0 | Stack Height - 30 m With Flue gas Monitoring System |
| Boiler 2 | 0 | Stack Height - 30 m With Flue gas Monitoring System |
| Process Vent Scrubber | 0 | Stack Height - 30 m With Chlorine Sensor |
| Emergency Vent Scrubber | 0 | SStack Height - 30 m With Chlorine Sensor |
| Emergency Chlorine Scrubber | 0 | SStack Height - 20 m With Chlorine Sensor |
| DG Set | 0 | Stack Height - 30 m |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs 50 Lacs |
| | **O & M cost:** | Rs 5 Lacs |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Sanitation | Water Supply | 20 |
| 2 | Safety | Onsite Safety with Work permit system | 30 |

## b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Automation | SRV's, RD's, Interlocks F&G detection system | 500 | 25 |
| 2 | Scrubbers | Process Vent, Emergency Vent and Chlorine Vent | 390 | 50 |
| 3 | WTP and ETP | Water Treatment Process | 150 | 75 |
| 4 | MEE | SWater Treatment Process with calendria | 200 | 100 |
| 5 | Fire and Safety | Fire Hydrant, Pumping Stations | 900 | 50 |
| 6 | Green Belt | Plantation | 100 | 10 |
| 7 | Rain water Harvesting | Collection of Rain Water | 10 | 1 |
| 8 | Solar | Street Light | 25 | 2.5 |
| 9 | OHS | Occupation Health and Safety measures | 25 | 2.5 |
| 10 | Energy Comsumption | Condensate recovery system | 25 | 2.5 |
| 11 | HW/SW Management | Handling and Disposal Facility | 100 | 10 |
| 12 | Acoustic Enclosure | Prevent Noise and Vibration | 25 | 2.5 |
| 13 | Environmental Monitoring | Air, Water, Noise, Soil Monitoring | 25 | 2.5 |
| 14 | Online Monitoring | Stack and ETP Online Monitoring | 25 | 2.5 |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| CNG | Liquid | Gas Yard | 20 | 15 | 116 | Local Vendor | By Road in Tanker |
| Chlorine | Anhydrous | Storage Yard | 55 | 50 | 430 | GACL. Gujrat | By Road in Tanker |
| Caustic Lye | Liquid | ETP | 20 | 15 | 60 | Local Vendor | By Road in Tanker |
| Silicon Tetra Chloride | Liquid | Storage Yard | 90 | 75 | 500 | Local Vendor | ISO Tanker |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Liquid Nitrogen | Liquid | Gas Yard | 20 | 15 | 60 | Local Vendor | By Road in Tanker |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | 2 |
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 2274 |
| | **Area per car:** | NA |
| | **Area per car:** | NA |
| | **Number of 2-Wheelers as approved by competent authority:** | 10 |
| | **Number of 4-Wheelers as approved by competent authority:** | 10 |
| | **Public Transport:** | 3 Buses |
| | **Width of all Internal roads (m):** | 6 |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | 6 (b) |
| | **Court cases pending if any** | No |
| | **Other Relevant Informations** | No |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | Not Applicable |
| **Water Budget** | Not Applicable |
| **Waste Water Treatment** | Not Applicable |
| **Drainage pattern of the project** | Not Applicable |
| **Ground water parameters** | Not Applicable |
| **Solid Waste Management** | Not Applicable |
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP submitted their application for the grant of TOR under category 6(b)B1 as per EIA Notification, 2006. PP presented draft TOR based on standard TOR issued by MoEF & CC published in April, 2015. PP proposes to store 50 Tons of chlorine on site.

As the industry is located in the notified industrial area/estate (MIDC), Public Hearing is exempted under the provisions as per para 7 III Stage (3) (b) of the EIA Notification, 2006

## DECISION OF SEAC

Based on the presentation made by PP; committee decided to approve the TOR for the preparation of EIA/EMP report as per standard TOR and additional TOR points mentioned below.

PP to collect base line data as per Office Memorandum issued by MoEF&CC dated 27.08.2017.

The validity of the TOR will be for three years as per OM issued by MoEF and CC on 29.08.2017.

PP to submit Form - 2 along with EIA/EMP report as per OM issued by MoEF&CC on 20.04.2018.

PP to submit their plan to utilize CER (Corporate Environment Responsibility) along with timelines as per OM issued by MoEF&CC dated 01.05.2018.

**Specific Conditions by SEAC:**

**1)** PP to submit certificate of incorporation of the company, list of directors and memorandum of articles.
**2)** PP to submit lay out plan showing internal roads with six meter width and nine meter turning radius, location of pollution control equipment, parking areas, 33% green belt with its dimensions, rain water harvesting structures (locations with dimensions ), storm water drain lines, along with index and area statement showing calculations for each area and cross sections of storm water drain and rain water harvesting pits etc.
**3)** PP to provide green belt as per OM issued by MoEF&CC dated 09.08.2018. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
**4)** PP to carry out heat integration study and explore possibility to reuse heat generated in the process for other unit operations.
**5)** PP to submit storm water drain calculations considering the location of plot at the base of hillock, annual rain fall, contour of the area etc.
**6)** PP to carry out HAZOP and QRA and submit Disaster Management Plan. PP submit details of safety precautions proposed based on the results of HAZOP and Risk Assessment study.
**7)** PP to use new and renewable energy for the illumination of office building and street lights.
**8)** PP to submit their plan for handling an emergency in case of leakage of chlorine in view of evacuation time, training of the personnel, emergency response, medical assistance, rescue operations etc.
**9)** PP to conduct socio economic impact study and implementation plan along with time schedule based on outcome of the study.

## FINAL RECOMMENDATION

The Committee decided to Grant ToR subject to the above observations,PP requested to prepare and submit EIA report as per EIA Notification, 2006 and amendments thereof.

## 156th Meeting of State Level Expert Appraisal Committee (SEAC-1)

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Environmental Clearance for the proposed capacity expansion by 300 MT/M of Ethoxylated Hydrophobes

**Is a Violation Case:** No

| | |
|---|---|
| **1.Name of Project** | Proposed capacity expansion by 300 MT/M of Ethoxylated Hydrophobes by Deepchand Chemicals Pvt. Ltd. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. P N Kanade ,Director |
| **4.Name of Consultant** | Mahabal Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Not applicable |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Capacity Expansion |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | No |
| **8.Location of the project** | Plot no. E-12/13, MIDC Lote Parshuram |
| **9.Taluka** | Khed |
| **10.Village** | Khed |
| **Correspondence Name:** | Mr. P N Kanade |
| **Room Number:** | 11/1 |
| **Floor:** | - |
| **Building Name:** | - |
| **Road/Street Name:** | Ambedkar Nagar |
| **Locality:** | Sion |
| **City:** | Mumbai |
| **11.Area of the project** | MIDC,Lote Parshuram |
| **12.IOD/IOA/Concession/Plan Approval Number** | Not applicable |
| | **IOD/IOA/Concession/Plan Approval Number:** Not applicable |
| | **Approved Built-up Area:** |
| **13.Note on the initiated work (If applicable)** | No expansion will be done without obtaining prior Environmental Clearance |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not applicable |
| **15.Total Plot Area (sq. m.)** | NA |
| **16.Deductions** | NA |
| **17.Net Plot area** | NA |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** NA |
| | **b) Non FSI area (sq. m.):** NA |
| | **c) Total BUA area (sq. m.):** 170 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** NA |
| | **Approved Non FSI area (sq. m.):** NA |
| | **Date of Approval:** 05-09-2018 |
| **19.Total ground coverage (m2)** | Not applicable |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | Not applicable |
| **21.Estimated cost of the project** | 5700000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| **23.Number of tenants and shops** | NA |
| **24.Number of expected residents / users** | Not applicable |
| **25.Tenant density per hectare** | Not applicable |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | - |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Not applicable |
| **29.Existing structure (s) if any** | Not applicable |
| **30.Details of the demolition with disposal (If applicable)** | Not applicable |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Ethoxylated Hydrophobes | 0 | 300 | 300 |
| 2 | Phenol Glyon | 10 | 0 | 10 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| Dry season: | **Source of water** | Not applicable |
| | **Fresh water (CMD):** | Not applicable |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | Not applicable |
| | **Fire fighting - Underground water tank(CMD):** | Not applicable |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| Wet season: | **Source of water** | Not applicable |
| | **Fresh water (CMD):** | Not applicable |
| | **Recycled water - Flushing (CMD):** | Not applicable |
| | **Recycled water - Gardening (CMD):** | Not applicable |
| | **Swimming pool make up (Cum):** | Not applicable |
| | **Total Water Requirement (CMD) :** | Not applicable |
| | **Fire fighting - Underground water tank(CMD):** | Not applicable |
| | **Fire fighting - Overhead water tank(CMD):** | Not applicable |
| | **Excess treated water** | Not applicable |
| **Details of Swimming pool (If any)** | Not applicable | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | 1 | 1 | 2 | 0.2 | 0 | 0.2 | 0.8 | 0 | 0.8 |
| Industrial Process | 1.5 | 0.5 | 2 | 1.8 | 0 | 1.8 | 0.2 | 0 | 0.2 |
| Gardening | 0.5 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 3-4 |
| | **Size and no of RWH tank(s) and Quantity:** | 1 No- 70KL |
| | **Location of the RWH tank(s):** | Near EO storage tank |
| | **Quantity of recharge pits:** | Not applicable |
| | **Size of recharge pits :** | Not applicable |
| | **Budgetary allocation (Capital cost) :** | Rs. 4 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs. 1.2 Lakhs/annum |
| | **Details of UGT tanks if any :** | 62 m3 |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Along plot boundary |
| | **Quantity of storm water:** | 0.05 m3/sec |
| | **Size of SWD:** | 500 mm x 500 mm |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | - |
| | **STP technology:** | Septic tank and soak pit |
| | **Capacity of STP (CMD):** | Not applicable |
| | **Location & area of the STP:** | Not applicable |
| | **Budgetary allocation (Capital cost):** | Rs. 1 Lakh |
| | **Budgetary allocation (O & M cost):** | Rs. 0.30 Lakh/annum |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Not applicable |
| | **Disposal of the construction waste debris:** | Not applicable |
| **Waste generation in the operation Phase:** | **Dry waste:** | 1.5 kg/day |
| | **Wet waste:** | 1 kg/day |
| | **Hazardous waste:** | Not applicable |
| | **Biomedical waste (If applicable):** | Not applicable |
| | **STP Sludge (Dry sludge):** | Not applicable |
| | **Others if any:** | Not applicable |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Will be handed over to the local body after segregation. |
| | **Wet waste:** | Will be handed over to the local body after segregation. |
| | **Hazardous waste:** | Not applicable |
| | **Biomedical waste (If applicable):** | Not applicable |
| | **STP Sludge (Dry sludge):** | Not applicable |
| | **Others if any:** | Not applicable |
| **Area requirement:** | **Location(s):** | Not applicable |
| | **Area for the storage of waste & other material:** | Not applicable |
| | **Area for machinery:** | Not applicable |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Not applicable |
| | **O & M cost:** | Not applicable |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | COD | mg/L | 200 | less than 200 | 250 |
| 2 | BOD | mg/L | 20-25 | 100 | 100 |
| 3 | Suspended Solids | mg/L | 1200 | 100 | 100 |
| 4 | pH | mg/L | 5 -10 | 6-8 | 5.5-9 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 0.2 |
| Capacity of the ETP: | 0.8 m3/day |
| Amount of treated effluent recycled : | The treated effluent is sent to CETP for further treatment |
| Amount of water send to the CETP: | - |
| Membership of CETP (if require): | CETP membership has been obtained |
| Note on ETP technology to be used | Equalization and Physico + chemical Treatment (Primary) + Polishing (Tertiary treatment) |
| Disposal of the ETP sludge | The sludge is disposed off through CHWTSDF |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | - | - | - | - | - | - | - |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | Thermic fluid heater | LDO | 1 | 7.5 m | 0.3 | 275 C |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | LDO | 1 KL | 4KL | 5KL |

| | |
|---|---|
| 41.Source of Fuel | Through local dealer |

| | |
|---|---|
| 42.Mode of Transportation of fuel to site | By road |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 660 m2 |
| | **No of trees to be cut :** | Nil |
| | **Number of trees to be planted :** | 50 nos |
| | **List of proposed native trees :** | Cassia Fistula, Acacia Auriculiformis, Acacia Catechu, Acacia Nilotica, Acacia Senegal, Albizia Amara, Albizia Lebbeck, Azadirachta Indica, Citrus Lemon, Dalgerbia Sissoo, Erythrina Variegata, Gliricidia Sepium, Grewia Tenax, Hardwickia Binata, Leucaena Latisiliqua, Pithecellobium Dulce, Ziziphus Nummularia, Neolamarckia Cadamba, Holoptelea Integrifolia, Schlelchora Oleosa, Xylia Xylocarpa, Bombax Ceiba, Terminalia Elliptica, Terminalia Paniculata, Helicteres Isora, Cordia Dichotoma, Macaranga P |
| | **Timeline for completion of plantation :** | With completion of the proposed expansions construction phase |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Cassia Fistula | Bahava | 2 | Medicinal use, most importantly used in the Indian Pharmaceutical codex. |
| 2 | Acacia Auriculiformis | Kadamb | 2 | Used for fuel wood, charcoal is known for less smoke & spark, wood is used for making pulp. |
| 3 | Acacia Catechu | Khair | 1 | The heart wood and bark of the tree are used in traditional medicine for sore throats and diarrhea. It is also used for its actions like anti-dyslipidemia, anthelminthic, anti-inflammatory, anti-diuretic, anti-pruritic, coolant, taste promoting, enhancing digestion and curing skin disorders. |
| 4 | Acacia Nilotica | Babul | 1 | These trees are best fed dry as a supplement. In the present commercial market, gum arabic is defined as the dried exudate from the trunk of these trees. |
| 5 | Acacia Senegal | Khair | 3 | The tree parts are used as a food additive, in crafts, and as a cosmetic. The gum is drained from cuts in the bark. New foliage is very useful as forage. |
| 6 | Albizia Lebbeck | Siris | 2 | Its uses include environmental management, forage, medicine and wood. In India the tree is used to produce timber. Even where it is not native, some indigenous herbivores are liable to utilize lebbeck as a food resource. |

| | | | | |
|---|---|---|---|---|
| 7 | Azadirachta Indica | Neem | 4 | This tree's ,leaves, wood and seeds are used by Ayurvedic practitioners for Anthelmintic, antifungal, anti diabetic, antibacterial, antiviral, contraceptive, and sedative. Seeds are ground into a powder that is soaked overnight in water and sprayed onto the crop. |
| 8 | Citrus Lemon | Lemon | 2 | In this fruit vitamin C is high, which prevents scurvy. Citrus fruit intake is associated with a reduced risk of stomach cancer. Lemon have the highest concentration of citrate of any citrus fruit. |
| 9 | Dalgerbia Sissoo | Shisham | 1 | Shisham is best known economic timber and fuel also use to musical instruments, it is used for plywood, agricultural tools, flooring. |
| 10 | Erythrina Variegata | Panghara | 2 | Variegata is valued as an ornamental tree. Erythrina variegata is known as dap dap in the Philippines where its bark and leaves are used in medicine. |
| 11 | Hardwickia Binata | Kamara | 1 | The bark of the tree is used for making ropes and wood is used for making agricultural equipment. |
| 12 | Pithecellobium Dulce | Vialayti chincha | 2 | The bark and pulp are astringent and homeostatic and use the pulp and bark against gum ailments, toothache and haemorrhages in general. A bark extract is also used against dysentery, chronic diarrhoea and tuberculosis. An extract of the leaves is used for gall ailments and to prevent miscarriage. The ground seed is used to clean ulcers. |
| 13 | Ziziphus Nummularia | Bor | 2 | The fruit are edible. Dried fruit used medicinally as astringent inbilious affliction in India. The leaves are used to treat scabies and other skin diseases. |
| 14 | Butea Monosperma | Palash | 2 | Use of this tree is as a host of a lac insect for production of Rangini lac. The leaves are lobed for fodder for buffalo and are used for making leaf plates and cups and beedi wrapping. The oil is comparable to groundnut oil or sesame oil for use in soap industry. |
| 15 | Schlelchora Oleosa | Kusum | 2 | Leaves are edible. Oil obtained from the seed, called Macassar oil. Powdered seeds are applied to wounds and ulcers of cattle to remove maggots. The bark contains about 10% tannin and the analgesic compound lupeol. |

| | | | | |
|---|---|---|---|---|
| 16 | Xylia Xylocarpa | Jamba | 2 | A decoction is used to rid the body of worms, It is also used in the treatment of leprosy, vomiting, diarrhea, gonorrhea and ulcers, The oil from the seeds is used in the treatment of rheumatism, piles and leprosy, The bark and wood are a source of tannins. |
| 17 | Bombax Ceiba | Sawar | 1 | It is used widely in the match industry, cheap light plywood for tea chests, fruit crates, packing cases, toys. And medical use in tonic, alterative, styptic and demulcent. It is used in dysentery, haemolypsis of pulmonary tuberculosis, influenza etc. |
| 18 | Terminalia Elliptica | Ain | 1 | The wood is used for furniture, cabinetwork, joinery, paneling, specialty items, boat-building, railroad cross-ties (treated), and decorative veneers. The bark and especially the fruit yield pyrogallol and catechol to dye and tan leather. It is also thought to have curative value for stomach pain |
| 19 | Derris Indica | Karanj | 2 | It is often used for landscaping purposes as a windbreak or for shade due to the large canopy and showy fragrant flowers. The flowers are used by gardeners as compost for plants requiring rich nutrients. Oil and residue of the plant are toxic and will induce nausea and vomiting if ingested, the fruits and sprouts, along with the seeds, are used in many traditional remedies. |
| 20 | Mangifera indica | Mango | 4 | Most cultivated tree of tropical world grows up to 35-40 m, with crown radius of 10 m. Leaves are long, green, alternate and tree fruits in summer. |
| 21 | Cocos nucifera | Coconut | 4 | Large palm, growing up to 30 m, with pinnate leaves 4–6 meters long, and pinnae 60–90 cm long. It is Kalpa Vriksham of India.. |
| 22 | Syzygium cumini | Jambhul | 1 | An evergreen tropical tree, grows up to 30 m. The flowers are fragrant and small. It produces oblong fruits in May or June. Seeds are used in Ayurveda |
| 23 | Tamarindus indica | Chinch | 2 | Long-lived, medium size, bushy tree, which attains a maximum crown height of 12.1 to 18.3 m. Leaves are evergreen, bright green , elliptical ovular, arrangement is alternate, of the pinnately compound type |

| | | | | |
|---|---|---|---|---|
| 24 | Ficus benghalensis | Vad | 2 | Large, sacred, and extensive growing tree of the Indian subcontinent. It produces propagating roots which grow downwards as aerial roots |
| 25 | Saraca asoca | Ashok | 2 | Small erect green tree with beautiful foliage and green flowers. Plays an important role in culture and tradition of India. |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | - | - | - |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | Not applicable |
| | **DG set as Power back-up during construction phase** | Not applicable |
| | **During Operation phase (Connected load):** | 19 KW |
| | **During Operation phase (Demand load):** | 19 KW |
| | **Transformer:** | - |
| | **DG set as Power back-up during operation phase:** | 1x 40 kVA |
| | **Fuel used:** | LDO |
| | **Details of high tension line passing through the plot if any:** | Not applicable |

## 48.Energy saving by non-conventional method:

Solar Street lighting in landscape

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | - | - |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| - | - | - |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | - |
| | **O & M cost:** | - |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | - | - | - |

### b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Air Pollution | Air Pollution Control | 0.5 | 0.25 |
| 2 | Water Pollution | Water Pollution Control | 1.0 | 0.30 |
| 3 | Environment Monitoring And Management | Air, Water, Noise, Soil sampling & testing | 0 | 0 |
| 4 | Occupational Health | Routine Health checkup for worker's | 0.25 | 0.5 |
| 5 | Green Belt | Green belt development, tree plantation | - | 0.20 |
| 6 | Solid waste | Solid waste management | 0.25 | 0.25 |
| 7 | Noise Pollution | Noise Pollution Control | - | - |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| EO | - | NE | 4.5 | 4.5 | 30 | Relience industrial limited | By Road |
| Fatty alcohols | - | SW | 8.5 | 8.5 | 25 | Local dealer | By Road |
| Fatty amines | - | SE | 8 | 8 | 60; proposed: 25 | Local dealer | By Road |
| Phos. Pentoxide | - | SE | 5 | 5 | 3 | Local dealer | By Road |
| Fatty oils | - | SE | 20 | 100 | 50: proposed: 50 | Local dealer | By Road |
| Caustic soda/potash | - | SE | 500 kg | 1 | 1: proposed: 1 | Local dealer | By Road |
| Acetic acid | - | SE | 1 | 1 | 1 | Local dealer | By Road |
| PEG/DEG | - | SE | 2 | 2 | 2 | Local dealer | By Road |
| Hydrogen peroxide | - | SE | 300 kg | 300 kg | 300 kg | Local dealer | By Road |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Alkyl phenols | - | SE | 20 | 20 | 5 | Local dealer | By Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | - |
| **Parking details:** | **Number and area of basement:** | Not applicable |
| | **Number and area of podia:** | Not Applicable |
| | **Total Parking area:** | 240 m2 |
| | **Area per car:** | NA |
| | **Area per car:** | NA |
| | **Number of 2-Wheelers as approved by competent authority:** | NA |
| | **Number of 4-Wheelers as approved by competent authority:** | NA |
| | **Public Transport:** | - |
| | **Width of all Internal roads (m):** | - |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | 5 F |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 01-09-2018 |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | Not Applicable |
| **Water Budget** | Not Applicable |
| **Waste Water Treatment** | Not Applicable |
| **Drainage pattern of the project** | Not Applicable |
| **Ground water parameters** | Not Applicable |
| **Solid Waste Management** | Not Applicable |
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP submitted their application for the grant of TOR under category 5(f)B1 as per EIA Notification, 2006. PP presented draft TOR based on standard TOR issued by MoEF & CC published in April, 2015.

As the industry is located in the notified industrial area/estate (MIDC), Public Hearing is exempted under the provisions as per para 7 III Stage (3) (b) of the EIA Notification, 2006

## DECISION OF SEAC

Based on the presentation made by PP; committee decided to approve the TOR for the preparation of EIA/EMP report as per standard TOR and additional TOR points mentioned below.

PP to collect base line data as per Office Memorandum issued by MoEF&CC dated 27.08.2017.

The validity of the TOR will be for three years as per OM issued by MoEF and CC on 29.08.2017.

PP to submit Form - 2 along with EIA/EMP report as per OM issued by MoEF&CC on 20.04.2018.

PP to submit their plan to utilize CER (Corporate Environment Responsibility) along with timelines as per OM issued by MoEF&CC dated 01.05.2018.

**Specific Conditions by SEAC:**

**1)** PP to submit certificate of incorporation of the company, list of directors and memorandum of articles.
**2)** PP to submit lay out plan showing internal roads with six meter width and nine meter turning radius, location of pollution control equipment, parking areas, 33% green belt with its dimensions, rain water harvesting structures (locations with dimensions ), storm water drain lines, along with index and area statement showing calculations for each area and cross sections of storm water drain and rain water harvesting pits etc.
**3)** PP to provide green belt as per OM issued by MoEF&CC dated 09.08.2018. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
**4)** PP to submit a technical report on how the proposed expansion with respect to the production quantity will be accommodated in the existing facility along with structural stability certificate of existing buildings/structures on the site.
**5)** PP to carry out life cycle analysis of the activities carried out on site with respect to the sustainability index, green house and ozone depletion potential etc
**6)** PP to include detailed material balance charts for each product showing consumption of raw material, sources of pollution and mitigation measures to control the pollution and justified use of resources along with quantities in the EIA report.
**7)** PP to include detailed water balance calculations along with design of effluent treatment plant.
**8)** PP to carry out HAZOP and QRA and submit Disaster Management Plan.
**9)** PP to submit hazardous chemical handling protocol
**10)** PP to provide lightening arrestor.
**11)** PP to conduct socio economic impact study.

## FINAL RECOMMENDATION

The Committee decided to Grant ToR subject to the above observations,PP requested to prepare and submit EIA report as per EIA Notification, 2006 and amendments thereof.

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Grant of Violation ToR's for Expansion of grain based distillery from 30 KLPD to 58 KLPD (expansion by 28 KLPD. )

**Is a Violation Case:** Yes

| | |
|---|---|
| **1.Name of Project** | M/s. Viraj Alcohols & Allied Industries Ltd., |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. Mansing Fattesingrao Naik (Chairman) |
| **4.Name of Consultant** | Equinox Environments (India) Pvt. Ltd., Kolhapur |
| **5.Type of project** | Industry |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Expansion of grain based distillery from 30 KLPD to 58 KLPD (expansion by 28 KLPD. ) Application for ToR's |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Yes, Environmental Clearance granted by MoEF vide letter no. – J-11011/185/2006–IA II (I) Dated 25 September, 2006 |
| **8.Location of the project** | Gat No. 511 |
| **9.Taluka** | Shirala |
| **10.Village** | Kapari |
| **Correspondence Name:** | Yuvraj B. Gaikwad (General Manager) |
| **Room Number:** | -- |
| **Floor:** | -- |
| **Building Name:** | Viraj Alcohols & Allied Industries Ltd. |
| **Road/Street Name:** | A/p.-Kapari |
| **Locality:** | Tal.: Shirala |
| **City:** | Sangli |
| **11.Area of the project** | NA |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** NA |
| | **Approved Built-up Area:** 13088.77 |
| **13.Note on the initiated work (If applicable)** | One additional silo, additional 7 distillation columns and higher capacity boiler installation has been done on site. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | -- |
| **15.Total Plot Area (sq. m.)** | 44515.9 |
| **16.Deductions** | NA |
| **17.Net Plot area** | 44515.9 Sq. M. |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** Not applicable |
| | **b) Non FSI area (sq. m.):** Not applicable |
| | **c) Total BUA area (sq. m.):** |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** NA |
| | **Approved Non FSI area (sq. m.):** NA |
| | **Date of Approval:** 01-01-1900 |
| **19.Total ground coverage (m2)** | Not applicable |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | Not applicable |
| **21.Estimated cost of the project** | 120600000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| **23.Number of tenants and shops** | NA |
| **24.Number of expected residents / users** | NA |
| **25.Tenant density per hectare** | NA |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | NA |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Not applicable |
| **29.Existing structure (s) if any** | Not applicable |
| **30.Details of the demolition with disposal (If applicable)** | NA |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Rectified Spirit (RS) | 900 KL/M | 840 KL/M | 1740 KL/M |
| 2 | Ethanol | 802 KL/M | 749 KL/M | 1551 KL/M |
| 3 | Extra Neutral Alcohol (ENA) | 812 KL/M | 758 KL/M | 1570 KL/M |
| 4 | Electricity | -- | 1 MW | 1 MW |
| 5 | CO2 Gas | 660 MT/M | 616 MT/M | 1276 MT/M |
| 6 | DWGS | 2220 MT/M | 2070 MT/M | 4290 MT/M |
| 7 | DDGS | 390 MT/M | 360 MT/M | 750 MT/M |

## 32.Total Water Requirement

| | | |
|---|---|---|
| Dry season: | **Source of water** | Warna River |
| | **Fresh water (CMD):** | 323 |
| | **Recycled water - Flushing (CMD):** | 725 (In process & utilities; not for flushing) |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 1048 |
| | **Fire fighting - Underground water tank(CMD):** | NA |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | NA |
| Wet season: | **Source of water** | Warna River |
| | **Fresh water (CMD):** | 288 |
| | **Recycled water - Flushing (CMD):** | 760 (In process & utilities; not for flushing) |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 1048 |
| | **Fire fighting - Underground water tank(CMD):** | NA |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | NA |
| **Details of Swimming pool (If any)** | Not applicable | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| **Water Requirement** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** | **Existing** | **Proposed** | **Total** |
| Domestic | 18 | 0 | 18 | 2.5 | 0 | 2.5 | 15.5 | 0 | 15.5 |
| Industrial Process | 298 | 281 | 579 | 34 | 32 | 66 | 264 | 249 | 513 |
| Cooling tower & thermopack | 257 | 194 | 451 | 237 | 184 | 421 | 20 | 10 | 30 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Planning of RWH is done. Implementation on site is under process |
| | **Size and no of RWH tank(s) and Quantity:** | Planning of RWH is done. Implementation on site is under process |
| | **Location of the RWH tank(s):** | Planning of RWH is done. Implementation on site is under process |
| | **Quantity of recharge pits:** | Planning of RWH is done. Implementation on site is under process |
| | **Size of recharge pits :** | Planning of RWH is done. Implementation on site is under process |
| | **Budgetary allocation (Capital cost) :** | Rs. 10 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs. 1 Lakhs |
| | **Details of UGT tanks if any :** | NA |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | NA |
| | **Quantity of storm water:** | NA |
| | **Size of SWD:** | NA |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 15.5 CMD. Same will be treat in proposed STP. |
| | **STP technology:** | Activated Sludge Process (ASP) |
| | **Capacity of STP (CMD):** | 20 CMD |
| | **Location & area of the STP:** | Towards south direction of plot |
| | **Budgetary allocation (Capital cost):** | Rs. 15 lakhs |
| | **Budgetary allocation (O & M cost):** | Rs. 0.25 Lakhs |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | NA |
| | **Disposal of the construction waste debris:** | NA |
| **Waste generation in the operation Phase:** | **Dry waste:** | Existing Bagasse Ash - 1.5 MT/D, Proposed bagasse/ biomass ash - 1.1 MT/D OR Coal Ash - 3.5 MT/D |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | Distillation residue - (Cat. 20.3) and ETP Sludge (Cat 34.2) - 0.0048 MT/D |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 0.002 MT/D |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Bagasse Ash- Used as Manure. Coal Ash-Supplied to Brick manufacturer |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | Distillation Residue and ETP Sludge -Used as Manure as a soil conditioner. |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Used as mannure |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | NA |
| | **Area for the storage of waste & other material:** | Within industrial premises (5 Sq. M.) |
| | **Area for machinery:** | NA |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 35 Lakhs |
| | **O & M cost:** | Rs. 1 Lakhs |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 4.30 | 6.92 | -- |
| 2 | Suspended Solids (SS) | mg / lit | 83.00 | 52.00 | 100 |
| 3 | Total Dissolved Solids (TDS) | mg / lit | 767.00 | 540.00 | 2100 |
| 4 | Chemical Oxygen Demand (COD) | mg / lit | 2037.60 | 90.60 | 250 |
| 5 | Biochemical Oxygen Demand (BOD) | mg / lit | 831.65 | 32.30 | 100 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 41 CMD |
| Capacity of the ETP: | 72 CMD |
| Amount of treated effluent recycled : | 35 CMD |
| Amount of water send to the CETP: | NA |
| Membership of CETP (if require): | NA |
| Note on ETP technology to be used | Primary, Secondary and Tertiary treatment, ASP |
| Disposal of the ETP sludge | Used as Manure as a soil conditioner |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Distillation Residue and ETP Sludge | Cat.20.3 and Cat. 34.2 | Kg/D | 2.5 | 2.3 | 4.8 | Used as Manure as a soil conditioner. |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | Boiler | Bagasse (130 MTPD) or Coal (70 MTPD) or Cashew cake (70 MTPD) | 1 | Existing 33 M, After expansion 40 M | 1.8 | 125°C |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Bagasse ( MTPD) | 75 | 55 | 130 |
| 2 | Coal ( MTPD) | -- | 70 | 70 |
| 3 | Cashew cake ( MTPD) | -- | 70 | 70 |
| 41.Source of Fuel | | Bagasse – nearby sugar factories, Coal – authorized coal supplier | | |
| 42.Mode of Transportation of fuel to site | | By road | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 14,700 Sq. M. |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 200 |
| | **List of proposed native trees :** | Chinch, Vad, Pimpal, Silver Oak, Karanj, Saptaparni, Ashok, Umbar, rain tree |
| | **Timeline for completion of plantation :** | Already 33% of green belt is developed on site. under expansion of distiller existing green belt will be segmented. |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Samaneo samon | Rain tree | 20 | Evergreen |
| 2 | Delonix regia | Gulmohor | 15 | Evergreen |
| 3 | Millettia pinnata | Karanj | 20 | Evergreen |
| 4 | Alstonia scholaris | Saptaparni | 10 | Evergreen |
| 5 | Anthocephalus chmensis | Kadamb | 25 | Deciduous |
| 6 | Tomorindus indica. | Chinch | 12 | Deciduous |
| 7 | Polyalthia longifolia | Ashok | 5 | Evergreen |
| 8 | Ficus religiose | Pimpal | 10 | Evergreen |
| 9 | Ficus benghalensis | Vad | 5 | Evergreen |
| 10 | Ficus glomerate | Umbar | 20 | Deciduous |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | Own turbine & generator (1 MW) |
| | **During Construction Phase: (Demand Load)** | NIL |
| | **DG set as Power back-up during construction phase** | NIL |
| | **During Operation phase (Connected load):** | NIL |
| | **During Operation phase (Demand load):** | 1MW |
| | **Transformer:** | NA |
| | **DG set as Power back-up during operation phase:** | Existing 160 KVA & proposed 320 KVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

## 48.Energy saving by non-conventional method:

NIL

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | NA | NA |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Boiler | Mechanical Dust Collector (MDC) followed by bag filter with 33 M height of of stack | MDC followed by bag filters along with 40 M height of stack |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

# 51.Environmental Management plan Budgetary Allocation

## a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | NA | NA | NA |

## b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | APC Equipment | Bag Filters to 20 TPH boiler and increasing stack height so as to make 40 M stack, Online monitoring system. | 56 | 1 |

| | | | | |
|---|---|---|---|---|
| 2 | Installation of STP | Installation of STP | 15 | 0.25 |
| 3 | ETP | ETP | 60 | 1.5 |
| 4 | Noise Pollution Control | Noise Pollution Control | 10 | 0.50 |
| 5 | Occupational Health & Safety | Occupational Health & Safety | 5 | 0.50 |
| 6 | Environmental Monitoring & Management | Environmental Monitoring & Management | 5 | 10 |
| 7 | Solid Wastes Disposal –Ash Silos, Transportation | Solid Wastes Disposal –Ash Silos, Transportation | 35 | 1 |
| 8 | Green Belt Augmentation Plan & Rain Water Harvesting implementation. | Green Belt Augmentation Plan & Rain Water Harvesting implementation. | 25 | 1.25 |
| 9 | CSR amount (for 2.5 years after expansion) | CSR amount (for 2.5 years after expansion) | 42.5 | - |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| NA | NA | NA | NA | NA | NA | NA | NA |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | NA |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | NA |
| | **Area per car:** | NA |
| | **Area per car:** | NA |
| | **Number of 2-Wheelers as approved by competent authority:** | NA |
| | **Number of 4-Wheelers as approved by competent authority:** | NA |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | NA |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | B |
| | **Court cases pending if any** | NIL |
| | **Other Relevant Informations** | ToR's granted by SEAC-1 in 124th meeting dt. 30.03.2016. SEAC-1 committee visited to site on 26.04.2016. Site visit report was discussed in 126th SEAC-1 meeting. In 127th SEAC-1 meeting violation noticed. Compliance done by industry and submitted to DoE, Maharashtra time to time. Subsequently, EIA done & Public Hearing conducted. |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | Not Applicable |
| **Water Budget** | Not Applicable |
| **Waste Water Treatment** | Not Applicable |
| **Drainage pattern of the project** | Not Applicable |

| | |
|---|---|
| **Ground water parameters** | Not Applicable |
| **Solid Waste Management** | Not Applicable |
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP has obtained earlier EC vide No. J-11011/185/2006-IA-II(I) dated 25.09.2006 from MoEF&CC. PP has obtained certified compliance report from the Regional Office of MoEF&CC, Nagpur vide No. 5-87/2006 (ENV) 3915 dated 05.07.2018.

PP applied for the expansion of the project to SEAC-1 and was considered by SEAC in their 124th meeting held on 30th to 31st March, 2016 where in ToR was granted to the PP for the preparation of EIA/EMP Reprot.

A site visit was conducted by the SEAC-1 on 26.04.2016 where in it was observed that, PP has violated few conditions stipulated in the environment clearance. The site visit reprot was discuused by the SEAC in their 126th meeting held on 29th and 30th April, 2016. From then the proposal was pending.

PP submitted application under violation category as per Notification issued by MoEF&CC dated 08.03.2018.

PP presented the proposal for ToR as per standard ToR issued by MoEF&CC in April 2015 and Notification issued on 08.03.2018.

## DECISION OF SEAC

Based on the presentation made by PP; committee decided to approve the TOR for the preparation of EIA/EMP report as per standard TOR and additional TOR points mentioned below for the preparation of EIA/EMP report and remediation plan as mentioned in the EIA Notification 2006 and amended on 08.03.2018 etc.

PP to collect base line data as per Office Memorandum issued by MoEF&CC dated 27.08.2017. PP to collect one month data of current time for comparision.

The validity of the TOR will be for three years as per OM issued by MoEF and CC on 29.08.2017.

PP to submit Form - 2 along with EIA/EMP report as per OM issued by MoEF&CC on 20.04.2018.

PP to submit their plan to utilize CER (Corporate Environment Responsibility) along with timelines as per OM issued by MoEF&CC dated 01.05.2018.

Public Consultation to be carried out as per procedure stipulated in the EIA Notification,2006.

PP to refer to the Office Memorandum issued by MoEF&CC dated 19.08.2018 with respect to the standard conditions to be stipulated in the Environment Clearance letter for the projects falling under category 5(f) to identify the impact of operations on the environment attributes and implement appropriate mitigation measures to reduce the impact.

PP to identify all such activities on site which have impacted on the various verticals of the environment like Water, Air, Soil and Noise etc and compare it with the standard parameters to assess the damage as referred in the Notification dated 08.03.2018.



**Specific Conditions by SEAC:**

**1)** PP to submit certificate of incorporation of the company, list of directors and memorandum of articles.
**2)** PP to submit lay out plan showing internal roads with six meter width and nine meter turning radius, location of pollution control equipment, parking areas, 33% green belt with its dimensions, rain water harvesting structures (locations with dimensions ), storm water drain lines, along with index and area statement showing calculations for each area and cross sections of storm water drain and rain water harvesting pits etc.
**3)** PP to provide green belt as per OM issued by MoEF&CC dated 09.08.2018. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department."
**4)** PP to submit permission and copy of agreement made with irrigation department for the lifting of water from river Morna.
**5)** PP to submit project site details (location, top sheet of the study area of 10 km., coordinates, Google map, layout map, land use, geological features and geo hydrological status of the study area, drainage pattern etc.)
**6)** PP to submit details of Forest and Wild Life eco- sensitive zones if any in the study area and within the range of 5 km.
**7)** Land use of the study area delineating forest area, agricultural land, grazing land, wild life sanctuary, national parks, migratory routes of fauna, water bodies, human settlement and other ecological features to be indicated in the report.
**8)** PP to submit details of likely impact of the proposed project and work carried out without obtaining prior Environment Clearance on the environmental parameters (ambient air, surface and ground water, land, flora and fauna, ambient noise, climate change and socio economic etc.)
**9)** PP to assess ecological damage with respect to the air, water, land and other environmental attributes. The collection and analysis of data shall be done by an Environmental Laboratory accredited by NABL or a laboratory of a council of Scientific and Industrial Research (CSIR) Institution working in the field of Environment.
**10)** PP to prepare an EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
**11)** The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultant.
**12)** PP to carry out Risk Assessment and submit Disaster Management Plan.
**13)** PP to provide new and renewable energy sources for the illumination of the office building and street lights.
**14)** PP to include a technical note on the use of food grains for the manufacturing of alcohol in view of food security issues.
**15)** PP to submit point wise compliance status of the conditions stipulated in the earlier environment clearance, consent letters etc.

## FINAL RECOMMENDATION

The Committee decided to Grant ToR subject to the above observations,PP requested to prepare and submit EIA report as per EIA Notification, 2006 and amendments thereof.

**SEAC Meeting number:** 156th Day-2 **Meeting Date** October 5, 2018

**Subject:** Environment Clearance for Environment Clearance for proposed industrial project

**Is a Violation Case:** No

| | |
|---|---|
| **1.Name of Project** | Proposed Synthetic Organic Chemical Plant |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s.Omesa Drugs And Chemicals Private Ltd. |
| **4.Name of Consultant** | Green Circle Inc. |
| **5.Type of project** | Industrial Project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New project |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | NA |
| **8.Location of the project** | Plot.No.D-7, Mahad Industrial Area, |
| **9.Taluka** | Mahad |
| **10.Village** | Birwadi |
| **Correspondence Name:** | Dr. Sanjay Suresh Sawant |
| **Room Number:** | Flat.No.C-102, |
| **Floor:** | 1st Floor, |
| **Building Name:** | Ganesh Nabhangan, Sr.No.18/19, |
| **Road/Street Name:** | B-20, Raikarnagar, Sinhagad Road, |
| **Locality:** | Dhayari, |
| **City:** | Pune-411041 |
| **11.Area of the project** | MIDC |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** NA |
| | **Approved Built-up Area:** |
| **13.Note on the initiated work (If applicable)** | NA |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Approval from Executive Engineer MIDC, Mahad. |
| **15.Total Plot Area (sq. m.)** | 1500 m2 |
| **16.Deductions** | -- |
| **17.Net Plot area** | 1500 m2 |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** NA |
| | **b) Non FSI area (sq. m.):** NA |
| | **c) Total BUA area (sq. m.):** 488.50 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** |
| | **Approved Non FSI area (sq. m.):** |
| | **Date of Approval:** |
| **19.Total ground coverage (m2)** | 280 m2 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 18.67% |
| **21.Estimated cost of the project** | 12600000.0 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 1 | Building 1 | G + 1 | 10 |

| | |
|---|---|
| **23.Number of tenants and shops** | NA |
| **24.Number of expected residents / users** | Workers: 20, Staff: 4. |
| **25.Tenant density per hectare** | NA |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 25 m |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Min 7 m |
| **29.Existing structure (s) if any** | NA |
| **30.Details of the demolition with disposal (If applicable)** | NA |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | FINE CHEMICALS | -- | -- | -- |
| 2 | Fendizoic Acid | 0 | 0.5 | 0.5 |
| 3 | 1-Hydroxybenotriazole | 0 | 2.0 | 2.0 |
| 4 | tert-Butyl Hydroquinone | 0 | 1.0 | 1.0 |
| 5 | Butylated Hydroxy Anisole | 0 | 0.5 | 0.5 |
| 6 | L-Ascorbyl-6-palmitate | 0 | 0.5 | 0.5 |
| 7 | Methyl acetoacetate | 0 | 5.0 | 5.0 |
| 8 | Mono methyl chloro acetate | 0 | 5.0 | 5.0 |
| 9 | PRODUCTS | -- | -- | -- |
| 10 | Bronopol | 0 | 4.0 | 4.0 |
| 11 | Piracetam | 0 | 0.5 | 0.5 |
| 12 | Miconazole Nitrate | 0 | 1.0 | 1.0 |
| 13 | Brimonidine Tartarate | 0 | 0.01 | 0.01 |
| 14 | Bromfenac Sodium | 0 | 0.01 | 0.01 |
| 15 | Nepafenac Sodium | 0 | 0.01 | 0.01 |
| 16 | Atenolol | 0 | 0.5 | 0.5 |
| 17 | Propranolol | 0 | 0.5 | 0.5 |

| | | | | |
|---|---|---|---|---|
| 18 | Albendazole | 0 | 1.0 | 1.0 |
| 19 | Darunavir | 0 | 0.01 | 0.01 |
| 20 | Glycine | 0 | 5.0 | 5.0 |
| 21 | Sulphanil amide | 0 | 2.0 | 2.0 |
| 22 | Lithium Carbonate | 0 | 1.0 | 1.0 |
| 23 | Diclofenic Sodium | 0 | 2.0 | 2.0 |
| 24 | Etamsylate | 0 | 1.0 | 1.0 |
| 25 | Chlorpromazine | 0 | 0.5 | 0.5 |
| 26 | Febuxostat | 0 | 1.0 | 1.0 |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | NA |
| | **Fresh water (CMD):** | NA |
| | **Recycled water - Flushing (CMD):** | NA |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | NA |
| | **Fire fighting - Underground water tank(CMD):** | 11 m3 |
| | **Fire fighting - Overhead water tank(CMD):** | 10 m3 |
| | **Excess treated water** | NA |
| **Wet season:** | **Source of water** | NA |
| | **Fresh water (CMD):** | NA |
| | **Recycled water - Flushing (CMD):** | NA |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | NA |
| | **Fire fighting - Underground water tank(CMD):** | 11 m3 |
| | **Fire fighting - Overhead water tank(CMD):** | 10 m3 |
| | **Excess treated water** | NA |
| **Details of Swimming pool (If any)** | NA | |

## 33.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| Water Requirement | Existing | Proposed | Total | Existing | Proposed | Total | Existing | Proposed | Total |
| Domestic | 0 | 1.0 | 1.0 | 0 | 0.1 | 0.1 | 0 | 0.9 | 0.9 |
| Industrial Process | 0 | 8.5 | 8.5 | 0 | 0.5 | 0.5 | 0 | 8.0 | 8.0 |
| Cooling tower & thermopack | 0 | 4.0 | 4.0 | 0 | 1.5 | 1.5 | 0 | 2.5 | 2.5 |
| Gardening | 0 | 0.5 | 0.5 | 0 | 0.5 | 0.5 | 0 | 0.5 | 0.5 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 2 mtr |
| | **Size and no of RWH tank(s) and Quantity:** | 4 x 4 x 1 mtr 1 nos |
| | **Location of the RWH tank(s):** | Near main gate |
| | **Quantity of recharge pits:** | 16 cubic mtr |
| | **Size of recharge pits :** | 2 x 2 x 1 mtr |
| | **Budgetary allocation (Capital cost) :** | Rs. 1.93 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.2 Lakhs /annum |
| | **Details of UGT tanks if any :** | UGT: 10 cubic mtr |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Through MIDC drain |
| | **Quantity of storm water:** | 778 cubic mtr. Annually |
| | **Size of SWD:** | 300 mm wide |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 1.0 m3/day |
| | **STP technology:** | Sewage shall be treated within the ETP |
| | **Capacity of STP (CMD):** | Sewage shall be treated within the ETP |
| | **Location & area of the STP:** | NA |
| | **Budgetary allocation (Capital cost):** | NA |
| | **Budgetary allocation (O & M cost):** | NA |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Top soil shall be removed for foundation work |
| | **Disposal of the construction waste debris:** | Excavated soil shall be stored and will be used for plantation work |
| **Waste generation in the operation Phase:** | **Dry waste:** | NA |
| | **Wet waste:** | 300 kg /Month (Plastics ,Spent Carbon ,Hyflow) |
| | **Hazardous waste:** | 300 kg / Month ETP Sludge |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | Ash: 200 Kg / Month |
| **Mode of Disposal of waste:** | **Dry waste:** | NA |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | Shall be sent to Authorized waste management unit |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | NA |
| | **Area for the storage of waste & other material:** | 4 x 4 mtr |
| | **Area for machinery:** | NA |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 6 Lakhs |
| | **O & M cost:** | Rs. 1.5 Lakhs/annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 5-8 | 6.5-8.5 | 5.5-9.0 |
| 2 | TDS | mg/lit | 2000 | <100 | <2100 |
| 3 | BOD | mg/lit | 250-300 | <10 | <100 |
| 4 | COD | mg/lit | 7000-8000 | <50 | <250 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 11.4 m3/day |
| Capacity of the ETP: | 13 m3/day |
| Amount of treated effluent recycled : | 0.9 m3/day |
| Amount of water send to the CETP: | 10.5 m3/day |
| Membership of CETP (if require): | Applied for Membership |
| Note on ETP technology to be used | As per MPCB guideline |
| Disposal of the ETP sludge | Sent To CHWMT |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Spent Carbon | Schedule I | KG | 0 | 100 KG / M | 100 KG / M | Send to CHWMT |
| 2 | Spent Hyflow | Schedule I | KG | 0 | 200 KG / M | 200 KG / M | Send to CHWMT |
| 3 | ETP sludge | Schedule I | KG | 0 | 300 KG /M | 300 KG /M | Send to CHWMT |

## 39.Stacks emission Details

| Serial Number | Section & units | Fuel Used with Quantity | Stack No. | Height from ground level (m) | Internal diameter (m) | Temp. of Exhaust Gases |
|---|---|---|---|---|---|---|
| 1 | Boiler | BRICKATE/Coal 500 Kg /day | 1 nos. | 1.2 mtr to 2 .0 mtr | 500 mm to 700 mm | 110 Degree Celcius |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | BRICKATE/Coal | 0 | 200 Kg /day | 200 Kg /day |
| 41.Source of Fuel | | Local Vendor | | |
| 42.Mode of Transportation of fuel to site | | By Local transport | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | NA |
| | **No of trees to be cut :** | 0 |
| | **Number of trees to be planted :** | 25 |
| | **List of proposed native trees :** | As per below table |
| | **Timeline for completion of plantation :** | Before completion of project |

## 44.Number and list of trees species to be planted in the ground

| Serial Number | Name of the plant | Common Name | Quantity | Characteristics & ecological importance |
|---|---|---|---|---|
| 1 | Lagerstroemia flosregineae | Tamhan | 3 | State flower tree of Maharashtra Medium sized tree, beautiful purple flowers |
| 2 | Butea monosperma | Palas | 5 | Medium sized deciduous tree |
| 3 | Bauhinia racemosa | Apta | 5 | Small tree with small white flowers, Butterfly host plant |
| 4 | Cassia fistula | Bahawa | 5 | Medium sized deciduous tree. Beautiful yellow flowers, Butterfly host plant |
| 5 | Azadirachta indica | Neem | 7 | Semi-evergreen tree with medicinal value |
| **45.Total quantity of plants on ground** | | | | |

## 46.Number and list of shrubs and bushes species to be planted in the podium RG:

| Serial Number | Name | C/C Distance | Area m2 |
|---|---|---|---|
| 1 | NA | NA | NA |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 5 HP |
| | **DG set as Power back-up during construction phase** | NA |
| | **During Operation phase (Connected load):** | 100 HP |
| | **During Operation phase (Demand load):** | 75 HP |
| | **Transformer:** | Supply of MSEDCL |
| | **DG set as Power back-up during operation phase:** | NA |
| | **Fuel used:** | NA |
| | **Details of high tension line passing through the plot if any:** | NA |

## 48.Energy saving by non-conventional method:

1. LED Light.
2. Solar System used for Straight Light.
3. Energy saving Equipment Used

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Led Light | 100 nos |
| 2 | VFD for Reactor | 4 nos |
| 3 | VFD for Pump | 10 nos |
| 4 | Lighting Transformer | 1 nos |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Air pollution from Process,Boiler and DG sets | NA | Scrubber arrangement Installed |
| Effluent from Process | NA | ETP Installed |
| Solid &Hazardous waste | NA | Sent to CHWMST |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 15 Lakhs |
| | **O & M cost:** | Rs. 4 Lakhs/annum |

## 51.Environmental Management plan Budgetary Allocation

### a) Construction phase (with Break-up):

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | To control air pollution | Water For Dust Suppression | 1 |
| 2 | To maintain hygienic condition | Site Sanitation, Disinfection& Safety | 2 |
| 3 | Air, water, noise and soil analysis | Environmental Monitoring | 2 |
| 4 | To check fitness of workers | Health Check Up | 1 |
| 5 | NA | TOTAL | 6 |

## b) Operation Phase (with Break-up):

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Air Environment | Air pollution controlling equipments | 7 | 3.5 |
| 2 | Effluent Treatment Plant | To treat effluent and sewage | 25 | 2.0 |
| 3 | Noise Pollution | Noise pollution controlling equipment | 1 | 0.5 |
| 4 | Rain Water Harvesting | To harvest rain water | 1.93 | 0.2 |
| 5 | Tree Plantation | For green belt development | 3 | 1 |
| 6 | Energy saving | For use of solar lighting and solar heater | 15 | 4 |
| 7 | Solid waste management | To treat biodegradable waste | 6 | 1.5 |
| 8 | Environment Monitoring | Air, water, noise and soil analysis | 5 | 2.5 |
| 9 | Occupational Health | Health &Safety of worker | 1 | 1 |
| 10 | NA | TOTAL | 64.93 | 16.2 |

## 51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

| Description | Status | Location | Storage Capacity in MT | Maximum Quantity of Storage at any point of time in MT | Consumption / Month in MT | Source of Supply | Means of transportation |
|---|---|---|---|---|---|---|---|
| Liq.Bromine (Hazardous) | Liquid | Store Dept. Area 20 Sq.Mtr | 12 MT/ Month | 10 MT/ Month | 4 MT/ Month | Local Vendor | By Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | NA |
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 41.25 m2 |
| | **Area per car:** | NA |
| | **Area per car:** | NA |
| | **Number of 2-Wheelers as approved by competent authority:** | NA |
| | **Number of 4-Wheelers as approved by competent authority:** | NA |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | 5 mtr |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA |
| | **Category as per schedule of EIA Notification sheet** | 5 (f) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |



## SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

| | |
|---|---|
| **Environmental Impacts of the project** | Not Applicable |
| **Water Budget** | Not Applicable |
| **Waste Water Treatment** | Not Applicable |
| **Drainage pattern of the project** | Not Applicable |

| | |
|---|---|
| **Ground water parameters** | Not Applicable |
| **Solid Waste Management** | Not Applicable |
| **Air Quality & Noise Level issues** | Not Applicable |
| **Energy Management** | Not Applicable |
| **Traffic circulation system and risk assessment** | Not Applicable |
| **Landscape Plan** | Not Applicable |
| **Disaster management system and risk assessment** | Not Applicable |
| **Socioeconomic impact assessment** | Not Applicable |
| **Environmental Management Plan** | Not Applicable |
| **Any other issues related to environmental sustainability** | Not Applicable |

## Brief information of the project by SEAC

PP already submitted the application vide consolidated statement number 1111. This is duplication of application.

## DECISION OF SEAC

As the PP submitted earlier application which was considered in the 151st meeting held on 22.05.2018, SEAC decided to consider the CS No. 1111 and delist the CS No. 1110.

**Specific Conditions by SEAC:**

## FINAL RECOMMENDATION

Kindly find SEAC decision above.