# STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

**Environment department,**
**Room No. 217, 2nd floor,**
**Mantralaya, Annexe,**
**Mumbai- 400 032.**
**Date:March 14, 2020**

To,
**Changdeo Laxman Kadam**
at Plot No – E-6, MIDC Mahad, Dist-Raigad, Maharashtra - 402302.

**Subject:** Environment Clearance for For Bulk Drugs & Bulk Drugs Intermediates manufacture by Indo Amines Ltd.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 177th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 190th meetings.

2. It is noted that the proposal is considered by SEAC-I under screening category B1 as per EIA Notification 2006.

**Brief Information of the project submitted by you is as below :-**

| | |
|---|---|
| **1.Name of Project** | ndo Amines Ltd. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Changdeo Laxman Kadam |
| **4.Name of Consultant** | Sadekar Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Manufacture of Bulk Drugs & Bulk Drugs Intermediates under Schedule 5 (f) of EIA Notification 2006, Category - B (B1) project. |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New activity to be executed within a manufacturing plant purchased with existing buildings & allied infrastructure. |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | NA, since this is a new activity. |
| **8.Location of the project** | Plot No – E-6, MIDC Mahad, Dist-Raigad, Maharashtra - 402302. |
| **9.Taluka** | Mahad |
| **10.Village** | Birwadi |
| **Correspondence Name:** | Mr.Changdevo Laxman Kadam |
| **Room Number:** | MIDC Plot No-W-44 |
| **Floor:** | - |
| **Building Name:** | Indo Amines ltd. |
| **Road/Street Name:** | MIDC Manpada Road |
| **Locality:** | MIDC Dombivali Phase -II |
| **City:** | Dombivali(E) |
| **11.Whether in Corporation / Municipal / other area** | Notified Mahad MIDC. |
| **12.IOD/IOA/Concession/Plan Approval Number** | NA |
| | **IOD/IOA/Concession/Plan Approval Number:** SPA/860/03 |
| | **Approved Built-up Area:** 7822.04 |

| | |
|---|---|
| **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.)** | 3000 Sq. m. |
| **16.Deductions** | -- |
| **17.Net Plot area** | -- |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **FSI area (sq. m.):** -- |
| | **Non FSI area (sq. m.):** -- |
| | **Total BUA area (sq. m.):** |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** -- |
| | **Approved Non FSI area (sq. m.):** -- |
| | **Date of Approval:** 25-08-2003 |
| **19.Total ground coverage (m2)** | -- |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | -- |
| **21.Estimated cost of the project** | 130879000 |

## 22.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Isosorbide-5-Mononitrate | -- | 5.0 | 5.0 |
| 2 | Atenolol IP/BP/USP | -- | 20.0 | 20.0 |
| 3 | Losartan Potassium IP/BP/USP | -- | 5.0 | 5.0 |
| 4 | Furosemide (Frusemide) IP/BP/USP | -- | 5.0 | 5.0 |
| 5 | Para Hydroxy Phenyl Acetamide (PHPA) | -- | 30.0 | 30.0 |
| 6 | Bezafibrate IP/BP/USP | -- | 10.0 | 10.0 |
| 7 | N-(4-Chlorobenzoyl)Tyramine | -- | 10.0 | 10.0 |
| 8 | Ethyl Oleate IP/BP/USP | -- | 20.0 | 20.0 |
| 9 | Strong Cetrimide Solution IP/BP | -- | 100.0 | 100.0 |
| 10 | Cetrimide IP/BP/USP / Cetyl Trimethyl ammonium bromide | -- | 50.0 | 50.0 |
| 11 | Para Methoxy Phenyl Acetic Acid(PMPA) | -- | 10.0 | 10.0 |

## 23.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MIDC Mahad |
| | **Fresh water (CMD):** | 1st Cycle - 67.0 CMD, 2nd Cycle onwards - 56.2 CMD |
| | **Recycled water - Flushing (CMD):** | NA |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | st Cycle - 67.0 CMD, 2nd Cycle onwards - 56.2 CMD |
| | **Fire fighting - Underground water tank(CMD):** | 100 KL (Capacity of Tank) |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | NA |

| | | |
|---|---|---|
| **Wet season:** | **Source of water** | MIDC Mahad & Harvested rain water |
| | **Fresh water (CMD):** | 1st Cycle - 62.0 CMD, 2nd Cycle onwards - 43.2 CMD |
| | **Recycled water - Flushing (CMD):** | NA |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 1st Cycle - 62.0 CMD, 2nd Cycle onwards - 43.2 CMD |
| | **Fire fighting - Underground water tank(CMD):** | 100 KL (Capacity of Tank) |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | NA |
| **Details of Swimming pool (If any)** | NA | |

## 24.Details of Total water consumed

| Particulars | Consumption (CMD) | | | Loss (CMD) | | | Effluent (CMD) | | |
|---|---|---|---|---|---|---|---|---|---|
| Water Requirement | Existing | Proposed | Total | Existing | Proposed | Total | Existing | Proposed | Total |
| Domestic | -- | 3.0 | 3.0 | -- | 0.45 | 0.45 | -- | 2.55 | 2.55 |
| Industrial Process | -- | 15.0 | 15.0 | -- | 4.25 | 4.25 | -- | 10.75 | 10.75 |
| Cooling tower & thermopack | -- | 44.0 | 44.0 | -- | 28.0 | 28.0 | -- | 5.2 | 5.2 (10.8 Boiler Condensate Recovery) |
| Gardening | -- | 5.0 | 5.0 | -- | 5.0 | 5..0 | -- | -- | -- |

| | | |
|---|---|---|
| **25.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Pre monsoon - 5.14 mbgl & Post monsoon - 2.78 mbgl for Mahad Taluka (As per GSDA, Govt. of Maharashtra and CGWB Govt. of India Report). |
| | **Size and no of RWH tank(s) and Quantity:** | 1 No. overhead tank of Size - 5 m x 3m x 1.5 m. |
| | **Location of the RWH tank(s):** | Utility area |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | 350000 |
| | **Budgetary allocation (O & M cost) :** | 75000 |
| | **Details of UGT tanks if any :** | MIDC water storage tank of 30.536 m3 & Firefighting water storage tank of 100 m3 capacity. |
| **26.Storm water drainage** | **Natural water drainage pattern:** | -- |
| | **Quantity of storm water:** | 337.5 m3/hr. |
| | **Size of SWD:** | Width - 0.5 m, Depth - 0.75 m & Capacity of SWD - 5231.88 m3 . |
| **27.Sewage and Waste water** | **Sewage generation in KLD:** | 2.55 |
| | **STP technology:** | Domestic sewage will be sent to ETP. |
| | **Capacity of STP (CMD):** | NA |
| | **Location & area of the STP:** | NA |
| | **Budgetary allocation (Capital cost):** | NA |
| | **Budgetary allocation (O & M cost):** | NA |

## 28.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | There will not be any major construction activity however realignment & modifications of some existing structures will be involved by virtue of which wastes likes debris, cardboards, wood planks, metal rods, left over cement, sand, stone aggregates etc. will be generated. |
| | **Disposal of the construction waste debris:** | Inert materials will be sold to scrap dealers & debris left over cement, sand and stone aggregates will be used within plot for filling & leveling purpose. |
| **Waste generation in the operation Phase:** | **Dry waste:** | Waste such as papers, cardboards, stationery & office wastes from office . |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | ETP Sludge - 1170.0 kg/M, Spent Carbon - 9480 kg/M, Distillation Residue - 14.593 MT/M, Empty drums, Carboys & Containers - 50 Nos./M, Spent Solvent - 1765 kg/M, Recovered Acetic Acid - 1.3 MT/M, Recovered Sodium Acetate - 2.75 MT/M, Recovered Sodium Bromide - 1.20 MT/M, Recovered Sodium Hydrosulfide - 25.99 MT/M, Recovered Hydrochloric Acid - 0.61 MT/M, Recovered 2-Butyl-4-Chloro-5-Imidazolecarboxaldehyde - 0.1 MT/M, Recovered Soda Ash - 2.5 MT/M, Recovered Glycerol - 1.7 MT/M. |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Will be sold to recycler or disposed through local administration waste dispsoal system |
| | **Wet waste:** | NA |
| | **Hazardous waste:** | Spent Solvent, Distillation residue, Empty drums, Carboys & Containers Recovered Acetic Acid, Recovered Sodium Acetate, Recovered Sodium Bromide, Recovered Sodium Hydrosulfide, Recovered Hydrochloric Acid, Recovered 2-Butyl-4-Chloro-5-Imidazolecarboxaldehyde, Recovered Soda Ash & Recovered Glycerol will be sold to MPCB Authorized vendors or disposed to CHWTSDF. ETP Sludge will be disposed to CHWTSDF. |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | NA |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Near ETP & Sludge tank. |
| | **Area for the storage of waste & other material:** | 3.9 sq. m. |
| | **Area for machinery:** | NA |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | NA |
| | **O & M cost:** | NA |

## 29.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | - | 5.9 - 6.5 | 7.1 - 8.5 | 5.5 - 9.0 |
| 2 | TDS | mg/l | 1800 -2000 | 165.0 | 2100.0 |
| 3 | BOD | mg/l | 400 - 800 | 27.0 | 100.0 |
| 4 | COD | mg/l | 7600 - 8000 | 125 | 250.0 |
| 5 | O & G | mg/l | 15.2 | 7.3 | 10.0 |
| 6 | TSS | mg/l | 500 - 800 | BDL | 100.0 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 18.5 |
| Capacity of the ETP: | 20 CMD |
| Amount of treated effluent recycled : | Boiler Condensate recovery - 10.8 CMD |
| Amount of water send to the CETP: | 16.28 CMD |
| Membership of CETP (if require): | Company is having membership of MMA - CETP, Mahad. |
| Note on ETP technology to be used | LCOD-LTDS & HCOD-LTDS effluent: 18.5 CMD LCOD-LTDS & HCOD-LTDS effluent comprising of manufacturing process, boiler, cooling tower & scrubber blow downs and domestic activities will be subjected to full-fledged ETP comprising of primary, secondary & tertiary treatment scheme & 16.28 CMD treated effluent will be disposed to MMA CETP, Mahad. |
| Disposal of the ETP sludge | ETP sludge will be disposed to Mumbai Waste Management Ltd. - CHWTSDF, Taloja. |

## 30.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | ETP Sludge | 34.2 | Kg/M | -- | 1170 | 1170 | CHWTSDF, Taloja |
| 2 | Spent Carbon | 28.3 | Kg/M | -- | 9480 | 9480 | CHWTSDF, Taloja |
| 3 | Distillation Residue | 20.3 | MT/M | -- | 14.593 | 14.593 | Sale to MPCB Authorized Vendor/ CHWTSDF, Taloja |
| 4 | Empty drums, Carboys, Containers | 33.1 | Nos/M | -- | 50.0 | 50.0 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 5 | Spent solvent | 28.6 | Kg/M | -- | 1765 | 1765 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 6 | Recovered Acetic Acid | 28.1 | MT/M | -- | 1.3 | 1.3 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 7 | Recovered Sodium Acetate | 28.1 | MT/M | -- | 2.75 | 2.75 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 8 | Recovered Sodium Bromide | 28.1 | MT/M | -- | 1.20 | 1.20 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 9 | Recovered Sodium Hydrosulfide | 28.1 | MT/M | -- | 25.99 | 25.99 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 10 | Recovered Hydrochloric Acid | 28.1 | MT/M | -- | 0.61 | 0.61 | Sale MPCB Authorized Vendor/CHWTSDF, |
| 11 | Recovered 2-Butyl-4-Chloro-5-Imidazolecarboxaldehyde | 28.1 | MT/M | -- | 0.1 | 0.1 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 12 | Recovered Soda Ash | 28.1 | MT/M | -- | 2.5 | 2.5 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |
| 13 | Recovered Glycerol | 28.1 | MT/M | -- | 1.7 | 1.7 | Sale to MPCB Authorized Vendor/CHWTSDF, Taloja |

## 31.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 | 0.6 & 1.0 TPH steam boilers | Furnace Oil - 2200 l/day | 1 | 30.0 | 0.6 | 90 |
| 2 | 4 & 10 lakhkiloCal./hr. thermic fluid heaters | Furnace Oil - 1600 l/day | 2 | 30.0 | 0.6 | 110 |
| 3 | 250 & 500 kVA Diesel Generator | High Speed Diesel - 90 l/hr. (Fuel consumption will depend on hours of power failure) | 3 | 4.0 | 0.45 | 185 |
| 4 | Process plant - 3 Alkali scrubbers | -- | 4 | 5 (above roof) | 0.3 | -- |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | Process plant - 2 H2S scrubbers | -- | 5 | 5 (above roof) | 0.3 | -- |
| 6 | Process plant - Ammonia vapors scrubbers | -- | 6 | 5 (above roof) | 0.3 | -- |

## 32.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Furnace oil | -- | 3.8 MT/day | 3.8 MT/day |
| 2 | High Speed Diesel | -- | 90 l/hr. (Fuel consumption will depend on hours of power failure) | 90 l/hr. (Fuel consumption will depend on hours of power failure) |
| 33.Source of Fuel | | Furnace Oil : Local Supplier High speed diesel: Local HP vendor | | |
| 34.Mode of Transportation of fuel to site | | By Road | | |

## 35.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):** | 445 KW |
| | **During Operation phase (Demand load):** | 440 kVA |
| | **Transformer:** | 500 KVA |
| | **DG set as Power back-up during operation phase:** | 1 x 250 kVA & 1 x 500 kVA |
| | **Fuel used:** | High Speed Diesel |
| | **Details of high tension line passing through the plot if any:** | Not Applicable |

## Energy saving by non-conventional method:

20 Solar street lights will be installed within project premises.

## 36.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Solar Street Ligh | 20 |

## 37.Details of pollution control Systems

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

| | | |
|---|---|---|
| Stem boilers & Thermic fluid heaters | -- | Common stack of 30 m height for steam boilers & Common stack of 30 m height for thermic fluid heaters as per CPCB guidelines. |
| Manufacturing process | -- | Provision of 3 nos. alkali scrubbers, 2 nos. of H2S scrubbers & 2 nos. of NH3 scrubbers for process reactors. |
| Waste water generated from industrial activities | ETP of 20 CMD capacity comprising of Primary, Secondary and Tertiary Treatment. | -- |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 5.5 Lakh |
| | **O & M cost:** | 0.4 Lakh |

## 38.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 3 nos. alkali scrubbers and, 2 nos. of H2S scrubbers, 2 nos. of NH3 scrubbers for process reactors. Provision of common stack of 30.0 m height for steam boilers & common stack of 30.0 m height for thermic fluid heaters | 50.0 | 1.5 |
| 2 | Water | Operation & maintenance of ETP of 20 CMD capacity comprising of primary, secondary and tertiary treatment. | -- | 10.0 |
| 3 | Noise | Development of acoustic enclosures and installation of shock absorbers & vibration absorbing pads | 2.5 | -- |
| 4 | Occupational Health | Glares, Breathing Masks, Gloves, Boots, Helmets, Ear Plugs etc. & annual health-medical checkup of workers. | 5.5 | 1.0 |
| 5 | Green Belt | Green belt development & maintenance. | 3.5 | 2.1 |

| | | | | |
|---|---|---|---|---|
| 6 | Hazardous & Non-hazardous (Solid) waste Management | Purchase of additional containers/bags for storage of solid waste, concrete paving of hazardous waste storage area | 1.5 | 2.5 |
| 7 | Rain water harvesting | Rain water harvesting tank of 22.5 m3 & setting up of RWH system. | 3.5 | 0.75 |
| 8 | Energy conservation | Installation of solar lighting within project premises | 5.5 | 0.4 |
| 9 | Environment Monitoring | Monitoring of environmental parameters inclusive of Carbon & Water foot print monitoring | -- | 8.5 |

## 39.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 |
|---|---|---|---|---|---|---|---|
| Acetic acid | Liquid | Enclosed Shed | 200 Kg Drum | 0.4 | 0.49 | Local | By Road |
| Acetic anhydride | Liquid | Enclosed Shed | 500 Kg IBC | 1.0 | 4.75 | Local | By Road |
| Activated carbon | Solid | Enclosed Shed | 50 Kg Bags | 0.1 | 5.702 | Local | By Road |
| Acetone | Liquid | Enclosed Shed | ST | 11.5 | 16.66 | Local | By Road |
| Ammonia | Gas | Enclosed Shed | Cylinder | 1.8 | 17.1242 | Local | By Road |
| Boric acid | Solid | Enclosed Shed | 50 Kg Bags | 0.05 | 0.027 | Local | By Road |
| 2-Butyl-4-Chloro-5-Imidazolecarboxaldehyde (BCFI) | Solid | Enclosed Shed | 50 Kg Bags | 0.5 | 2.285 | Local | By Road |
| Cyclohexane | Liquid | Enclosed Shed | 200 Kg Drums | 0.2 | 0.73 | Local | By Road |
| Chlorosulfonic acid | Liquid | Enclosed Shed | 500 Kg IBC | 1.0 | 2.3 | Local | By Road |
| Cyclopropyl amine | Liquid | Enclosed Shed | 200 Kg Drums | 0.4 | 0.84 | Local | By Road |
| 4-Chlorobenzoic acid | Solid | Enclosed Shed | 100 kg Bags | 0.6 | 6.3 | Local | By Road |
| Furfuryl Amine | Liquid | Enclosed Shed | 200 Kg Drums | 0.6 | 1.625 | Local | By Road |
| Hyflow | Solid | Enclosed Shed | 50 Kg Bags | 0.15 | 1.522 | Local | By Road |
| Hydros | Solid | Enclosed Shed | 50 Kg Drum | 0.15 | 0.42 | Local | By Road |
| Hydrochloric acid | Liquid | Enclosed Shed | ST | 8.5 | 9.62 | Local | By Road |
| Hydrogen bromide | Liquid | Enclosed Shed | 500 Kg IBC | 1.5 | 5.657 | Local | By Road |
| Hydrogen | Gas | Enclosed Shed | Cylinders | 25 Nos. | 0.023 | Local | By Road |
| Isopropyl alcohol (IPA) | Liquid | Enclosed Shed | ST | 5.5 | 183.18 | Local | By Road |
| Isosorbide | Solid | Enclosed Shed | 50 Kg Bags | 1.5 | 6.45 | Local | By Road |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Tetradecyl dimethyl amine | Liquid | Enclosed Shed | 500 Kg IBC | 5 | 64.68 | Local | By Road |
| Methyl benzyl amine | Liquid | Enclosed Shed | 500 Kg IBC | 3 | 28.46 | Local | By Road |
| Dichloromethane (MDC) | Liquid | Enclosed Shed | 500 Kg IBC | 3 | 28.43 | Local | By Road |
| Toluene | Liquid | Enclosed Shed | ST | 12.5 | 92.28 | Local | By Road |
| Raney Nickel Catalyst (RNC) | Solid | Enclosed Shed | 50 Kg Bags | 0.05 | 0.083 | Local | By Road |
| Potassium hydroxide | Solid | Enclosed Shed | 100 Kg Bags | 0.2 | 0.645 | Local | By Road |
| 1 - Para hydroxy phenyl acetamide (PHAP) | Solid | Enclosed Shed | 50 Kg Bags | 2 | 44.46 | Local | By Road |
| Pure N-(4-Chlorobenzoyl)-Tyramine | Solid | Enclosed Shed | 100 Kg Bags | 0.8 | 8.069 | Local | By Road |
| 4'-Bromomethyl-2-cyanobipheny (OTBB) | Solid | Enclosed Shed | 50 Kg Bags | 0.5 | 3.33 | Local | By Road |
| Sulphuric acid | Liquid | Enclosed Shed | 500 Kg IBC | 1.0 | 0.96 | Local | By Road |
| Soda ash | Solid | Enclosed Shed | 60 Kg Bags | 0.3 | 1.3 | Local | By Road |
| Sodium hydroxide | Solid | Enclosed Shed | 50 Kg Bags | 1.5 | 3.62 | Local | By Road |
| Sodium acetate | Solid | Enclosed Shed | 100 Kg Bags | 0.1 | 0.43 | Local | By Road |
| Methyl-2-bromo-2-methyl propanoate | Liquid | Enclosed Shed | 500 Kg IBC | 0.5 | 5.29 | Local | By Road |
| Para hydroxy phenyl acetamide | Solid | Enclosed Shed | 50 Kg Bags | 1.2 | 11.34 | Local | By Road |
| Mono Isopropyl Amine (MIPA) | Liquid | Enclosed Shed | ST | 4.5 | 62.21 | Local | By Road |
| Methanol | Liquid | Enclosed Shed | ST | 11.5 | 56.7 | Local | By Road |
| Methyl bromide | Liquid | Enclosed Shed | Cylinder 600 Kg | 1.8 | 14.11 | Local | By Road |
| Methyl Isobutyl Ketone (MIBK) | Liquid | Enclosed Shed | 500 Kg IBC | 2.5 | 25 | Local | By Road |
| Sodium azide | Solid | Enclosed Shed | 50kg Bags | 0.05 | 0.76 | Local | By Road |
| 2,4-dichlorobenzoic acid | Solid | Enclosed Shed | 100 Kg Bags | 0.4 | 3.76 | Local | By Road |
| Sulfur | Solid | Enclosed Shed | 50 kg Bags | 1.5 | 14.55 | Local | By Road |
| Triethyl amine hydrochloride (TEA HCl) | Solid | Enclosed Shed | 100 kg Bags | 0.5 | 1.61 | Local | By Road |
| Tyramine | Solid | Enclosed Shed | 500 Kg IBC | 1 | 5.52 | Local | By Road |
| Oleic acid | Liquid | Enclosed Shed | 500 Kg IBC | 4 | 24 | Local | By Road |
| O-Xylene | Liquid | Enclosed Shed | 200 Kg Drums | 0.4 | 2.47 | Local | By Road |
| 4 methoxy acetophenone (4-MAP) | Solid | Enclosed Shed | 50 Kg Bags | 3.0 | 13.287 | Local | By Road |

## 40.Any Other Information

No Information Available

| | | |
|---|---|---|
| | **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** | 1) Water Balance: Cooling Tower & Boiler consumption = 44 CMD, Losses = 28 CMD, Effluent (Blow down) = 5.2 CMD, thus 44- 28 -5.2 = 10.8 CMD is boiler condensate recovery.<br>2) Dry season water requirement: 1st cycle = 67.0 CMD, 2nd cycle onwards boiler condensate recovery = 10.8 CMD, thus 2nd cycle onwards water requirement = 67.0 – 10. 8 = 56.2 CMD<br><br>3) Wet season water requirement: 1st cycle = 67.0 - 5.0 CMD = 62.0 CMD (watering for green belt will be not required during wet season). Boiler condensate recovery = 10.8 CMD, Harvested rain water = 8.0 CMD, Total quantity of recycle = 10.8 + 8.0 = 18.8 CMD, thus 2nd cycle onward water requirement = 62.0 – 18.8 = 43.2 CMD.<br><br>Note: There will not be any major construction activity however realignment & modifications of some existing structures will be involved. |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

**3. The proposal has been considered by SEIAA in its 190th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:**

**Specific Conditions:**

| | |
|---|---|
| **I** | PP to prepare safety related training modules in Marathi and Hindi and impart training to the concern staff so as to increase its effectiveness. |
| **II** | PP to use new and renewable energy for illumination of office buildings, street lights, parking areas and maintain the same regularly. PP to provide lightening arrestor. |
| **III** | PP to include water and carbon foot print monitoring in their management plan. |
| **IV** | PP to implement CER plan in consultation with the District Authority as per OM issued by MoEF&CC dated 01.05.2018. |
| **V** | PP to ensure that CER plan gets approved from Municipal Commissioner/District Collector. |
| **VI** | PP to ensure to comply with the conditions stipulated in the Office Memorandum issued by MoEF& CC dated 9th August, 2018. |

**General Conditions:**

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| **I** | (i)PP to achieve Zero Liquid Discharge ; PP shall ensure that there is no increase in the effluent load to CETP. |
| **II** | No additional land shall be used /acquired for any activity of the project without obtaining proper permission. |
| **III** | PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment. |
| **IV** | Proper Housekeeping programmers shall be implemented. |

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| **V** | In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve. |
| **VI** | A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable). |
| **VII** | A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water. |
| **VIII** | Arrangement shall be made that effluent and storm water does not get mixed. |
| **IX** | Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board. |
| **X** | Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided. |
| **XI** | The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989. |
| **XII** | Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept. |
| **XIII** | Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning. |
| **XIV** | Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act. |
| **XV** | (The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. |
| **XVI** | The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes. |
| **XVII** | Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured. |
| **XVIII** | A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards. |
| **XIX** | Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department |
| **XX** | The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in |
| **XXI** | Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year. |
| **XXII** | A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent. |
| **XXIII** | The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectorai parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain. |
| **XXIV** | The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. |
| **XXV** | The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail. |

**4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.**

**5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.**

**6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.**

**7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.**

**8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.**

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

**10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune),New Administrative Building, 1stFloor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.**

**Shri. Anil Diggikar (Member Secretary SEIAA)**

**Copy to:**

**1.** SECRETARY MOEF & CC

**2.** IA- DIVISION MOEF & CC

**3.** MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI

**4.** REGIONAL OFFICE MOEF & CC NAGPUR

**5.** REGIONAL OFFICE MPCB RAIGAD

**6.** REGIONAL OFFICE MIDC RAIGAD

**7.** MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD

**8.** COLLECTOR OFFICE RAIGAD