# STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

**Environment department,**
**Room No. 217, 2nd floor,**
**Mantralaya, Annexe,**
**Mumbai- 400 032.**
**Date:April 24, 2020**

To,
**Maharashtra Aldehydes and Chemicals Limited,**
at Plot No. A-17, MIDC Mahad, Mahad

**Subject:** Environment Clearance for Regularization of Existing Manufacturing Unit & Proposed Expansion of Synthetic Organic Chemicals Facility at Plot No. A-17, MIDC Mahad, Mahad, Dist. Raigad by Maharashtra Aldehydes and Chemicals 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 5 (f)- B as per EIA Notification 2006.

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

| | |
|---|---|
| **1.Name of Project** | Regularization of Existing Violation and Proposed Expansion of Synthetic Organic Chemicals Facility at Plot No. A-17, MIDC Mahad, Mahad, Dist. Raigad by Maharashtra Aldehydes and Chemicals Ltd. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Maharashtra Aldehydes and Chemicals Limited, |
| **4.Name of Consultant** | Aditya Environmental Services Pvt. Ltd. |
| **5.Type of project** | Industrial project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Regularization of Existing violation and Proposed Expansion of existing Synthetic Organic Chemicals Manufacturing activity |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | No- proposal pertains to Regularization of Existing violation and Proposed Expansion of existing Synthetic Organic Chemicals Manufacturing activity |
| **8.Location of the project** | Plot No. A-17, MIDC Mahad, Mahad |
| **9.Taluka** | Mahad |
| **10.Village** | Kamble Turf Birwadi |
| **Correspondence Name:** | D N Patil (General Manager – Works) |
| **Room Number:** | NA |
| **Floor:** | NA |
| **Building Name:** | NA |
| **Road/Street Name:** | NA |
| **Locality:** | Maharashtra Aldehydes and Chemicals Limited, A-17, MIDC Mahad Mahad, Dist Raigad |
| **City:** | MIDC, Mahad |
| **11.Whether in Corporation / Municipal / other area** | MIDC |

| | |
|---|---|
| **12.IOD/IOA/Concession/Plan Approval Number** | MIDC plot approval |
| | **IOD/IOA/Concession/Plan Approval Number:** MIDC plot approval: SPA/MHD/ A-64302/of'2019, Dtd:- 17/02/2019 |
| | **Approved Built-up Area:** 6534.64 |
| **13.Note on the initiated work (If applicable)** | 2009-DEP & DMP capacity increased from 350 to 800 after obtaining Consent from MPCB 2011 – Product Mix changed with Consent from MPCB . For proposed expansion no work initiated at site . |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | MIDC approval |
| **15.Total Plot Area (sq. m.)** | 20000 sq.m. |
| **16.Deductions** | -- |
| **17.Net Plot area** | -- |
| **18 (a).Proposed Built-up Area (FSI & Non-FSI)** | **FSI area (sq. m.):** 8799.90 |
| | **Non FSI area (sq. m.):** -- |
| | **Total BUA area (sq. m.):** 15404.753 |
| **18 (b).Approved Built up area as per DCR** | **Approved FSI area (sq. m.):** 20000 |
| | **Approved Non FSI area (sq. m.):** -- |
| | **Date of Approval:** 17-02-2019 |
| **19.Total ground coverage (m2)** | 7414.66 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 37% |
| **21.Estimated cost of the project** | 500000000 |

## 22.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | A) Alkyl Esters of Phthalic acids | 800 | 800 | 1600 |
| 2 | B) Alkyl Esters of carboxylic acids | -- | -- | -- |
| 3 | 1. Ethyl Benzoate | 30 | 0 | 30 |
| 4 | 2. Ethyl Butyrate | 0 | 100 | 100 |
| 5 | 3. Ethyl Propionate | 0 | 50 | 50 |
| 6 | 4. Ethyl Laurate | 0 | 5 | 5 |
| 7 | 5. Ethyl Caprate | 0 | 5 | 5 |
| 8 | 6. Ethyl Caproate | 0 | 5 | 5 |
| 9 | 7. Ethyl Heptanoate | 0 | 5 | 5 |
| 10 | 8. Ethyl 2-Methyl Butyrate | 0 | 5 | 5 |
| 11 | 9. Ethyl Valerate | 0 | 5 | 5 |
| 12 | 10. Ethyl Cinnamate | 0 | 4 | 4 |
| 13 | C) Alkyl Esters of Citric acid | -- | -- | -- |
| 14 | 1. Tri ethyl Citrate | 0 | 100 | 100 |
| 15 | 2. Tri Butyl Citrate | 0 | 15 | 15 |
| 16 | 3. Acetyl Tributyl Citrate | 0 | 35 | 35 |
| 17 | D) Phenol Derivatives | -- | -- | -- |
| 18 | 1. Syringaldehyde | 1.5 | 0 | 1.5 |
| 19 | 2. Trimethyl Hydroquinone & its Formulations | 20 | 0 | 20 |
| 20 | 3. Anisole | 0 | 500 | 500 |
| 21 | 4. Anethole | 0 | 300 | 300 |
| 22 | 5. 4-Methyoxyl Acetophenone | 0 | 260 | 260 |
| 23 | 6. 1-Piperidino 1-cyclohexene | 0 | 40 | 40 |
| 24 | 7. Di hydro Anethole | 0 | 20 | 20 |
| 25 | 8. Cis Anethole | 0 | 10 | 10 |
| 26 | 9. 2-methoxy Acetophenone(2-MAP) | 0 | 1 | 1 |
| 27 | 10. 2,4-Diacetyl Anisole | 0 | 1 | 1 |
| 28 | E) Cyclopentanone and its derivatives | -- | -- | -- |
| 29 | 1. Cyclopentanone | 100 | 0 | 100 |
| 30 | F) Absolute Alcohol | -- | -- | -- |
| 31 | 1. Anhydrous Alcohol | 0 | 1200 | 1200 |
| 32 | G) Distillation of Solvents | -- | -- | -- |

| | | | | |
|---|---|---|---|---|
| 33 | 1. Ultrapurification of Solvents | 165 | 235 | 400 |
| 34 | H) Vitamin Formulations | -- | -- | -- |
| 35 | 1. Maxvit Vitamin Formulation | 100 | 400 | 500 |
| 36 | I) Sodium Sulphate | -- | -- | -- |
| 37 | 1. Sodium Sulphate | 0 | 500 | 500 |
| 38 | J) Acetic acid | -- | -- | -- |
| 39 | 1. Acetic acid | 0 | 105 | 105 |
| 40 | K) Propionic acid | -- | -- | -- |
| 41 | 1. Propionic acid | 0 | 180 | 180 |
| 42 | L) Sodium Pyrithione | -- | -- | -- |
| 43 | 1. Sodium Pyrithione | 75 | - 75 | 0 (product will be discontinued in proposed project) |

## 23.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MIDC |
| | **Fresh water (CMD):** | 377 |
| | **Recycled water - Flushing (CMD):** | 33 (Cooling tower) |
| | **Recycled water - Gardening (CMD):** | Not Applicable |
| | **Swimming pool make up (Cum):** | Not Applicable |
| | **Total Water Requirement (CMD) :** | 410 |
| | **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** | MIDC |
| | **Fresh water (CMD):** | 352 |
| | **Recycled water - Flushing (CMD):** | 33 (Cooling tower) |
| | **Recycled water - Gardening (CMD):** | Not Applicable |
| | **Swimming pool make up (Cum):** | Not Applicable |
| | **Total Water Requirement (CMD) :** | 385 |
| | **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 | |

## 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 | 10.5 | 4.5 | 15 | 2.5 | 0.5 | 3 | 8 | 4 | 12 |
| Industrial Process | 79 | -4.0 | 75 | 4.1 | -4.1 | 0 | 74.9 | 0.1 | 75 |
| Cooling tower & thermopack | 91 | 204 | 295 | 74.4 | 200.6 | 275 | 16.6 | 3.4 | 20 |
| Gardening | 8 | 17 | 25 | 8 | 17 | 25 | 0 | 0 | 0 |

| | | |
|---|---|---|
| **25.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 1 to 7 m pre-monsoon (CGWA report) |
| | **Size and no of RWH tank(s) and Quantity:** | 12 m3 capacity tank ( 1 No) |
| | **Location of the RWH tank(s):** | Within site |
| | **Quantity of recharge pits:** | Nil |
| | **Size of recharge pits :** | Nil |
| | **Budgetary allocation (Capital cost) :** | Rs. 3 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.5 Lakhs |
| | **Details of UGT tanks if any :** | 12 m3 capacity tank ( 1 No) |
| **26.Storm water drainage** | **Natural water drainage pattern:** | Towards south. |
| | **Quantity of storm water:** | 162.5 lit/second |
| | **Size of SWD:** | 0.3 m x 0.5 m ( 3 Nos) |
| **27.Sewage and Waste water** | **Sewage generation in KLD:** | 12 cmd (Existing + Proposed) |
| | **STP technology:** | Sewage will be treated in ETP at site |
| | **Capacity of STP (CMD):** | It will be combinly treated in Effluent treatment plant |
| | **Location & area of the STP:** | Not Applicable |
| | **Budgetary allocation (Capital cost):** | Nil |
| | **Budgetary allocation (O & M cost):** | Nil |

## 28.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | 5500 cum substratum removed for new building 3500 cum Debris generated Miscellaneous scrap (glass, plastic, metals) – 5 Tons – to be sold for recycle and reuse |
| | **Disposal of the construction waste debris:** | Substratum/Debris/ site preparation waste will be reused for leveling of plot |
| **Waste generation in the operation Phase:** | **Dry waste:** | Coal ash – 3.1 TPD |
| | **Wet waste:** | Garden Trimming / Canteen Waste - 1 TPM |
| | **Hazardous waste:** | Details given in Sr No 39 below |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | 0.2 TPM ETP Biological sludge |
| | **Others if any:** | Not Applicable |
| **Mode of Disposal of waste:** | **Dry waste:** | Sale to brick manufacturer or for landfilling |
| | **Wet waste:** | Composted sludge will be used as manure |
| | **Hazardous waste:** | CHWTSDF / Sale to authorized Parties |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | Mix with compost and used as Manure |
| | **Others if any:** | Not Applicable |
| **Area requirement:** | **Location(s):** | Within plot- Coal ash silo near Boiler house Canteen and wet waste – near ETP |
| | **Area for the storage of waste & other material:** | 50 Sq. mtr. |
| | **Area for machinery:** | Not Applicable |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Existing Rs 10 Lacs + Proposed Rs 15 lakhs = Rs 25 lakhs |
| | **O & M cost:** | Existing Rs. 21.66 lakhs + Proposed Rs 25 Lacs per year |

## 29.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 2 to 4 | 6.5 to 9 | 6.5 to 9 |
| 2 | Chemical oxygen Demand | mg/L | 9000 to 10000 | < 150 | 250 |
| 3 | Biological oxygen Demand | mg/L | 3000 to 4000 | < 30 | 30 |
| 4 | Total suspended solids | mg/L | 200 to 250 | < 50 | 100 |
| 5 | Total Dissolved solids | mg/L | 3500 to 4000 | < 1500 | 2100 |
| 6 | Oil & Grease | mg/L | 10 to 15 | < 5 | 10 |
| 7 | Sulphate | mg/L | 300 to 350 | < 800 | 1000 |
| 8 | Total Ammonical nitrogen | mg/L | 7 to 10 | < 30 | 50 |
| 9 | Chloride | mg/L | 150 to 200 | < 400 | 600 |

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|---|---|
| Amount of effluent generation (CMD): | 107 cmd (Existing 99.5 cmd + Proposed additional 7.5 cmd ) |
| Capacity of the ETP: | 110 cmd ETP (for biodegradable waste) 40 cmd RO (for utility effluents) and 45 cmd MEE (for high TDS effluents) |
| Amount of treated effluent recycled : | 33 cmd of treated effluent will be recycled for cooling purposes |
| Amount of water send to the CETP: | 67.5 cmd to CETP |
| Membership of CETP (if require): | Yes, MACL is member of Mahad CETP |
| Note on ETP technology to be used | Low Organic effluent from process will be segregated & treated along with sewage water Aerobic Biological process comprising Primary, Secondary & tertiary units. Wastewater from Utilities (CT, Boiler blowdown and DM Plant rinses) will be passed through RO and permeate reused for cooling. High COD/high TDS effluent will be treated in MEE and salts will be recovered, condensate will be treated in Aerobic biological ETP Process. |
| Disposal of the ETP sludge | ETP Chemical sludge (including MEE salts) 10 TPM to CHWTSDF ETP Biological sludge 0.2 TPM will be disposed with Compost. |

## 30.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Chemical sludge form waste water treatment | 35.3 | TPM | 10 | 200 | 210 | CHWTSDF |
| 2 | Residue And wastes | 28.1 | KL/M | 120 | 300 | 420 | CHWTSDF |
| 3 | Spent Organic solvent | 28.6 | KL/M | 270 | 0 | 270 | Sale to MPCB authorized recycler/ CHWTSDF |
| 4 | Process sludge / residue | 26.1 | KL/M | 60 | 150 | 210 | CHWTSDF |
| 5 | Discarded barrels/liners | 33.1 | Nos/A | 0 | 2200 | 2200 | Sale to MPCB authorized recycler |
| 6 | Discarded Asbestos | 15.2 | Kg/A | 0 | 250 | 250 | CHWTSDF |
| 7 | Spent oil | 5.1 | Kg/M | 0 | 230 | 230 | Sale to MPCB authorized recycler |
| 8 | Oil soaked gaskets and cotton waste | 5.2 | Kg/M | 0 | 5 | 5 | CHWTSDF |
| 9 | Filter & Filter material | 36.2 | TPA | 0 | 1 | 1 | CHWTSDF |
| 10 | Spent catalyst | 28.2 | TPA | 0 | 10 | 10 | Recycle to catalyst manufacture / CHWTSDF |

## 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 | Boiler (existing) - 2 TPH | Coal- 7 TPD | 1 | 32 mtr | 0.8 | 142 |
| 2 | TFH (Existing) - 3 Lakh Kcal/Hour | FO- 1.2 KL/day OR Coal- 2.8 TPD | 1 | 20 mtr | 0.45 | 148 |
| 3 | Boiler (Proposed) - 6 TPH | Coal: 26 TPD | 1 | 33 mtr | 0.6 | 140 |
| 4 | TFH (Proposd) - 8 lakh Kcal/hour | Coal: 7.2 TPD | 1 | 30 mtr | 0.35 | 150 |
| 5 | DG set (Existing) - 62 KVA | HSD: 0.5 KL/day | 1 | 2 mtr above roof | 0.15 | 140 |
| 6 | DG set (Proposed) - 250 KVA | HSD: 1.2 KL/day | 1 | 3.5 mtr above roof | 0.30 | 140 |
| 7 | Process reactor (proposed) | -- | 1 | 15 mtr | 0.1 | Ambient |

## 32.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Imported Coal (10 % Ash + 0.5 % Sulphur) / Briquette | 9.8 TPD | 33.2 TPD | 43 TPD |
| 2 | Furnace oil (0.2 % Ash % & 4.5 % Sulphur) | 1.2 KL/day | -- | 1.2 KL/day |
| 3 | HSD (0.01 Ash % & 1 % Sulphur) | 0.5 KL/day | 1.2 KL/day | 1.7 KL/day |

| | |
|---|---|
| 33.Source of Fuel | Coal Imported from Indonesia and other countries FO & HSD from Indian Refineries |
| 34.Mode of Transportation of fuel to site | By road (Through Closed Vehicle) |

## 35.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 770 KVA (proposed) |
| | **DG set as Power back-up during construction phase** | 2 DG set (Existing 1 No. 62 KVA + Proposed 1 No. 250 KVA) |
| | **During Operation phase (Connected load):** | 770 KVA |
| | **During Operation phase (Demand load):** | 770 KVA |
| | **Transformer:** | within plot |
| | **DG set as Power back-up during operation phase:** | 2 DG set (Existing 1 No. 62 KVA + Proposed 1 No. 250 KVA) |
| | **Fuel used:** | HSD for DG sets |
| | **Details of high tension line passing through the plot if any:** | No HT line passing through plot. |

## Energy saving by non-conventional method:

It is proposed to install 31 KW solar energy panels.

## 36.Detail calculations & % of saving:

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

## 37.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Air pollution - Boiler (Existing) | Mechanical dust collector, bag filter, stack | - |
| Air pollution - TFH (Existing) | Mechanical dust collector, stack | - |
| Air pollution - DG Set (Existing) | Exhaust pipe height | - |
| Air pollution - Boiler (Proposed) | - | Stack height with cyclone separator & bag filter |
| Air pollution - TFH (Proposed) | - | Stack height with cyclone separator & bag filter |

| | | |
|---|---|---|
| Air pollution - DG set (Proposed) | - | Exhaust pipe height |
| Air pollution - Process vent (Proposed) | - | Stack |
| Noise Pollution | PPE, acoustic enclosure | PPE, acoustic enclosure |
| Solid and hazardous waste management | Disposal to CHWTSDF / Recycling or sale to authorized party | Disposal to CHWTSDF / Recycling or sale to authorized party |
| Water Pollution | ETP (Combined treatment trade effluent with sewage)- primary, secondary and tertiary treatment | MEE & RO |

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

## 38.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Noise and dust | Barricading around construction site | Rs. 2.55 lakhs |
| 2 | Land environment | Top soil Management & Substratum disposal | Rs. 2.65 Lakhs |
| 3 | Safety | OHS Measures for labourers | Rs. 0.5 lakhs |

### 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 Control | Provision of stacks and bag filters as per norm | 13 (Existing) + 20 (Proposed) | 1.3 (Existing) + 2 (Proposed) |
| 2 | Water Pollution Control | MEE unit for expansion to be installed in phases | 0 (Existing) + 250 (Proposed) | - |
| 3 | Water Pollution Control | RO unit for expansion to be installed in phases | 0 (Existing) + 30 (Proposed) | - |
| 4 | Water Pollution Control | ETP Upgradation | 61 (Existing ETP) + 30 (Proposed) | 21 (Existing) + 64 (Proposed) |
| 5 | Environmental Monitoring | Routine on site monitoring | 2 (Existing) + 5 (Proposed) | 1.5 (Existing) + 2 (Proposed) |
| 6 | Noise Control | Acoustic enclosure/ Anti vibration pads, PPE's (in built in equipment cost), PPEs | 3 (Existing) + 5 (Proposed) | 2 (Existing) + 3 (Proposed) |
| 7 | Hazardous waste & Solid Waste management | Storage & Disposal of Hazardous Waste & Non-Hazardous Waste | 10 (Existing) + 15 (Proposed) | 21.66 (Existing) + 25 (Proposed) |
| 8 | Occupational health, safety and fire protection | Fire (Fire hydrant network), safety and occupational health. | 10 (Existing) + 32(Proposed) | 3 (Existing) + 8 (Proposed) |

| | | | | |
|---|---|---|---|---|
| 9 | Green Initiative (Solar energy) | Solar energy utilization for office building, Street lighting, Water heating | 0 (Existing) + 25(Proposed) | 0 (Existing) + 1.5(Proposed) |
| 10 | Rain Water Harvesting | Rain Water Harvesting | 0 (Existing) + 3 (Proposed) | 0 (Existing) + 0.5 (Proposed) |
| 11 | Green belt within site | Green belt within site | 1.95 (390 Nos x 500 Rs per tree) (Existing) + 5.00 (1000 Nos x 500 Rs per tree) (Proposed) | 1.0 (Existing) + 2 (Proposed) |

## 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 |
|---|---|---|---|---|---|---|---|
| SDS | Existing + Proposed | within plot | 100 KL + 3 x 100 KL | 300 KL | 1283 | Local | Tanker |
| Methanol | Existing | within plot | 46 KL | 40 KL | 755 | Local | Tanker |
| Acetic Anhydride | Proposed | within plot | 20 KL | 16 KL | 209 | Local | Tanker |
| Hexane | Existing | within plot | 12 KL | 10 KL | 444 | Local | Tanker |
| 2 Ethyl Hexanol | Proposed | within plot | 2 x 100 KL | 2 x 80 KL | 300 | Local | Tanker |
| Iso Nonyl Alcohol | Proposed | within plot | 100 KL | 80 KL | 37 | Local | Tanker |
| Propionic Anhydride | Proposed | within plot | 20 KL | 16 KL | 328 | Local | Tanker |
| Acetonitrile | Proposed | within plot | 20 KL | 16 KL | 444 | Local | Tanker |
| Ethyl Acetate | Proposed | within plot | 20 KL | 16 KL | 444 | Local | Tanker |
| Ethyl Acetoacetate | Proposed | within plot | 20 KL | 16 KL | 444 | Local | Tanker |
| Acetic acid | Proposed | within plot | 20 KL | 16 KL | 444 | Local | Tanker |
| Butanol | Proposed | within plot | 20 KL | 16 KL | 59 | Local | Tanker |
| Toluene | Proposed | within plot | 20 KL | 16 KL | 444 | Local | Tanker |
| Hydrogen | Proposed | within plot | 2 cylinder trolly | 2 cylinder trolly | 7 | Local | Trolly Truck |

## 40.Any Other Information

No Information Available

| | | |
|---|---|---|
| | **CRZ/ RRZ clearance obtain, if any:** | Not applicable |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Not applicable |
| | **Category as per schedule of EIA Notification sheet** | 5 (f)- B |
| | **Court cases pending if any** | Not applicable |
| | **Other Relevant Informations** | Not applicable |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 12-04-2018 |

**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 provide Zero Liquid Discharge Effluent Treatment Plant. |
| **II** | PP to provide mechanical sludge drying system to ensure proper drying of ETP sludge in rainy season. |
| **III** | PP to ensure compliance of the recommendations of the HAZOP and Risk assessment study. |
| **IV** | PP to include carbon and water foot print monitoring in their management plan. |
| **V** | PP to use briquettes as a fuel for boiler or use coal having ash content less than 10%. |
| **VI** | PP to provide new and renewable energy sources for the illumination of the office building and street lights. |
| **VII** | PP to submit a bank guarantee of Rs.124.40 lakhs (Rs.1.244 Crores) to Maharashtra Pollution Control Board towards effective implementation of the EMP comprising remediation plan and Natural and Community Resource augmentation Plan. |
| **VIII** | PP to submit CER as applicable as per MOEF & CC circular dated 1.5.2018 in consultation with Municipal Corporation. |
| **IX** | PP to ensure to comply with the conditions stipulated in the Office Memorandum issued by MoEF& CC dated 9th August, 2018. |

**General Conditions:**

| | |
|---|---|
| **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. |
| **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

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