# SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Construction of New bridge across Varsova Creek along NH-8

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Rehabilitation and Expansion of NH-8 from km 496+100 to km 498+350 ?Construction of New bridge across Varsova Creek along NH-8 |
| **2.Type of institution** | Government |
| **3.Name of Project Proponent** | National Highways Authority of India |
| **4.Name of Consultant** | M/s Intercontinental Consultants and Technocrats Pvt. Ltd. |
| **5.Type of project** | Others |
| **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** | Not Applicable |
| **8.Location of the project** | Proposed Bridge will be constructed on Versova creek on Ulhas river near Ghodbunder on NH-8 in the state of Maharashtra |
| **9.Taluka** | Thane & Vasai |
| **10.Village** | Varsova village & Sasunavgarh village |
| **11.Area of the project** | in Mira Bhayandar and Vasai Virar Municipal Corporation, Maharashtra. |
| **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)** | Not applicable |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not applicable |
| **15.Total Plot Area (sq. m.)** | Not applicable |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18.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 |
| **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** | 2470200000 |

## 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)** | Approach Road 60 to 78 m; Interchange - 115 m ; Bridge - 18 m |
| **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** | No existing structures on Right of Way |
| **30.Details of the demolition with disposal (If applicable)** | No demolition involved |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Not Applicable |
| | **Size and no of RWH tank(s) and Quantity:** | Not Applicable |
| | **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 :** | Not Applicable |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Please refer Section-3.4.3 Drainage Pattern of Chapter-3 of EIA Report |
| | **Quantity of storm water:** | Not Applicable |
| | **Size of SWD:** | Not Applicable |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | Estimated Sewage generation is 3.6 KLD from the labour camp |
| | **STP technology:** | ? Sewage from labour camp shall be treated in packaged sewage treatment plant or septic tank. 3.24 KLD of treated water can be reused for flushing, washing etc. |
| | **Capacity of STP (CMD):** | Not Applicable |
| | **Location & area of the STP:** | Construction Camp |
| | **Budgetary allocation (Capital cost):** | Not Applicable |
| | **Budgetary allocation (O & M cost):** | Not Applicable |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Municipal solid waste of 20 kg/day is likely to be generated from the construction camp of 100 labours @200 grams per capita |
| | **Disposal of the construction waste debris:** | Approved dumping Area |
| **Waste generation in the operation Phase:** | **Dry waste:** | Not Applicable |
| | **Wet waste:** | Not Applicable |
| | **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:** | Not Applicable |
| | **Wet waste:** | Not Applicable |
| | **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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not Applicable |
| Capacity of the ETP: | Not Applicable |
| Amount of treated effluent recycled : | Not Applicable |
| Amount of water send to the CETP: | Not Applicable |
| Membership of CETP (if require): | Not Applicable |
| Note on ETP technology to be used | Not Applicable |
| Disposal of the ETP sludge | Not Applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| 41.Source of Fuel | | Not Applicable | | |
| 42.Mode of Transportation of fuel to site | | Not Applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 576 trees are proposed to be planted in available vacant spaces. Total green area proposed is 18839.335 sq.m out of which grass turfing is proposed on embankment slopes which is 10263.295 sq.m. The green belt area is 8576.04 sq.m, tree. Plantation plan is enclosed as Annexure 4.1. of EIA Report |
| | **No of trees to be cut :** | 5 trees located in the ROW will be felled |
| | **Number of trees to be planted :** | 576 trees are proposed to be planted |
| | **List of proposed native trees :** | Fast growing native species will be planted. Species will be finalized in consultation with the State Forest Department |
| | **Timeline for completion of plantation :** | 2 years (within the construction period) |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| **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 | Not Applicable | Not Applicable | Not Applicable |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | The power supply is proposed to be sourced from Maharashtra State Electricity Distribution Company Ltd. |
| | **During Construction Phase: (Demand Load)** | Not Applicable |
| | **DG set as Power back-up during construction phase** | yes |
| | **During Operation phase (Connected load):** | Not Applicable |
| | **During Operation phase (Demand load):** | Not Applicable |
| | **Transformer:** | Not Applicable |
| | **DG set as Power back-up during operation phase:** | Not Applicable |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | Not Applicable |

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

Not Applicable

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Not Applicable | Not Applicable |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not Applicable | Not Applicable | Not Applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Not Applicable |
| | **O & M cost:** | Not Applicable |

## 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Mitigation Cost | Environment | 1631500 |
| 2 | Monitoring Cost | Environment | 252000 |
| 3 | Training and Environmental Awareness | Environment | 200000 |

| | | | |
|---|---|---|---|
| 4 | Disaster Management Plan | Environment | 1000000 |
| 5 | Mangrove Conservation Program | Mangrove Conservation | 250000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Monitoring Cost | Environment | 1204000 | Not Applicable |

## 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 |
|---|---|---|---|---|---|---|---|
| Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Thane-Ghodbunder junction |
| **Parking details:** | **Number and area of basement:** | Not Applicable |
| | **Number and area of podia:** | Not Applicable |
| | **Total Parking area:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Number of 2-Wheelers as approved by competent authority:** | Not Applicable |
| | **Number of 4-Wheelers as approved by competent authority:** | Not Applicable |
| | **Public Transport:** | Not Applicable |
| | **Width of all Internal roads (m):** | Not Applicable |
| | **CRZ/ RRZ clearance obtain, if any:** | Application submitted for CRZ Clearance |

| | | |
|---|---|---|
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Sanjay Gandhi National Park is located within 15 kms of proposed project location boundary. The nearest distance is 65 m from Chainage 497+700 |
| | **Category as per schedule of EIA Notification sheet** | Not Applicable |
| | **Court cases pending if any** | None |
| | **Other Relevant Informations** | CRZ area : 1.8525 haCRZ IA: 0.9708 ha CRZ III: 0.1755 ha CRZ IV: 0.7062 ha |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## Brief information of the project by SEAC

National Highways Authority of India has proposed to construct new 4 lane bridge across Versova creek on river ulhas along NH-8 near Thane-Ghodbunder Road. Proposed improvement of the project alignment starts at Km 496 + 100 in surat side on NH-8 and ends at Km 498+350 in Mumbai side totaling to a length of 2.25 km. Total length includes proposed bridge of 917.87 m (approx) and both approaches of 1.33 km. National Center for Sustainable Coastal Management, Chennai has prepared CRZ map in the 1:4000 scale and report, as per which, proposed new bridge is passing through CRZ-IA, CRZ-IB, CRZ-III and CRZ-IVB. Mangroves which are CRZ-IA are present at the bank of the creek and adjacent areas.

The Authority noted that the PP has submitted the EIA report prepared by M/s. Intercontinental Consultants and Technocrats Pvt. Ltd. The brief EIA report is as follows: The CRZ area directly impacted due to the construction of piers and abutments of the proposed new bridge and construction of the interchange is 0.6038 ha. Total 0.6038 ha area will be directly impacted due to construction out of which 0.0523 ha is Mangrove area. The mangroves species present at the site are Avicennia marina, Bruguiera cylindrica and Acanthus ilicifolius. Adequate measures shall be taken to minimize impact in CRZ area. Adequate measures shall be taken to reduce turbidity of water body during construction. Implementing sediment and erosion controls during construction will minimize adverse impact of water bodies. Construction activity will be avoided near water bodies during rainy season. Proper care will be taken to avoid discharge of chemicals/oil into or near the water body or mangroves. Oil receptors shall be provided near oil filling/storage site. Contingency plan for controlling and managing an oil spill is given in the chapter 7, Disaster Management Plan. Water will not be taken from the Creek for construction purpose. Ground water shall not be extracted for construction purpose within the CRZ limits. Five times the number of mangroves cut during the construction process shall be replanted under mangrove compensatory plantation as per the extant norms. The budget for the same shall be provided separately as per the demand received from Forest Department. Mangrove conservation program shall be carried in consultation with the Forest department in project area. Fund of Rs.2.5 lakh has been earmarked for mangrove conservation program. No construction camps shall be located in CRZ areas. Construction camps shall be located beyond 2500 m from the mangroves.

## DECISION OF SEAC

**After detailed deliberation and discussion the Authority decided to recommend the proposal from CRZ point of view to SEIAA subject to compliance of following conditions:**

1.PP should ensure that proposed activties in CRZ areas are as per provisions of CRZ Notification, 2011 (amended time to time).

2. PP to ensure that tidal flow of the coastal water bodies should not be hampered due to proposed expansion of NH 8.

3. No reclamation of coastal water bodies is allowed.

4. PP to ensure that proper disaster managment plans is in place for the proposed activities.

5. PP should restore the site after completion of the proposed activities.

6.PP should carry out compensatory mangrove replantation and submit the plan.

7. PP should obtain prior permission from Mumbai High Court for cuting of mangrove.

8. PP to implement the Environment Management Plan & recomendations of EIA during mplementation and operation phase of the project.

9. PP should obtain the permission from Forest Department, if applicable.

10. All other required permissions should be obtained before the commencement of the project.

**Specific Conditions by SEAC:**

## SEIAA DECISION

The PP states that they have applied for mangrove clearance. The SEIAA noted that the CAT has represented against this project on the grounds of mangrove destruction. The PP was advised to obtain clearance from the mangrove cell before approaching the SEIAA for EC

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Construction of New bridge across Varsova Creek along NH-8

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Rehabilitation and Expansion of NH-8 from km 496+100 to km 498+350 ?Construction of New bridge across Varsova Creek along NH-8 |
| **2.Type of institution** | Government |
| **3.Name of Project Proponent** | National Highways Authority of India |
| **4.Name of Consultant** | M/s Intercontinental Consultants and Technocrats Pvt. Ltd. |
| **5.Type of project** | Others |
| **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** | Not Applicable |
| **8.Location of the project** | Proposed Bridge will be constructed on Versova creek on Ulhas river near Ghodbunder on NH-8 in the state of Maharashtra |
| **9.Taluka** | Thane & Vasai |
| **10.Village** | Varsova village & Sasunavgarh village |
| **11.Area of the project** | in Mira Bhayandar and Vasai Virar Municipal Corporation, Maharashtra. |
| **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)** | Not applicable |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not applicable |
| **15.Total Plot Area (sq. m.)** | Not applicable |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18.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 |
| **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** | 2470200000 |

## 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)** | Approach Road 60 to 78 m; Interchange - 115 m ; Bridge - 18 m |
| **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** | No existing structures on Right of Way |
| **30.Details of the demolition with disposal (If applicable)** | No demolition involved |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Not Applicable |
| | **Size and no of RWH tank(s) and Quantity:** | Not Applicable |
| | **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 :** | Not Applicable |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Please refer Section-3.4.3 Drainage Pattern of Chapter-3 of EIA Report |
| | **Quantity of storm water:** | Not Applicable |
| | **Size of SWD:** | Not Applicable |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | Estimated Sewage generation is 3.6 KLD from the labour camp |
| | **STP technology:** | ? Sewage from labour camp shall be treated in packaged sewage treatment plant or septic tank. 3.24 KLD of treated water can be reused for flushing, washing etc. |
| | **Capacity of STP (CMD):** | Not Applicable |
| | **Location & area of the STP:** | Construction Camp |
| | **Budgetary allocation (Capital cost):** | Not Applicable |
| | **Budgetary allocation (O & M cost):** | Not Applicable |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Municipal solid waste of 20 kg/day is likely to be generated from the construction camp of 100 labours @200 grams per capita |
| | **Disposal of the construction waste debris:** | Approved dumping Area |
| **Waste generation in the operation Phase:** | **Dry waste:** | Not Applicable |
| | **Wet waste:** | Not Applicable |
| | **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:** | Not Applicable |
| | **Wet waste:** | Not Applicable |
| | **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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not Applicable |
| Capacity of the ETP: | Not Applicable |
| Amount of treated effluent recycled : | Not Applicable |
| Amount of water send to the CETP: | Not Applicable |
| Membership of CETP (if require): | Not Applicable |
| Note on ETP technology to be used | Not Applicable |
| Disposal of the ETP sludge | Not Applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| 41.Source of Fuel | | Not Applicable | | |
| 42.Mode of Transportation of fuel to site | | Not Applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 576 trees are proposed to be planted in available vacant spaces. Total green area proposed is 18839.335 sq.m out of which grass turfing is proposed on embankment slopes which is 10263.295 sq.m. The green belt area is 8576.04 sq.m, tree. Plantation plan is enclosed as Annexure 4.1. of EIA Report |
| | **No of trees to be cut :** | 5 trees located in the ROW will be felled |
| | **Number of trees to be planted :** | 576 trees are proposed to be planted |
| | **List of proposed native trees :** | Fast growing native species will be planted. Species will be finalized in consultation with the State Forest Department |
| | **Timeline for completion of plantation :** | 2 years (within the construction period) |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| **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 | Not Applicable | Not Applicable | Not Applicable |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | The power supply is proposed to be sourced from Maharashtra State Electricity Distribution Company Ltd. |
| | **During Construction Phase: (Demand Load)** | Not Applicable |
| | **DG set as Power back-up during construction phase** | yes |
| | **During Operation phase (Connected load):** | Not Applicable |
| | **During Operation phase (Demand load):** | Not Applicable |
| | **Transformer:** | Not Applicable |
| | **DG set as Power back-up during operation phase:** | Not Applicable |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | Not Applicable |

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

Not Applicable

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Not Applicable | Not Applicable |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not Applicable | Not Applicable | Not Applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Not Applicable |
| | **O & M cost:** | Not Applicable |

## 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Mitigation Cost | Environment | 1631500 |
| 2 | Monitoring Cost | Environment | 252000 |
| 3 | Training and Environmental Awareness | Environment | 200000 |

| | | | |
|---|---|---|---|
| 4 | Disaster Management Plan | Environment | 1000000 |
| 5 | Mangrove Conservation Program | Mangrove Conservation | 250000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Monitoring Cost | Environment | 1204000 | Not Applicable |

## 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 |
|---|---|---|---|---|---|---|---|
| Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Thane-Ghodbunder junction |
| **Parking details:** | **Number and area of basement:** | Not Applicable |
| | **Number and area of podia:** | Not Applicable |
| | **Total Parking area:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Number of 2-Wheelers as approved by competent authority:** | Not Applicable |
| | **Number of 4-Wheelers as approved by competent authority:** | Not Applicable |
| | **Public Transport:** | Not Applicable |
| | **Width of all Internal roads (m):** | Not Applicable |
| | **CRZ/ RRZ clearance obtain, if any:** | Application submitted for CRZ Clearance |

| | | |
|---|---|---|
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Sanjay Gandhi National Park is located within 15 kms of proposed project location boundary. The nearest distance is 65 m from Chainage 497+700 |
| | **Category as per schedule of EIA Notification sheet** | Not Applicable |
| | **Court cases pending if any** | None |
| | **Other Relevant Informations** | CRZ area : 1.8525 haCRZ IA: 0.9708 ha CRZ III: 0.1755 ha CRZ IV: 0.7062 ha |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## Brief information of the project by SEAC

National Highways Authority of India has proposed to construct new 4 lane bridge across Versova creek on river ulhas along NH-8 near Thane-Ghodbunder Road. Proposed improvement of the project alignment starts at Km 496 + 100 in surat side on NH-8 and ends at Km 498+350 in Mumbai side totaling to a length of 2.25 km. Total length includes proposed bridge of 917.87 m (approx) and both approaches of 1.33 km. National Center for Sustainable Coastal Management, Chennai has prepared CRZ map in the 1:4000 scale and report, as per which, proposed new bridge is passing through CRZ-IA, CRZ-IB, CRZ-III and CRZ-IVB. Mangroves which are CRZ-IA are present at the bank of the creek and adjacent areas.

The Authority noted that the PP has submitted the EIA report prepared by M/s. Intercontinental Consultants and Technocrats Pvt. Ltd. The brief EIA report is as follows: The CRZ area directly impacted due to the construction of piers and abutments of the proposed new bridge and construction of the interchange is 0.6038 ha. Total 0.6038 ha area will be directly impacted due to construction out of which 0.0523 ha is Mangrove area. The mangroves species present at the site are Avicennia marina, Bruguiera cylindrica and Acanthus ilicifolius. Adequate measures shall be taken to minimize impact in CRZ area. Adequate measures shall be taken to reduce turbidity of water body during construction. Implementing sediment and erosion controls during construction will minimize adverse impact of water bodies. Construction activity will be avoided near water bodies during rainy season. Proper care will be taken to avoid discharge of chemicals/oil into or near the water body or mangroves. Oil receptors shall be provided near oil filling/storage site. Contingency plan for controlling and managing an oil spill is given in the chapter 7, Disaster Management Plan. Water will not be taken from the Creek for construction purpose. Ground water shall not be extracted for construction purpose within the CRZ limits. Five times the number of mangroves cut during the construction process shall be replanted under mangrove compensatory plantation as per the extant norms. The budget for the same shall be provided separately as per the demand received from Forest Department. Mangrove conservation program shall be carried in consultation with the Forest department in project area. Fund of Rs.2.5 lakh has been earmarked for mangrove conservation program. No construction camps shall be located in CRZ areas. Construction camps shall be located beyond 2500 m from the mangroves.

## DECISION OF SEAC

**After detailed deliberation and discussion the Authority decided to recommend the proposal from CRZ point of view to SEIAA subject to compliance of following conditions:**

1.PP should ensure that proposed activties in CRZ areas are as per provisions of CRZ Notification, 2011 (amended time to time).

2. PP to ensure that tidal flow of the coastal water bodies should not be hampered due to proposed expansion of NH 8.

3. No reclamation of coastal water bodies is allowed.

4. PP to ensure that proper disaster managment plans is in place for the proposed activities.

5. PP should restore the site after completion of the proposed activities.

6.PP should carry out compensatory mangrove replantation and submit the plan.

7. PP should obtain prior permission from Mumbai High Court for cuting of mangrove.

8. PP to implement the Environment Management Plan & recomendations of EIA during mplementation and operation phase of the project.

9. PP should obtain the permission from Forest Department, if applicable.

10. All other required permissions should be obtained before the commencement of the project.

**Specific Conditions by SEAC:**

## SEIAA DECISION

The PP states that they have applied for mangrove clearance. The SEIAA noted that the CAT has represented against this project on the grounds of mangrove destruction. The PP was advised to obtain clearance from the mangrove cell before approaching the SEIAA for EC

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to defer the proposal till PP submits the additional information as per above conditions within 30 days

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Construction of New bridge across Varsova Creek along NH-8

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Rehabilitation and Expansion of NH-8 from km 496+100 to km 498+350 ?Construction of New bridge across Varsova Creek along NH-8 |
| **2.Type of institution** | Government |
| **3.Name of Project Proponent** | National Highways Authority of India |
| **4.Name of Consultant** | M/s Intercontinental Consultants and Technocrats Pvt. Ltd. |
| **5.Type of project** | Others |
| **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** | Not Applicable |
| **8.Location of the project** | Proposed Bridge will be constructed on Versova creek on Ulhas river near Ghodbunder on NH-8 in the state of Maharashtra |
| **9.Taluka** | Thane & Vasai |
| **10.Village** | Varsova village & Sasunavgarh village |
| **11.Area of the project** | in Mira Bhayandar and Vasai Virar Municipal Corporation, Maharashtra. |
| **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)** | Not applicable |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not applicable |
| **15.Total Plot Area (sq. m.)** | Not applicable |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18.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 |
| **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** | 2470200000 |

## 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)** | Approach Road 60 to 78 m; Interchange - 115 m ; Bridge - 18 m |
| **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** | No existing structures on Right of Way |
| **30.Details of the demolition with disposal (If applicable)** | No demolition involved |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Not Applicable |
| | **Size and no of RWH tank(s) and Quantity:** | Not Applicable |
| | **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 :** | Not Applicable |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | Please refer Section-3.4.3 Drainage Pattern of Chapter-3 of EIA Report |
| | **Quantity of storm water:** | Not Applicable |
| | **Size of SWD:** | Not Applicable |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | Estimated Sewage generation is 3.6 KLD from the labour camp |
| | **STP technology:** | ? Sewage from labour camp shall be treated in packaged sewage treatment plant or septic tank. 3.24 KLD of treated water can be reused for flushing, washing etc. |
| | **Capacity of STP (CMD):** | Not Applicable |
| | **Location & area of the STP:** | Construction Camp |
| | **Budgetary allocation (Capital cost):** | Not Applicable |
| | **Budgetary allocation (O & M cost):** | Not Applicable |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Municipal solid waste of 20 kg/day is likely to be generated from the construction camp of 100 labours @200 grams per capita |
| | **Disposal of the construction waste debris:** | Approved dumping Area |
| **Waste generation in the operation Phase:** | **Dry waste:** | Not Applicable |
| | **Wet waste:** | Not Applicable |
| | **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:** | Not Applicable |
| | **Wet waste:** | Not Applicable |
| | **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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not Applicable |
| Capacity of the ETP: | Not Applicable |
| Amount of treated effluent recycled : | Not Applicable |
| Amount of water send to the CETP: | Not Applicable |
| Membership of CETP (if require): | Not Applicable |
| Note on ETP technology to be used | Not Applicable |
| Disposal of the ETP sludge | Not Applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| 41.Source of Fuel | | Not Applicable | | |
| 42.Mode of Transportation of fuel to site | | Not Applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 576 trees are proposed to be planted in available vacant spaces. Total green area proposed is 18839.335 sq.m out of which grass turfing is proposed on embankment slopes which is 10263.295 sq.m. The green belt area is 8576.04 sq.m, tree. Plantation plan is enclosed as Annexure 4.1. of EIA Report |
| | **No of trees to be cut :** | 5 trees located in the ROW will be felled |
| | **Number of trees to be planted :** | 576 trees are proposed to be planted |
| | **List of proposed native trees :** | Fast growing native species will be planted. Species will be finalized in consultation with the State Forest Department |
| | **Timeline for completion of plantation :** | 2 years (within the construction period) |

## 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 | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| **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 | Not Applicable | Not Applicable | Not Applicable |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | The power supply is proposed to be sourced from Maharashtra State Electricity Distribution Company Ltd. |
| | **During Construction Phase: (Demand Load)** | Not Applicable |
| | **DG set as Power back-up during construction phase** | yes |
| | **During Operation phase (Connected load):** | Not Applicable |
| | **During Operation phase (Demand load):** | Not Applicable |
| | **Transformer:** | Not Applicable |
| | **DG set as Power back-up during operation phase:** | Not Applicable |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | Not Applicable |

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

Not Applicable

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Not Applicable | Not Applicable |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not Applicable | Not Applicable | Not Applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Not Applicable |
| | **O & M cost:** | Not Applicable |

## 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Mitigation Cost | Environment | 1631500 |
| 2 | Monitoring Cost | Environment | 252000 |
| 3 | Training and Environmental Awareness | Environment | 200000 |

| | | | |
|---|---|---|---|
| 4 | Disaster Management Plan | Environment | 1000000 |
| 5 | Mangrove Conservation Program | Mangrove Conservation | 250000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Monitoring Cost | Environment | 1204000 | Not Applicable |

## 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 |
|---|---|---|---|---|---|---|---|
| Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Thane-Ghodbunder junction |
| **Parking details:** | **Number and area of basement:** | Not Applicable |
| | **Number and area of podia:** | Not Applicable |
| | **Total Parking area:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Number of 2-Wheelers as approved by competent authority:** | Not Applicable |
| | **Number of 4-Wheelers as approved by competent authority:** | Not Applicable |
| | **Public Transport:** | Not Applicable |
| | **Width of all Internal roads (m):** | Not Applicable |
| | **CRZ/ RRZ clearance obtain, if any:** | Application submitted for CRZ Clearance |

| | | |
|---|---|---|
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Sanjay Gandhi National Park is located within 15 kms of proposed project location boundary. The nearest distance is 65 m from Chainage 497+700 |
| | **Category as per schedule of EIA Notification sheet** | Not Applicable |
| | **Court cases pending if any** | None |
| | **Other Relevant Informations** | CRZ area : 1.8525 haCRZ IA: 0.9708 ha CRZ III: 0.1755 ha CRZ IV: 0.7062 ha |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## Brief information of the project by SEAC

National Highways Authority of India has proposed to construct new 4 lane bridge across Versova creek on river ulhas along NH-8 near Thane-Ghodbunder Road. Proposed improvement of the project alignment starts at Km 496 + 100 in surat side on NH-8 and ends at Km 498+350 in Mumbai side totaling to a length of 2.25 km. Total length includes proposed bridge of 917.87 m (approx) and both approaches of 1.33 km. National Center for Sustainable Coastal Management, Chennai has prepared CRZ map in the 1:4000 scale and report, as per which, proposed new bridge is passing through CRZ-IA, CRZ-IB, CRZ-III and CRZ-IVB. Mangroves which are CRZ-IA are present at the bank of the creek and adjacent areas.

The Authority noted that the PP has submitted the EIA report prepared by M/s. Intercontinental Consultants and Technocrats Pvt. Ltd. The brief EIA report is as follows: The CRZ area directly impacted due to the construction of piers and abutments of the proposed new bridge and construction of the interchange is 0.6038 ha. Total 0.6038 ha area will be directly impacted due to construction out of which 0.0523 ha is Mangrove area. The mangroves species present at the site are Avicennia marina, Bruguiera cylindrica and Acanthus ilicifolius. Adequate measures shall be taken to minimize impact in CRZ area. Adequate measures shall be taken to reduce turbidity of water body during construction. Implementing sediment and erosion controls during construction will minimize adverse impact of water bodies. Construction activity will be avoided near water bodies during rainy season. Proper care will be taken to avoid discharge of chemicals/oil into or near the water body or mangroves. Oil receptors shall be provided near oil filling/storage site. Contingency plan for controlling and managing an oil spill is given in the chapter 7, Disaster Management Plan. Water will not be taken from the Creek for construction purpose. Ground water shall not be extracted for construction purpose within the CRZ limits. Five times the number of mangroves cut during the construction process shall be replanted under mangrove compensatory plantation as per the extant norms. The budget for the same shall be provided separately as per the demand received from Forest Department. Mangrove conservation program shall be carried in consultation with the Forest department in project area. Fund of Rs.2.5 lakh has been earmarked for mangrove conservation program. No construction camps shall be located in CRZ areas. Construction camps shall be located beyond 2500 m from the mangroves.

## DECISION OF SEAC

**After detailed deliberation and discussion the Authority decided to recommend the proposal from CRZ point of view to SEIAA subject to compliance of following conditions:**

1.PP should ensure that proposed activties in CRZ areas are as per provisions of CRZ Notification, 2011 (amended time to time).

2. PP to ensure that tidal flow of the coastal water bodies should not be hampered due to proposed expansion of NH 8.

3. No reclamation of coastal water bodies is allowed.

4. PP to ensure that proper disaster managment plans is in place for the proposed activities.

5. PP should restore the site after completion of the proposed activities.

6.PP should carry out compensatory mangrove replantation and submit the plan.

7. PP should obtain prior permission from Mumbai High Court for cuting of mangrove.

8. PP to implement the Environment Management Plan & recomendations of EIA during mplementation and operation phase of the project.

9. PP should obtain the permission from Forest Department, if applicable.

10. All other required permissions should be obtained before the commencement of the project.

**Specific Conditions by SEAC:**

## SEIAA DECISION

The PP states that they have applied for mangrove clearance. The SEIAA noted that the CAT has represented against this project on the grounds of mangrove destruction. The PP was advised to obtain clearance from the mangrove cell before approaching the SEIAA for EC

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to defer the proposal till PP submits the additional information as per above conditions within 30 days

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Building & Construction Project

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Sanghvi Golden City |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s Sanghvi Premises Pvt Ltd. |
| **4.Name of Consultant** | M/s S G M Corporate Consultant Pvt Ltd |
| **5.Type of project** | Housing Project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not applicable |
| **8.Location of the project** | Old S.NO.186/1A (New S.NO.23/1A), Old S.NO.186/1B (New S.NO. 23/1B), Old S.NO.186/2 (New S.NO.23/2), Old S.NO.186/3 (New S.NO.23/3), Old S.NO.278 (New S.NO.24), Old S. NO. 18 (New S. NO. 22 ), Old S. NO. 276 (New S. NO. 25) of Village :-Aatgaon, Tal: Shahapur, Dist: Thane. |
| **9.Taluka** | Shahapur |
| **10.Village** | Aatgaon |
| **11.Area of the project** | Town Planning |
| **12.IOD/IOA/Concession/Plan Approval Number** | Standardised Development Control And Promotion Regulations For Regional Plans In Maharashtra |
| | **IOD/IOA/Concession/Plan Approval Number:** Approval No: NAP/Layout/BP/Mouje: Atgaon/Tal: Shahapur / SS Thane/2655 Dated 22/11/2013 & revised on dated 16/09/2016 |
| | **Approved Built-up Area:** 39392.98 |
| **13.Note on the initiated work (If applicable)** | PP had stated construction activities at site .an constructed about 12,366.108 sq.m. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | NA |
| **15.Total Plot Area (sq. m.)** | 35,620.00 |
| **16.Deductions** | 2562.077 |
| **17.Net Plot area** | 28149.230 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 40,732.41 |
| | **b) Non FSI area (sq. m.):** 6179.307 |
| | **c) Total BUA area (sq. m.):** 46911.717 |
| **19.Total ground coverage (m2)** | 7850 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 23 |
| **21.Estimated cost of the project** | 585000000 |



## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | 12 | G+4 | 14.95 |
| 2 | 07 | B+ G+7 | 23.70 |
| 3 | CLUB HOUSE | G+1 | 7.5 |

| | |
|---|---|
| **23.Number of tenants and shops** | Tenements : 823 No?s; Shops: 64 No |

| | |
|---|---|
| **24.Number of expected residents / users** | 4115 Nos |
| **25.Tenant density per hectare** | 300/ha |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 12.00 |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | 7.5 |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | GRAM PANCHAYAT |
| | **Fresh water (CMD):** | 275 |
| | **Recycled water - Flushing (CMD):** | 124 |
| | **Recycled water - Gardening (CMD):** | 21 |
| | **Swimming pool make up (Cum):** | 00 |
| | **Total Water Requirement (CMD) :** | 430 |
| | **Fire fighting - Underground water tank(CMD):** | 100 |
| | **Fire fighting - Overhead water tank(CMD):** | 00 |
| | **Excess treated water** | 140 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | GRAM PANCHAYAT |
| | **Fresh water (CMD):** | 275 |
| | **Recycled water - Flushing (CMD):** | 124 |
| | **Recycled water - Gardening (CMD):** | 00 |
| | **Swimming pool make up (Cum):** | 00 |
| | **Total Water Requirement (CMD) :** | 409 |
| | **Fire fighting - Underground water tank(CMD):** | 100 |
| | **Fire fighting - Overhead water tank(CMD):** | 00 |
| | **Excess treated water** | 161 |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 15-20 M |
| | **Size and no of RWH tank(s) and Quantity:** | NA |
| | **Location of the RWH tank(s):** | NA |
| | **Quantity of recharge pits:** | 25 |
| | **Size of recharge pits :** | 2.5 x 0.5 x 1.0 |
| | **Budgetary allocation (Capital cost) :** | 15 Lac |
| | **Budgetary allocation (O & M cost) :** | 1.0 Lac |
| | **Details of UGT tanks if any :** | Domestic: 88, 83, 240, & Flsuhing : 44, 41.5, 120 |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | yes |
| | **Quantity of storm water:** | 1.04 cum/sec |
| | **Size of SWD:** | 600 x 350 mm |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | 327 |
| | **STP technology:** | Nature based technolgy |
| | **Capacity of STP (CMD):** | 1 |
| | **Location & area of the STP:** | Ground |
| | **Budgetary allocation (Capital cost):** | 45.0 Lacs |
| | **Budgetary allocation (O & M cost):** | 3.75 Lacs |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | 100-150 kg/day |
| | **Disposal of the construction waste debris:** | Low lying area of site/ and making of road |
| **Waste generation in the operation Phase:** | **Dry waste:** | 660 kg/day |
| | **Wet waste:** | 940 kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 10 |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Segregated/Sale/Collected by local authority |
| | **Wet waste:** | Composting through OWC & used at site/ Handed over to local as manure |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | USED AS MANURE |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Ground |
| | **Area for the storage of waste & other material:** | 55.12 sq.m |
| | **Area for machinery:** | 8 .0 sq.m |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 15.0 |
| | **O & M cost:** | 3.25 |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | | Not applicable | | | |

| | |
|---|---|
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |
| 42.Mode of Transportation of fuel to site | | Not applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 3455.66 sq.m |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 700 |
| | **List of proposed native trees :** | Enclosed |
| | **Timeline for completion of plantation :** | 6 months |

## 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 | 50 | Native, deciduous, medicinal value |
| 2 | Mimusops elengi | Bakul | 50 | Shady tree for roadside plantation |
| 3 | Nyctanthes arbor-tristis | Parijatak | 50 | Flowery tree, the seeds, leaves and flowers all have medicinal value |
| 4 | Lagerstroemia flos-regineae | Tamhan | 50 | Shady tree for roadside plantation |
| 5 | Murraya paniculata | Kunti | 50 | Shady tree for roadside plantation |
| 6 | Saraca asoka | Sita Ashok | 100 | Large tree,,Bird host plant |

| | | | | |
|---|---|---|---|---|
| 7 | Syzigium cumini | Jamun | 10 | Fruit bearing tree, Large tree, medicinal plant,Bird host plant. |
| 8 | Bauhinia racemosa | Apta | 50 | Large tree,,Bird host plant |
| 9 | Azadirachta indica | Neem | 75 | Shady tree for roadside plantation and has medicinal uses |
| 10 | Ficus religosa | Peeple | 10 | Large tree,,Bird host plant. |
| 11 | Tamarandus Indica | Imli | 50 | Fruit bearing tree, Large tree, medicinal plant,Bird host plant. |
| 12 | Butea monosperma | Palash | 100 | Flowering 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 :** | MSEB |
| | **During Construction Phase: (Demand Load)** | 250 KVA |
| | **DG set as Power back-up during construction phase** | 125 KVA |
| | **During Operation phase (Connected load):** | 8332 KVA |
| | **During Operation phase (Demand load):** | 5132 KVA |
| | **Transformer:** | 3 X 2500 KVA |
| | **DG set as Power back-up during operation phase:** | 630 KVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

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

? Light fixtures will be used with energy saving LED & T5 fluorescent tube with electronic chocks.
? Use of Solar energy for street lightings and solar water heater.
? Small capacity transformers having low no load and load losses.
? Selection of Energy efficient equipments (BEE STAR RATED

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | 22 % (COMMON AREAS) | 771829 KWH |

## 50.Details of pollution control Systems

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

| | | |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 35.0 LACS |
| | **O & M cost:** | 1.75 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 | pH, BOD, COD, TSS | 8.0 |
| 2 | Health checkup | NA | 1.0 |
| 3 | Safety | NA | 2.5 |
| 4 | water | AS PER is 10500 | 4.5 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | STP | Nature based technology | 45.0 | 3.75 |
| 2 | Ran Water harvesting | RWH pits | 15.0 | 1.0 |
| 3 | Environmental monitoring | Air, water, noise & soil | 00 | 1.50 |
| 4 | Solid waste Mangement | Dustbins, OWC machine | 15.00 | 3.25 |
| 5 | Energy Conservation Measures | LEDs, Solar etc | 35.00 | 1.75 |
| 6 | Green belt | Plantation, Garden | 15.00 | 2.25 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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:** | 1 |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 4765.386 sq.m |
| | **Area per car:** | 24.50 SQ.M |
| | **Area per car:** | 24.50 SQ.M |
| | **Number of 2-Wheelers as approved by competent authority:** | 984 |
| | **Number of 4-Wheelers as approved by competent authority:** | 68 |
| | **Public Transport:** | BUS & RAILWAY |
| | **Width of all Internal roads (m):** | 6.0 & 9.0 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** | 8 (a) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 31-08-2015 |

## Brief information of the project by SEAC

PP, Ramesh Sanghvi architect Mahesh Jagtap were present during the meeting. PP informed that plot area is increasing from 25,630.00 to 35,620.00 sq. m due to purchase of new plot in 2015 and PP has submitted plan to planning authority to revised building permission and applied for EC as BUA is exceeding from 20,000.00 m2. PP further informed that they have completed construction admeasuring 12,366.108 m2. Further, PP requested to reappraise the project as per circular of Environment Dept. dated 21/04/2015 issued on the basis of High Court orders. Committee observed that construction admeasuring 12,366.108 m2 prior to EC is violation of the provisions of EIA Notification. However, considering High Court orders and subsequent circular of Environment Department dated 21/04/2015, Committee appraised the matter. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. It is observed that proposal was earlier considered in 43rd SEAC II Meeting. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed. PP stated that total plot area is 35,620 m2 & total construction area of the project is 46,911.71 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1,1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit undertaking on legal paper regarding construction undertaken by them is less than 20,000 m2 & if it is false, PP is liable for further legal action as per the law. PP to submit detailed statement for the construction completed till date.

2. PP to provide tertiary treatment to achieve BOD of 5 mg/lit. PP to submit detailed report on STP technology proposed along with mass flow diagram considering dry and wet season.

3. Further, treated water should be reused / recycled in the project itself to ensure the zero discharge outside the project boundary. PP to submit details accordingly.

4. PP to submit details of the source & commitment regarding drinking water from the competent authority.

5. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for PROPOSED COMMERCIAL BUILDING OF "NAMSTE HOTEL AND RETAIL OFFICES" at Plot bearing C.S. No. 371, 1/107 &1/106 of Lower Parel Division, Situated at Senapati Bapat Marg, Ambika Silk Mills Ltd. Mumbai by M/s. Jaguar Buildcon Pvt. Ltd.

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | COMMERCIAL BUILDING OF ? NAMSTE HOTEL AND RETAIL OFFICES? |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. Sunil Garg, Jaguar Buildcon Pvt. Ltd. |
| **4.Name of Consultant** | Dr. D. A. Patil, Mahabal Enviro Engg. Pvt. Ltd. |
| **5.Type of project** | Commercial building of Hotel and Retail offices |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Not applicable |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not applicable |
| **8.Location of the project** | Plot bearing C.S. No. 371,1/107 &1/106 of Lower Parel Division, Situated at Senapati Bapat Marg, Ambika Silk Mills Ltd. Mumbai |
| **9.Taluka** | Mumbai |
| **10.Village** | Mumbai |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai (MCGM) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Approved plans: EEBP/111/GS/A dt. 30-12-2011 |
| | **IOD/IOA/Concession/Plan Approval Number:** Approved plans: EEBP/111/GS/A dt. 30-12-2011 |
| | **Approved Built-up Area:** 12550.26 |
| **13.Note on the initiated work (If applicable)** | Basement work started |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Approved plans: EEBP/111/GS/A dt. 30-12-2011 |
| **15.Total Plot Area (sq. m.)** | 11,443.03 m2 |
| **16.Deductions** | 2,202.78 m2 (amenity 572.15 m2 +1630.63 m2) |
| **17.Net Plot area** | 9240.25 m2 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 12,550.26 m2 |
| | **b) Non FSI area (sq. m.):** 20,804.78 m2 |
| | **c) Total BUA area (sq. m.):** 33,355.04 m2 |
| **19.Total ground coverage (m2)** | 3640.6 m2 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 39.4% |
| **21.Estimated cost of the project** | 2800000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Building 1 | 3B+Ground+8th Upper Floors | 36.15m |

| | |
|---|---|
| **23.Number of tenants and shops** | 57 Hotel Rooms, 3 Meeting Rooms, 13 Retails, & 1 Business Center |
| **24.Number of expected residents / users** | 2,109 Nos. |
| **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)** | 30.00 m wide Senapati Bapat Marg |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Min 9 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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MCGM |
| | **Fresh water (CMD):** | 48 |
| | **Recycled water - Flushing (CMD):** | 64 |
| | **Recycled water - Gardening (CMD):** | 9 |
| | **Swimming pool make up (Cum):** | 10 |
| | **Total Water Requirement (CMD) :** | 112 |
| | **Fire fighting - Underground water tank(CMD):** | As per CFO NOC |
| | **Fire fighting - Overhead water tank(CMD):** | As per CFO NOC |
| | **Excess treated water** | 0 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | MCGM |
| | **Fresh water (CMD):** | 48 |
| | **Recycled water - Flushing (CMD):** | 64 |
| | **Recycled water - Gardening (CMD):** | - |
| | **Swimming pool make up (Cum):** | 10 |
| | **Total Water Requirement (CMD) :** | 112 |
| | **Fire fighting - Underground water tank(CMD):** | As per CFO NOC |
| | **Fire fighting - Overhead water tank(CMD):** | As per CFO NOC |
| | **Excess treated water** | 0 |
| **Details of Swimming pool (If any)** | Swimming pool will be provided | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 3 ? 4 m |
| | **Size and no of RWH tank(s) and Quantity:** | 1 RWH tank of total 50 m3 holding capacity |
| | **Location of the RWH tank(s):** | Underground |
| | **Quantity of recharge pits:** | Not Applicable |
| | **Size of recharge pits :** | Not Applicable |
| | **Budgetary allocation (Capital cost) :** | Rs.12 Lacs |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.6 Lacs/year |
| | **Details of UGT tanks if any :** | Under -ground |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | Towards North to South East direction of plot |
| | **Quantity of storm water:** | 1264.98 m3/hr |
| | **Size of SWD:** | 450mm x 600 mm |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | 101 KLD |
| | **STP technology:** | MBR Technology |
| | **Capacity of STP (CMD):** | Total capacity 120 KLD & area provided about 100 m2 |
| | **Location & area of the STP:** | 1st Basement |
| | **Budgetary allocation (Capital cost):** | Rs. 54 Lacs |
| | **Budgetary allocation (O & M cost):** | Rs. 15 Lacs/year |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Construction debris: 833 m3 |
| | **Disposal of the construction waste debris:** | Top soil will be used for landscaping & the construction debris is utilized at site for levelling |
| **Waste generation in the operation Phase:** | **Dry waste:** | 176 kg/day |
| | **Wet waste:** | 264 kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 1.0 m3/day |
| | **Others if any:** | The E- waste shall be handed over to E-waste management vendor authorized by MPCB |
| **Mode of Disposal of waste:** | **Dry waste:** | Dry garbage will be segregated & disposed off to recyclers |
| | **Wet waste:** | Wet garbage will be composted using Mechanical Composting and used as organic manure for landscaping. |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Sludge use as manure for gardening |
| | **Others if any:** | The E- waste shall be handed over to E-waste management vendor authorized by MPCB |
| **Area requirement:** | **Location(s):** | Ground |
| | **Area for the storage of waste & other material:** | 50 m2 |
| | **Area for machinery:** | 22 m2 |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 11 Lacs |
| | **O & M cost:** | Rs. 4 Lacs/year |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |
| 42.Mode of Transportation of fuel to site | | Not applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 1802.96 m2 |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 100 |
| | **List of proposed native trees :** | 100 |
| | **Timeline for completion of plantation :** | 2 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 | Chrysalidocarpus Lutescens | Bamboo Palm | 5 | Tall evergreen tree |
| 2 | Livistonia Chinesis | Fountain palm | 5 | Tall evergreen tree |
| 3 | Roystonea Oleracea | Royal Palm | 5 | Tall evergreen tree |
| 4 | Azardiracta Indica | Neem | 10 | Large tree, good for roadside plantation |
| 5 | Bauhinia Blakeana | Orchid | 15 | Moderate sized evergreen tree |

| | | | | |
|---|---|---|---|---|
| 6 | Delonix Regia | Gulmohar | 15 | Large tree, good for roadside plantation |
| 7 | Largersroemia Speciosa | Tamhan | 15 | State flower tree of Maharashtra Medium sized tree, beautiful purple flowers |
| 8 | Saraca Ashoka | Ashoka | 15 | Shady tree with red-yellow flowers. |
| 9 | Mimusops Elengi | Bakul | 10 | Shady tree, small white fragrant flowers |
| 10 | Wodyetia bifurcata | Fox tail palm | 5 | Tall 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 | Murrayapaniculata- Kunti | - | - |
| 2 | Adhatodavasica- Adulsa | - | - |
| 3 | Nerium oleander- Kanher | - | - |
| 4 | Vitexnegundo- Nirgudi | - | - |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 250 kVA |
| | **DG set as Power back-up during construction phase** | 250 kVA |
| | **During Operation phase (Connected load):** | 3.5 MW |
| | **During Operation phase (Demand load):** | 2.2 MW |
| | **Transformer:** | - |
| | **DG set as Power back-up during operation phase:** | Total 2 x 1000 kVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

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

ENERGY CONSERVATION MEASURES
1. Efficient Envelope design with XPS Insulation for wall & roof.
2. High performance glass with lower SHGC & better U value.
3. Lower LPD reducing lighting as well as air-conditioning load.
4. Controlling of lights through Motion sensors, Day light sensors & Timers.
5. Use of high energy efficient pumps & motors for fire fighting, UG tanks and STP.
6. Solar PV & BIPV Panels of capacity 200 kWp for complete external lighting.
7. AHU?s, Cooling Towers, Secondary pum

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Total Energy saving: 25.12 % | Total Energy saving: 25.12 % |
| 2 | Energy saving through renewable energy is 16.80 % as compared to proposed case | Energy saving through renewable energy is 16.80 % as compared to proposed case |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs.10 Lacs |
| | **O & M cost:** | Rs. 1.0 Lacs/year |

## 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Water spray for dust suppression | One water Tanker to spray water | 5 |
| 2 | Site sanitation | Toilets | 3 |
| 3 | Environmental Monitoring | As per the CPCB guidelines through MoEF Approved laboratories – Ambient Air-RSPM, PM2.5, SO2, NOx, CO), Noise: Leq day time and Night Time | 3 |
| 4 | Potable Water Supply to Labour Camp | - | 6 |
| 5 | Health check-up & first aid | - | 4 |
| 6 | Safety Personal Protective Equipment | Helmets, Safety Shoes, Safety Belt, Goggles, Hand Gloves | 5 |
| 7 | Traffic Management | Sign Boards, Persons at entry exit and Parking area | 3 |
| 8 | Safety nets | - | 8 |
| 9 | Solid Waste Management & Site maintenance activity | - | 6 |
| 10 | Safety - Training to Workers (Twice in Year), Safety Officer | - | 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 | STP | with Tertiary | 54 | 15 |
| 2 | Solar System | - | 10 | 1.0 |
| 3 | Rain Water Harvesting | - | 12 | 0.6 |

| | | | | |
|---|---|---|---|---|
| 4 | Solid waste Composting plant | - | 11 | 4 |
| 5 | Landscape development | - | 18 | 3 |
| 6 | Environmental Monitoring | As per CPCB Standards | - | 4.0 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | The project is accessible by 30.48 m wide Senapati Bapat Road from Eastside |
| **Parking details:** | **Number and area of basement:** | 3 Basement |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 13563.68 m2 |
| | **Area per car:** | 65 m2 |
| | **Area per car:** | 65 m2 |
| | **Number of 2-Wheelers as approved by competent authority:** | 250 |
| | **Number of 4-Wheelers as approved by competent authority:** | 161 |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | 6 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** | 8(a) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 23-05-2016 |

## Brief information of the project by SEAC

Representative of PP, Sunil Garg & Architect Saurav Chatterjee were present during the meeting along with environmental consultant M/s Mahabal. PP informed that the proposed project is commercial project for hotel. PP informed that they have initiated construction admeasuring 11,000 m2. Further, PP requested to reappraise the project as per circular of Environment Dept. dated 21/04/2015 issued on the basis of High Court orders. Committee observed that construction admeasuring 11,000 m2 prior to EC is violation of the provisions of EIA Notification. However, considering High Court orders and subsequent circular of Environment Department dated 21/04/2015, Committee appraised the matter. PP presented proposal for entire project potential to consider environmental aspects in totality. However, project is limited to FSI 1.33 for which approval has been given by the local planning authority and Committee appraised the same. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 11,443.03 m2 & total construction area of the project is 33,355.04 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit undertaking on legal paper regarding construction undertaken is by them is less than 20,000 m2 & if it is false, PP is liable for further legal action as per the law. PP to submit detailed statement for the construction completed till date.

2. It is informed that treated sewage water will be 100% recycled. PP to submit details indicating the same.

3. PP to ensure that BOD of treated water should be less than 5 mg/lit. PP to present appropriate technology to achieve the same.

4. PP to submit revised project specific Disaster Management Plan.

5. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

The PP has located the STP in the basement. The SEIAA is of the opinion that the STP needs to be moved to the ground level. PP to submit modified proposal with drawing showing 6 meter margin from the plot boundary. OS and non paved RG area to be on ground.

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to defer the proposal till PP submits the additional information as per above conditions within 30 days

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for "SRA project" at Dharavi, Mumbai

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | ?SRA project? at Dharavi, Mumbai |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s. Reliable Construction |
| **4.Name of Consultant** | M/s. Ultra-Tech |
| **5.Type of project** | Slum Rehabilitation Scheme (Expansion & Amendment in EC) |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Expansion & Amendment in EC |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Received Environmental Clearance dated 26th December 2014 |
| **8.Location of the project** | C.S. Nos. 25(pt), 55(pt), 62(pt), & 68(pt) to 72(pt) of Dharavi, Division at Matunga Labour Camp, Dharavi, G/North ward, Mumbai |
| **9.Taluka** | Mumbai |
| **10.Village** | Dharavi |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai (M.C.G.M.) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Received IOA & CC for Composite Building dt. 29.06.2007 and for Sale Building received IOA dt. 20.06.2013 and CC dt. 21.04.2015 |
| | **IOD/IOA/Concession/Plan Approval Number:** Composite Building IOA no. SRA/ENG/1742/GN/ML/AP and Sale Building IOA no. SRA/ENG/2121/GN/ML/AP |
| | **Approved Built-up Area:** 30113.54 |
| **13.Note on the initiated work (If applicable)** | Total constructed work (FSI+ Non FSI): 16,835.92 Sq.mt. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Received 1st LOI dated 10th January 2005 and last amended on 20th January 2015 from SRA |
| **15.Total Plot Area (sq. m.)** | 5693.04 Sq.mt. |
| **16.Deductions** | 485.77 Sq.mt. |
| **17.Net Plot area** | 5207.27 Sq.mt. |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 29698.18 Sq.mt. (Including Fungible area) |
| | **b) Non FSI area (sq. m.):** 16470.64 Sq.mt. |
| | **c) Total BUA area (sq. m.):** 46168.82 Sq.mt. |
| **19.Total ground coverage (m2)** | 2144.17 Sq.mt. |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 41% |
| **21.Estimated cost of the project** | 1499700000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Rehabilitation + Reservation - One composite building with 4 wings | Wing A : Municipal Housing : Ground + 7 Upper Floors Wing B to D: Rehabilitation : Ground + 17 Upper Floors | 53.20 mt. (up to terrace level) |
| 2 | Sale - One building with four wings | Wing A, B, C & D: Ground + 23 Upper Floors | 69.90 mt. (up to terrace level) |

| | |
|---|---|
| **23.Number of tenants and shops** | Rehabilitation + Reservation<br>MH Housing: Flats: 24 Nos.<br>Rehabilitation Flats: 361 Nos.<br>Sale Flats: 26 Nos.<br>Rehab Shops: 39 Nos.<br>Sale Shops: 1 No.<br>PAP Flats: 64 Nos.<br>PAP Shops: 5 Nos.<br>Balwadi: 5 Nos.<br>Welfare Centers: 5 Nos.<br>Society Offices: 5 Nos.<br><br>Sale<br>Flats: 360 Nos.<br>Society office: 1 No.<br>Fitness Centre: 1 No. |
| **24.Number of expected residents / users** | Rehabilitation + Reservation: 2610 Nos. Sale: 1805 Nos. |
| **25.Tenant density per hectare** | Rehabilitation + Reservation : 1000/hector, Sale: 692/hector |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 13.40 m wide D.P. Road |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | 7.5 mt. |
| **29.Existing structure (s) if any** | Partly construction completed as per earlier EC |
| **30.Details of the demolition with disposal (If applicable)** | The debris generated from demolition of existing structures shall be partly reused on site and partly disposed off to authorized landfill sites with permission from M.C.G.M. |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| Dry season: | **Source of water** | MCGM |
| | **Fresh water (CMD):** | 380 |
| | **Recycled water - Flushing (CMD):** | 193 |
| | **Recycled water - Gardening (CMD):** | 3 |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 576 |
| | **Fire fighting - Underground water tank(CMD):** | 400 |
| | **Fire fighting - Overhead water tank(CMD):** | 60 |
| | **Excess treated water** | 251 |
| Wet season: | **Source of water** | MCGM/RWH |
| | **Fresh water (CMD):** | 380 |
| | **Recycled water - Flushing (CMD):** | 193 |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 573 |
| | **Fire fighting - Underground water tank(CMD):** | 400 |
| | **Fire fighting - Overhead water tank(CMD):** | 60 |
| | **Excess treated water** | 254 |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 2.5 mt. below ground level |
| | **Size and no of RWH tank(s) and Quantity:** | Rehabilitation + Reservation: One RWH tank of capacity 100 KL, Sale: One RWH tank of capacity 70 KL. |
| | **Location of the RWH tank(s):** | Underground |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | Rs. 23.00 Lacs |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.96 Lacs/annum |
| | **Details of UGT tanks if any :** | Location(s) of the UGT tank(s): Underground |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | The storm water collected through the storm water drains of adequate capacity will be discharged in to the municipal SWD |
| | **Quantity of storm water:** | 0.12 m3/sec |
| | **Size of SWD:** | 300 mm wide X 250 mm deep with slope 1:250 |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | Rehabilitation + Reservation: 286, Sale: 211 |
| | **STP technology:** | Moving Bed Bio Reactor (MBBR) |
| | **Capacity of STP (CMD):** | Rehabilitation + Reservation: 1 STP of 300 KL capacity and Sale: 1 STP of 250 KL capacity |
| | **Location & area of the STP:** | Underground |
| | **Budgetary allocation (Capital cost):** | Rs. 118.65 Lacs |
| | **Budgetary allocation (O & M cost):** | Rs. 27.46 Lacs/annum |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Debris generated shall be partly reused on site and partly disposed to the authorized sites with permission from M.C.G.M. |
| | **Disposal of the construction waste debris:** | The construction waste shall be partly reused on site and shall be partly disposed to authorized site through authorized contractors with permission from M.C.G.M. |
| **Waste generation in the operation Phase:** | **Dry waste:** | 579 Kg/day |
| | **Wet waste:** | 1324 Kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 75 Kg/day |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Non recyclable: To M.C.G.M. Recyclable: To recyclers |
| | **Wet waste:** | Organic Waste Converters (OWC) |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | As manure |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Ground |
| | **Area for the storage of waste & other material:** | 71 |
| | **Area for machinery:** | 24 |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 18.00 Lacs |
| | **O & M cost:** | Rs. 5.69 Lacs/annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| 41.Source of Fuel | Not applicable |
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 417.14 Sq. mt. |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 74 nos. |
| | **List of proposed native trees :** | Given in list of proposed plantation on ground |
| | **Timeline for completion of plantation :** | Before occupation |

## 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 | 20 | Large tree, fast-growing evergreen tree, drought resistance, Medicinal properties, good for roadside plantation |
| 2 | Cassia fistula | Bahava | 18 | Medium sized deciduous tree.Beautiful yellow flowers, it is relatively drought tolerant and slightly salt tolerant. It has medicinal properties, Butterfly host plant. |
| 3 | Mimusops elengi | Bakul | 19 | Shady medium-sized evergreen tree, small white fragrant flowers, Its timber is valuable, the fruit is edible, and it is used in traditional medicine. |
| 4 | Peltophorum pterocarpum | Copper pod | 17 | It is planted as ornamental plant. The wood can also be used for fuel. The bark produces yellow-brown dye. The bark (sold as Kayu Timor in Java) from which extracts are taken are believed to be effective in curing dysentery (used internally) and relieving ulcers, muscular pain and sprains. The extracts can also be used as an eye lotion, gargle and even tooth powder. |
| **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 :** | Brihanmumbai Electricity Supply and Transport (BEST) |
| | **During Construction Phase: (Demand Load)** | 100 KW |
| | **DG set as Power back-up during construction phase** | As per requirement |
| | **During Operation phase (Connected load):** | 7979 KW |
| | **During Operation phase (Demand load):** | 3314 KW |
| | **Transformer:** | --- |
| | **DG set as Power back-up during operation phase:** | Composite Building - 1 DG set of 400 kVA capacity , Sale Building - 1 DG set of 400 kVA capacity |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | NA |

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

? Provision of solar lighting system for street, landscape, lift lobby and staircase lighting
? Provision of solar water heating system
? Use of LED lights in residential area
? Use of CFL/LED/T5 lamps for common area lighting
? Use of Electronic Ballast for common area lighting
? Use of VFD lights for lift lobby & pumps

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | • Provision of solar lighting system for street, landscape, lift lobby and staircase lighting • Provision of solar water heating system • Use of LED lights in residential area • Use of CFL/LED/T5 lamps for common area lighting • Use of Electronic Ballast for common area lighting • Use of VFD lights for lift lobby & pumps | Rehabilitation building : 23% Sale building : 20% |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 52.20 Lacs |
| | **O & M cost:** | Rs. 1.16 Lacs/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 | Air Environment | Dust Suppression | 3.60 |

| | | | |
|---|---|---|---|
| 2 | Air Environment | Air & Noise monitoring - Sensors for Air and Noise quality monitoring | 10.00 |
| 3 | Air Environment | Air & Noise monitoring - By outside MOEF Approved Laboratory | 0.66 |
| 4 | Water Environment | Drinking water analysis | 0.54 |
| 5 | Land Environment | Site Sanitation | 5.00 |
| 6 | Health & Hygiene | Disinfection at site-Pest Control | 2.40 |
| 7 | Health & Hygiene | Health Check Up of workers | 9.00 |
| 8 | Cost towards Disaster management | --- | 39.54 |

## 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 & Biological Environment | Cost for Gardening | 2.29 | 1.20 |
| 2 | Air Environment & Biological Environment | Cost for Ambient air & Noise Monitoring | No set up cost is involved | 0.22 |
| 3 | Air Environment & Biological Environment | DG Stack Exhaust Monitoring | No set up cost is involved | 0.10 |
| 4 | Water Environment - Waste water treatment | Cost for sewage treatment plant | 100.65 | 26.46 |
| 5 | Water Environment - Waste water treatment | Cost for Waste water Monitoring - On site sensors | 18.00 | 1.00 |
| 6 | Water Environment - Waste water treatment | Cost for Waste water Monitoring - By outside MOEF Approved Laboratory | No set up cost is involved | 0.054 |
| 7 | Water Environment - Water Conservation (Rain Water Harvesting System) | Cost for RWH tanks | 17.00 | 0.85 |
| 8 | Water Environment - Water Conservation (Rain Water Harvesting System) | Cost for treatment unit for rain water tanks | 6.00 | 0.02 |
| 9 | Water Environment - Water Conservation (Rain Water Harvesting System) | Rain Water Quality Monitoring | No set up cost is involved | 0.09 |
| 10 | Land Environment (Solid Waste Management) | Cost for Treatment of biodegradable garbage in OWC | 18.00 | 5.62 |

| | | | | |
|---|---|---|---|---|
| 11 | Land Environment (Solid Waste Management) | Cost for monitoring of OWC manure | No set up cost is involved | 0.08 |
| 12 | Energy Conservation | Solar system for water heating | 52.20 | 1.16 |
| 13 | Cost towards Disaster management | --- | 271.05 | 16.69 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Five entry and Five exits. |
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 1653.73 Sq.mt. |
| | **Area per car:** | As per NBC |
| | **Area per car:** | As per NBC |
| | **Number of 2-Wheelers as approved by competent authority:** | Required - Nil, Provided - 13 nos. |
| | **Number of 4-Wheelers as approved by competent authority:** | Required - 57 nos. , Provided - 57 nos. |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | Minimum 6.00 mt. |
| | **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** | Category 8(a) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 19-05-2016 |

## Brief information of the project by SEAC

The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed. PP stated that total plot area is 5693.04 m2 & total construction area of the project is 46,168.82 m2. Total number of four wheeler parking is 57 & two wheeler 13 on the parking area of 1654 m2. RG provided on ground is 417.14 m2. Sewage generation is 497 KLD. 2 STPs are provided of capacity 300 KLD & 250 KLD. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the recordRepresentative of PP, Sadanand Shetty & Taranath Shetty was present during the meeting along with environmental consultant M/s Ultratech. PP informed that they have received earlier EC vide letter dated 26/12/2014 for total construction area of 35,054.62 m2. PP informed that they have completed construction admeasuring 16,835.2 m2 as per EC. Expansion is due to increase in FSI from 3 to 4. PP submitted LOI dated 20/01/2015. PP also stated that there is change in planning of sale building. Height of the building is 69.9 m. Committee noted comparative changes due to proposed expansion/amendment:

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit compliance report with comparative statements of conditions stipulated in earlier EC.

2. PP shall operate and maintain Environmental Management Facilities (EMF) & fire-fighting system for 10 years after giving possession and shall also generate corpus fund for next 5 years.

3. PP to submit revised project specific Disaster Management Plan especially considering occurrence of flood in Dharavi area.

4. It is observed that there is no access of fire tender movement to the flats of rehab building. PP to provide paved area around the RG in the rehab component to enable fire tender movement to tackle fire in the rehab component & submit fire tender movement plan accordingly. 5. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Amendment in Environmental Clearance for "AMRUT MANTHAN + SHREE MAHALAXMI & PRIMUS RESIDENCES" at Santacruz, Mumbai.

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | ?AMRUT MANTHAN + SHREE MAHALAXMI & PRIMUS RESIDENCES? at Santacruz, Mumbai. |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s. GURUKRUPA DEVELOPERS |
| **4.Name of Consultant** | M/s. Enviro Analysts & Engineers Pvt. Ltd. |
| **5.Type of project** | Slum Rehabilitation Scheme + Residential Sale Bldg. |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Not applicable |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not applicable |
| **8.Location of the project** | Plot bearing C.T.S. No. 4091, 4091/1 to 37, 4097, 4097/1 to 5, 4090B & 4090A/2 to 19 of Village Kolekalyan, Santacruz (E), Mumbai, Maharashtra |
| **9.Taluka** | Andheri |
| **10.Village** | Kolekalyan |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai |
| **12.IOD/IOA/Concession/Plan Approval Number** | IOD (MCGM) |
| | **IOD/IOA/Concession/Plan Approval Number:** For Sale ? SRA/ ENG/ 2721/ HE/ PL/ AP & For Rehab ? SRA/ ENG/ 2217/ HE/ AP |
| | **Approved Built-up Area:** 11606 |
| **13.Note on the initiated work (If applicable)** | Total Construction work :- 9710.64 |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | For Sale ? SRA/ ENG/ 2721/ HE/ PL/ AP & For Rehab ? SRA/ ENG/ 2217/ HE/ AP |
| **15.Total Plot Area (sq. m.)** | 5,460.20 |
| **16.Deductions** | 84.54 |
| **17.Net Plot area** | 5,375.66 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 17,577.47 |
| | **b) Non FSI area (sq. m.):** 14,932.522 |
| | **c) Total BUA area (sq. m.):** 32,509.992 |
| **19.Total ground coverage (m2)** | 1,734.00 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 32.26 % |
| **21.Estimated cost of the project** | 106290000.00 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Rehab : Wing A & C | Ground/ Stilt + 12 Upper Floors | 42.20 |
| 2 | Rehab: Wing B | Ground/ Stilt + 13 Upper Floors | 42.20 |
| 3 | Sale : Wing A,B,C | 3 Basement + Ground/Stilt + 15 Upper Floors | 47.30 |

| | |
|---|---|
| **23.Number of tenants and shops** | Rehab:<br>Flats: 133 Nos.<br>PAP: 53 Nos.<br>Shops: 4 Nos. (Rehab)<br>1 No. (Sale)<br>Balwadi: 2 Nos.<br>Welfare Centre: 2 Nos.<br>Society Offices: 2 Nos.<br><br>Sale:<br>Residential: 162 Nos. |
| **24.Number of expected residents / users** | Rehab: 985 persons Sale: 810 persons |
| **25.Tenant density per hectare** | 668 |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 13.40 |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | 6.00 |
| **29.Existing structure (s) if any** | Partly completed new construction of Rehab Bldg. |
| **30.Details of the demolition with disposal (If applicable)** | The debris and part of excavated material has been disposed to authorized site through authorized contractors with permission from M.C.G.M. & part of excavated material shall be disposed of to authorized landfill sites. |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MCGM |
| | **Fresh water (CMD):** | Rehab : 85 ; Sale : 73 |
| | **Recycled water - Flushing (CMD):** | Rehab : 43 ; Sale : 38 |
| | **Recycled water - Gardening (CMD):** | Rehab : 2.26 ; Sale : 2.75 |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | Rehab : 130.26; Sale : 113.75 |
| | **Fire fighting - Underground water tank(CMD):** | Rehab : 150 ; Sale : 150 |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | 101.19 |
| **Wet season:** | **Source of water** | MCGM |
| | **Fresh water (CMD):** | Rehab : 85 ; Sale : 73 |
| | **Recycled water - Flushing (CMD):** | Rehab : 43 ; Sale : 38 |
| | **Recycled water - Gardening (CMD):** | Rehab : NIL ; Sale : NIL |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | Rehab : 128; Sale : 111 |
| | **Fire fighting - Underground water tank(CMD):** | Rehab : 150 ; Sale : 150 |
| | **Fire fighting - Overhead water tank(CMD):** | NA |
| | **Excess treated water** | 106 |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 5.00 mt |
| | **Size and no of RWH tank(s) and Quantity:** | NA |
| | **Location of the RWH tank(s):** | NA |
| | **Quantity of recharge pits:** | Rehabilitation: 2 nos. of recharge pits. Sale: 4 nos. of recharge pits. |
| | **Size of recharge pits :** | Rehabilitation: 2 nos. of recharge pits. Sale: 4 nos. of recharge pits. |
| | **Budgetary allocation (Capital cost) :** | Rs. 21 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.36 Lakhs/annum |
| | **Details of UGT tanks if any :** | Location(s) of the UGT tank(s):<br>Rehabilitation: Underground<br>Sale: Basement 1 & 2 |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | The storm water collected through the storm water drains of adequate capacity will be discharged in to the municipal SWD. |
| | **Quantity of storm water:** | 0.26 m3/sec |
| | **Size of SWD:** | 600 mm Wide x 500 mm Depth |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | Rehab :- 111 KLD ; Sale: -97 KLD |
| | **STP technology:** | Attached Growth |
| | **Capacity of STP (CMD):** | Rehab : 120 KLD ; Sale : 110 KLD |
| | **Location & area of the STP:** | Rehab : Underground ; Sale : 1st Level Basement |
| | **Budgetary allocation (Capital cost):** | Rehab : Rs.28.40 Lakhs ; Sale : Rs.27.70 Lakhs |
| | **Budgetary allocation (O & M cost):** | Rehab : 9.60 Lakhs/annum ; Sale : 9.36 Lakhs/annum |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | The debris and part of excavated material has been disposed to authorized site through authorized contractors with permission from M.C.G.M. & part of excavated material shall be disposed of to authorized landfill sites. |
| | **Disposal of the construction waste debris:** | Construction waste shall be disposed of by covered trucks to the authorized sites. |
| **Waste generation in the operation Phase:** | **Dry waste:** | Rehab : 130 kg/day ; Sale : 109 kg/day |
| | **Wet waste:** | Rehab : 300 kg/day ; Sale : 255 kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 11 kg/day |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Non-recyclable: To M.C.G.M. ; Recyclable: To recyclers |
| | **Wet waste:** | Organic Waste Converter |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Used as manure within the premises for plants. |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Rehab : Stilt ; Sale : Stilt |
| | **Area for the storage of waste & other material:** | Rehab : 22 sq.mt ; Sale : 30 sq.mt |
| | **Area for machinery:** | Rehab : 22 sq.mt ; Sale : 30 sq.mt |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rehab : Rs 6 Lakhs ; Sale : Rs 6 Lakhs |
| | **O & M cost:** | Rehab : Rs 1.8 Lakhs/annum ; Sale : Rs 1.8 Lakhs/annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| 41.Source of Fuel | Not applicable |
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 666.12 sq.mt |
| | **No of trees to be cut :** | 12 |
| | **Number of trees to be planted :** | 50 |
| | **List of proposed native trees :** | listed as below |
| | **Timeline for completion of plantation :** | At the end of 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 | Michelia Champaca | Champaka | 5 | Flowering |
| 2 | Polyalthia longifera | Ashoka | 10 | Flowering |
| 3 | Azadirachta Indica | Neem | 3 | Medicinal |
| 4 | Anthocephalus Cadamba | Kadam | 4 | Shady |
| 5 | Plumeria Alba | Chafa | 2 | Flowering |
| **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 :** | Reliance Energy |
| | **During Construction Phase: (Demand Load)** | 100 KW |
| | **DG set as Power back-up during construction phase** | 100 KW |
| | **During Operation phase (Connected load):** | Rehab : 1,148 KW ; Sale : 2,821 KW |
| | **During Operation phase (Demand load):** | Rehab : 479 KW ; Sale : 1,116 KW |
| | **Transformer:** | NA |
| | **DG set as Power back-up during operation phase:** | Rehabilitation: 1 D.G. Set of capacity 320 kVA Sale: 1 D.G. Set of capacity 630 kVA |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | NA |

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

Energy saving measures:
o Solar system shall be provided
o Common area lighting with CFL/T5 Lamps
o Energy efficient fluorescent lamps & CFL lamps with high frequency ballast which give more light output for the same watts consumed and therefore require less nos. of fixtures
o Equipment efficiency standards
o Power factor be maintained between 0.95 and unity for major equipment like Lift, STP etc. This will reduce electrical power distribution losses in the installation.
o Timer & motion sensor

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Energy savings | Rehabilitation: 20 % Sale: 22 % |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 8500000 |
| | **O & M cost:** | 500000 |

## 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 | Water for Dust Suppression | 1296000 |
| 2 | EHS | Site Sanitation | 500000 |
| 3 | Environmental Monitoring | Environmental Monitoring | 2160000 |
| 4 | EHS | Disinfection at site | 360000 |
| 5 | EHS | Health check-up for workers | 540000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Water Environment | STP | 2840000 | 960000 |
| 2 | Water Environment | Rain water harvesting (2 Nos. of recharge pits) Rain water harvesting (2 Nos. of recharge pits) 7.00 0.12 | 700000 | 12000 |
| 3 | Environmental Monitoring | Environmental Monitoring | MOEF approved agency for monitoring | 1107000 |
| 4 | Land Environment | Gardening | 400000 | 71000 |
| 5 | Solid waste | Cost for Treatment of biodegradable garbage in OWC | 600000 | 1800000 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | One entry & one exit to main road |
| **Parking details:** | **Number and area of basement:** | Sale : 3 No. Basement with Area : 6,532.527 Sq. mt. |
| | **Number and area of podia:** | NIL |
| | **Total Parking area:** | 3,806.11 Sq.mt |
| | **Area per car:** | 23.64 Sq.mt |
| | **Area per car:** | 23.64 Sq.mt |
| | **Number of 2-Wheelers as approved by competent authority:** | NIL |
| | **Number of 4-Wheelers as approved by competent authority:** | 161 |
| | **Public Transport:** | NIL |
| | **Width of all Internal roads (m):** | 6.00 mt |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Sanjay Gandhi National park: Approx. 11.05 Km |
| | **Category as per schedule of EIA Notification sheet** | 8 (b) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |

| | | |
|---|---|---|
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 25-11-2015 |

## Brief information of the project by SEAC

Representative of PP, Shyam Agrawal & Architect Mr.Talreja were present during the meeting. PP stated that they have received earlier EC vide letter SEAC-2013/CR-490/TC-1 dated 29/04/2014 for total construction area of 31,098.65 m2. PP also stated that they have completed construction admeasuring 9,710.64 m2 as per EC. PP informed that proposal is for amendment for change in use of sale building from office building to residential building. Fungible FSI is proposed to be utilized in the proposed residential sale building. There is no change in building profile and configuration of rehab component. Ground coverage is reduced to 32.26% from 35.57%. Height of the proposed sale building is 47.65 m against the 46.15 m as proposed earlier. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. It is observed that proposal was earlier considered in 43rd SEAC II Meeting. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed. PP stated that total plot area is 5460.20 m2 m2 & total construction area of the project is increased from 31,098.65 m2 to 32,509.992 m2. It is observed that RG is reduced from 666.12 m2 to 563.66 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1,1A, presentation & plans submitted are taken on the record.

## DECISION OF SEAC

**During discussion following points emerged:** 1. PP submitted compliance report with comparative statements of conditions stipulated in earlier EC.

2. PP to obtain fresh NOC for water supply and sewer line connection from local body.

3. It is observed that now area of 666.12 m2 for RG is maintained and RG for sale is at one place which is 364.63 m2. PP to ensure the implementation of same.

4. It is observed that compliance of point no 3 is not fully complied. PP to submit revised DMP along with item wise cost.

5. PP to ensure that renewable energy share is 10% of the total demand. Further, PP to revise the connection load as project profile changed from commercial to residential and submit details.

6. PP to ensure that vegetative noise barriers are developed in and around as ambient noise level as on today is above the permissible level. 7. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Slum Rehabilitation Scheme at Malad (W), Mumbai

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Slum Rehabilitation Scheme at Malad (W), Mumbai |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s. Crescent Amity Realtors Pvt. Ltd. |
| **4.Name of Consultant** | M/s. Ultra-Tech |
| **5.Type of project** | SRA Scheme |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Expansion and Amendment in Environment Clearance (EC) |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Received Environmental Clearance dt. 11.12.2014 |
| **8.Location of the project** | CTS No. 213A(PT), 213B, 214, 214/1 to 31, 215(PT) of Village - Valnai, Taluka - Borivali, Mumbai |
| **9.Taluka** | Borivali |
| **10.Village** | Valnai |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai (M.C.G.M.) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Received Intimation Of Approval (IOA) & Commencement Certificate (CC) from SRA |
| | **IOD/IOA/Concession/Plan Approval Number:** Sale Amended plan no. SRA/DDTP/652/PN/PL/AP dt. 16.4.2016 and Rehab Amended plan No. SRA/DDTP/683/PN/PL/AP dt. 16.4.2016 |
| | **Approved Built-up Area:** 23087.97 |
| **13.Note on the initiated work (If applicable)** | Total constructed work (FSI+ Non FSI): 6,724.34 Sq. mt. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Received revised Letter of Intent (LOI) dt.13.04.2016 from SRA |
| **15.Total Plot Area (sq. m.)** | 5,432.16 Sq.mt. |
| **16.Deductions** | 2,259.42 Sq.mt. |
| **17.Net Plot area** | 3,172.74 Sq.mt. |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 21,270.59 Sq.mt. (Including Fungible Area) |
| | **b) Non FSI area (sq. m.):** 11,869.77 Sq.mt. |
| | **c) Total BUA area (sq. m.):** 33,140.36 Sq.mt. |
| **19.Total ground coverage (m2)** | 1,227.65 Sq.mt. |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 39% |
| **21.Estimated cost of the project** | 726200000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Rehabilitation (Building No. 2) | Basement + Ground + 20 Upper Floors + 21st (pt) Floor | 64.17 mt. |
| 2 | Sale (Building No. 1) | Ground/Stilt + 6 Mechanical Parking Floors + E-Deck level + 1st to 14th Residential Floor + Fire Check Floor + 15th to 32ndUpper Floors and 33rd (pt) Floor | 140.50 mt. |

| | |
|---|---|
| **23.Number of tenants and shops** | Rehabilitation:<br>Residential Units: 152 Nos.<br>Public Transit Camp (PTC): 49 Nos.<br>Shops: 11 Nos.<br>Balwadi and Welfare Centre: 2 Nos. each<br>Society office: 1No.<br>Retail Market: 1 No.<br>Sale Clinic: 2 Nos.<br>Sale Shop: 1 No.<br>Sale Flats: 3 Nos.<br><br>Sale:<br>Flats: 128Nos.<br>Society office: 1 No. |
| **24.Number of expected residents / users** | 1743 Nos. |
| **25.Tenant density per hectare** | 1081/hector |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 18.30 mt. wide DP road |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Minimum 6.00 mt. |
| **29.Existing structure (s) if any** | Part completed construction of Rehabilitation and Sale Building as per earlier EC. |
| **30.Details of the demolition with disposal (If applicable)** | Demolition debris generated from the remaining structures shall be disposed to authorized landfill site as per NOC from M.C.G.M. |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| Dry season: | **Source of water** | MCGM |
| | **Fresh water (CMD):** | 152 |
| | **Recycled water - Flushing (CMD):** | 79 |
| | **Recycled water - Gardening (CMD):** | 3 |
| | **Swimming pool make up (Cum):** | 1 |
| | **Total Water Requirement (CMD) :** | 235 |
| | **Fire fighting - Underground water tank(CMD):** | 400 |
| | **Fire fighting - Overhead water tank(CMD):** | 30 |
| | **Excess treated water** | 98 |
| Wet season: | **Source of water** | MCGM/RWH |
| | **Fresh water (CMD):** | 152 |
| | **Recycled water - Flushing (CMD):** | 79 |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | 1 |
| | **Total Water Requirement (CMD) :** | 232 |
| | **Fire fighting - Underground water tank(CMD):** | 400 |
| | **Fire fighting - Overhead water tank(CMD):** | 30 |
| | **Excess treated water** | 101 |
| **Details of Swimming pool (If any)** | Swimming Pool volume - 31.48 m3 | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 6 ? 7 mt. below ground level |
| | **Size and no of RWH tank(s) and Quantity:** | For Rehabilitation Building - 1 RWH Tank of 32 KL and For Sale Building - 1 RWH Tank of 26 KL |
| | **Location of the RWH tank(s):** | Underground |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | Rs.12.20 Lacs |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.42 Lacs/annum |
| | **Details of UGT tanks if any :** | Location(s) of the UGT tank(s): Underground & Basement |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | The storm water collected through the storm water drains of adequate capacity will be discharged in to the municipal SWD |
| | **Quantity of storm water:** | 0.11 m3/sec |
| | **Size of SWD:** | 600mm x 450mm deep with the slope of 1: 300 |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | Rehabilitation: 126 KLD and Sale: 75 KLD |
| | **STP technology:** | MBBR (Moving Bed Bio Reactor) |
| | **Capacity of STP (CMD):** | Rehabilitation: 1 STP of capacity 130 KL and Sale: 1 STP of capacity 100 KL |
| | **Location & area of the STP:** | Underground |
| | **Budgetary allocation (Capital cost):** | Rs. 82.75 Lacs |
| | **Budgetary allocation (O & M cost):** | Rs. 21.11Lacs/annum |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Excavation material already disposed to authorized landfill site as per permission from M.C.G.M. |
| | **Disposal of the construction waste debris:** | Construction waste shall be partly reused on the site and partly will be disposed to the authorized landfill site |
| **Waste generation in the operation Phase:** | **Dry waste:** | 231 Kg/day |
| | **Wet waste:** | 525 Kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | 20 Kg/month |
| | **STP Sludge (Dry sludge):** | 30 Kg/day |
| | **Others if any:** | NA |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Non-recyclable: To M.C.G.M. Recyclable: To recyclers |
| | **Wet waste:** | Composting in organic waste convertor |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | Bio-medical waste will be handled and disposed as per Bio-medical Waste Management Rules, 2016 |
| | **STP Sludge (Dry sludge):** | As manure |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Ground |
| | **Area for the storage of waste & other material:** | 40 |
| | **Area for machinery:** | 24 |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs.18.00 Lacs |
| | **O & M cost:** | Rs. 3.53 Lacs/annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| 41.Source of Fuel | Not applicable |
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 358.56 Sq.mt. |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 50 Nos. |
| | **List of proposed native trees :** | Given in list of proposed plantation on ground |
| | **Timeline for completion of plantation :** | Before occupation |

## 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 | Mimusops elengi | Bakul | 7 | Shady medium-sized evergreen tree, small white fragrant flowers, Its timber is valuable, the fruit is edible, and it is used in traditional medicine. |
| 2 | Azadirachta indica | Neem | 8 | Large tree, fast-growing evergreen tree, drought resistance, Medicinal properties, good for roadside plantation |
| 3 | Neolamarckia cadamba | Kadamb | 8 | It is a quick growing , large traffic like spreading branches, its fragment orange flowers attracts pollinators, it helps in improving physical and chemical properties of soil, Shady, large tree, ball shaped flowers. It acquires profitable medicinal and commercial properties. |
| 4 | Nyctanthe sarbortristis | Parijatak | 8 | Small deciduous fast growing tree or shrub, beautiful fragrant flowers, Its leaves and bark has medicinal properties. |
| 5 | Annona reticulata | Ramphal | 11 | Erect tree with a spreading crown and 10 to 14 in (25-35 cm) thick trunk. The leaves are deciduous, alternate, oblong or narrow-lanceolate |
| 6 | Michelia champaca | Sonchafa | 8 | Medium sized evergreen tree, strongly fragrant yellow flowers used in perfume industry, Butterfly host plant |
| **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 :** | TATA Power |
| | **During Construction Phase: (Demand Load)** | 100 KW |
| | **DG set as Power back-up during construction phase** | As per requirement |
| | **During Operation phase (Connected load):** | 2349 KW |
| | **During Operation phase (Demand load):** | 1644 kW |
| | **Transformer:** | ---- |
| | **DG set as Power back-up during operation phase:** | Rehabilitation: 1 DG set of 380kVA, Sale: 1 DG set of 625 kVA |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | NA |

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

? Use of Solar system for Common area lighting
? Use of standalone Solar panels for external lighting
? Use of LED Lights for Common area lighting
? Use of VFD drives for all lifts
? Use of BEE Certified Motors for equipments

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | • Use of Solar system for Common area lighting • Use of standalone Solar panels for external lighting • Use of LED Lights for Common area lighting • Use of VFD drives for all lifts • Use of BEE Certified Motors for equipments | 24% |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 50.00 Lacs |
| | **O & M cost:** | Rs. 5.00 Lacs/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 | Air Environment | Dust suppression | 3.60 |

| | | | |
|---|---|---|---|
| 2 | Air Environment | Air & Noise monitoring - Sensors for Air and Noise quality monitoring | 10.00 |
| 3 | Air Environment | Air & Noise monitoring - By outside MOEF Approved Laboratory | 1.10 |
| 4 | Water Environment | Drinking water analysis | 0.90 |
| 5 | Land Environment | Site Sanitation | 5.00 |
| 6 | Health & Hygiene | Disinfection- Pest Control | 6.00 |
| 7 | Health & Hygiene | Health Checkup of workers | 22.50 |
| 8 | Cost towards Disaster management | --- | 105.00 |

## 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, Noise Environment & Biological Environment | Cost for Gardening | 1.97 | 1.20 |
| 2 | Air, Noise Environment & Biological Environment | Cost for Ambient air & Noise Monitoring | No set up cost is involved | 0.22 |
| 3 | Air, Noise Environment & Biological Environment | Cost for DG Stack Exhaust Monitoring | No set up cost is involved | 0.10 |
| 4 | Water Environment - Waste water treatment | Cost for sewage Treatment Plant | 64.75 | 20.05 |
| 5 | Water Environment - Waste water treatment | Cost for Waste water Monitoring - On site sensors | 18.00 | 1.00 |
| 6 | Water Environment - Waste water treatment | Cost for Waste water Monitoring - By outside MOEF Approved Laboratory | No set up cost is involved | 0.05 |
| 7 | Water Environment - Water Conservation (Rain Water Harvesting System) | Cost for RWH tanks | 6.20 | 0.31 |
| 8 | Water Environment - Water Conservation (Rain Water Harvesting System) | Cost for treatment unit for rain water tanks | 6.00 | 0.02 |
| 9 | Water Environment - Water Conservation (Rain Water Harvesting System) | Cost for Rainwater Monitoring | No set up cost is involved | 0.09 |
| 10 | Land Environment (Solid Waste Management) | Cost for Treatment of biodegradable garbage in OWC | 18.00 | 3.45 |

| | | | | |
|---|---|---|---|---|
| 11 | Land Environment (Solid Waste Management) | Cost for monitoring of organic manure | No set up cost is involved | 0.08 |
| 12 | Energy Conservation | Solar system | 50.00 | 5.00 |
| 13 | Cost towards Disaster management | --- | 172.92 | 14.44 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Two entry & two exit for each building |
| **Parking details:** | **Number and area of basement:** | 1 Basement for Rehabilitation Building (only for services) |
| | **Number and area of podia:** | 1 Podium for Sale Building but no parking provision |
| | **Total Parking area:** | 573.45 Sq.mt. |
| | **Area per car:** | As per NBC |
| | **Area per car:** | As per NBC |
| | **Number of 2-Wheelers as approved by competent authority:** | Required - Nil, Provided - 20 Nos. |
| | **Number of 4-Wheelers as approved by competent authority:** | Required - 159 Nos. , Provided - 159 Nos. |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | Minimum 6.00 mt. |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Sanjay Gandhi National Park: Within 4.00 Km. |

| | | |
|---|---|---|
| | **Category as per schedule of EIA Notification sheet** | Category 8(a) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 29-04-2016 |

## Brief information of the project by SEAC

Representative of PP, Jigar Vora, Architect Sheetal Nandanwar were present during the meeting along with environmental consultant M/s Ultratech. PP informed that they have received earlier EC vide letter dated 11/12/2014 for total construction area of 23,544.11 m2. PP informed that they have undertaken construction admeasuring 6724.34 m2 as per EC. Proposed vertical expansion is due to addition of FSI (from 3 to 4) and there is increase in eligibility of tenants also (from 84 to 163). PP also informed that they have received LOI from SRA dated 13/04/2016. Committee noted following comparative changes due to proposed expansion/amendment

The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 5432.16 m2 & total construction area of the project is 33,140.36 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:** 1. PP to submit compliance report with comparative statements of conditions stipulated in earlier EC.

2. PP to submit copy of structural reanalysis stability/design audit report to ascertain increased load of the proposed addition of floors on rehab and sale buildings.

3. PP to provide air cleaning system in basement.

4. It is observed that evacuation time for sale component is 53 minutes which appears to be high. PP to ensure that evacuation time should be 30 minutes.

5. PP to submit revised water budget details. It is not clear how harvested rain water is proposed to be used. PP to submit details of the treatment and utilization plan for the same.

6. It is observed that north-west side of the rehab building no.2 is not accessible for fighting the fire due to stack parking proposed at the end of the road. There is also not adequate turning radius for fire tender movement.

7. PP, if applicable, to obtain NOC from Wild Life Board in terms of OM of MoEF dated 30/03/2015. Further, it is informed that part of the project falls within 4 kms of SGNP. PP & concerned Municipal Corporation to ensure the compliance of the NGT order dated 03/12/2015 in the application MA.No.125/2014 before issuing commencement certificate for further construction permissions in the area.

8. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Application for Environmental Clearance for Navi Sherli Mata Yashodhara Nagar Rahiwasi CHS LTD, Bandra, Mumbai. CTS No E/86/10 By Joy Builders.

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Navi Sherli Mata Yashodhara Nagar Rahivashi SRA CHS Ltd (SRA Project |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. Jayant B. Soni |
| **4.Name of Consultant** | Mr. H.K.Desai |
| **5.Type of project** | SRA Scheme |
| **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** | Not applicable |
| **8.Location of the project** | Plot Bearing CTS NO. E/86/10, Village Bandra, 13th X 19th Road, Khar-West, Mumbai - 400052 |
| **9.Taluka** | Bandra |
| **10.Village** | Bandra |
| **11.Area of the project** | Municipal Corporation of greater Mumbai (MCGM) |
| **12.IOD/IOA/Concession/Plan Approval Number** | IOA received |
| | **IOD/IOA/Concession/Plan Approval Number:** IOA for Composite bldg 4: Approval vide no. SRA/ENG/2612/HW/PL/AP, dtd: 30.11.2016; IOA for Rehab Bldg 3: Approval vide no. SRA/ENG/444/HW/PL/LAY, dtd: 29.11.2016; IOA letter vide no. SRA/ENG/444/HW/PL/LAY dtd: 29.11.2016 |
| | **Approved Built-up Area:** 13521 |
| **13.Note on the initiated work (If applicable)** | Rehab Building 1 & 2 has been constructed completely. Rehab building 3 has been constructed part ground+ part stilt + 1st to 14th, 15th (Pt) to 18th(Pt) floor. Composite Building 4 has been completed up to 2nd floors. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | LOI received. Vide letter no.1) SRA/ENG/1060/HW/PL/LOI 2) SRA/ENG/1107/HW/PL/LOI Dated 20th May 2015 |
| **15.Total Plot Area (sq. m.)** | 3802.40 |
| **16.Deductions** | 306.32 |
| **17.Net Plot area** | 3507.72 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 14462.42 |
| | **b) Non FSI area (sq. m.):** 13119.13 |
| | **c) Total BUA area (sq. m.):** 27581.55 |
| **19.Total ground coverage (m2)** | 1562.025 m2 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 41.08 % |
| **21.Estimated cost of the project** | 850000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Rehab bldg- 1 | Stilt + 14 floors | 49.20 m |
| 2 | Rehab bldg- 2 | Gr (pt) + Stilt + 14th floors | 49.20 m |
| 3 | Rehab bldg- 3 | Gr(pt)+ stilt (pt) + 18 floors | 61.35 m |
| 4 | Composite Bldg | Gr. (Pt.) + Stilt + 19 floors | 63.20 |

| | |
|---|---|
| **23.Number of tenants and shops** | Residential: 528 nos.<br>Shops: 8 nos.<br>BWS: 14 nos. |

| | |
|---|---|
| **24.Number of expected residents / users** | 2701 nos |
| **25.Tenant density per hectare** | 1571 Tenant / hector |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 12.00 wide road |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Minimum 9.00 m |
| **29.Existing structure (s) if any** | ? Rehab building 1 & rehab building 2 have been constructed completely. ? Rehab building 3 have been constructed upto part ground+ part stilt + 1st to 14th, 15th (Pt) to 18th(Pt) floor. ? Composite Building 4 have been constructed upto 2nd floor |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MCGM/Recycled water |
| | **Fresh water (CMD):** | 238 |
| | **Recycled water - Flushing (CMD):** | 121 |
| | **Recycled water - Gardening (CMD):** | 2 |
| | **Swimming pool make up (Cum):** | Not Applicable |
| | **Total Water Requirement (CMD) :** | 361 |
| | **Fire fighting - Underground water tank(CMD):** | 300 |
| | **Fire fighting - Overhead water tank(CMD):** | 40 |
| | **Excess treated water** | 182 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | MCGM/RWH/ STP Treated water |
| | **Fresh water (CMD):** | 238 |
| | **Recycled water - Flushing (CMD):** | 121 |
| | **Recycled water - Gardening (CMD):** | 0 |
| | **Swimming pool make up (Cum):** | Not Applicable |
| | **Total Water Requirement (CMD) :** | 359 |
| | **Fire fighting - Underground water tank(CMD):** | 300 |
| | **Fire fighting - Overhead water tank(CMD):** | 40 |
| | **Excess treated water** | 184 |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 2 m bgl |
| | **Size and no of RWH tank(s) and Quantity:** | 2 nos. of RWH Tank of capacity 39 cum & 21 cum |
| | **Location of the RWH tank(s):** | Below Ground Level |
| | **Quantity of recharge pits:** | 2 no?s of recharge pits, 1 X 12 cum & 1 X 17 cum |
| | **Size of recharge pits :** | 2 no?s of recharge pits, 1 X 12 cum & 1 X 17 cum |
| | **Budgetary allocation (Capital cost) :** | 1500000 |
| | **Budgetary allocation (O & M cost) :** | 150000 |
| | **Details of UGT tanks if any :** | Domestic Water Tank: 289 KLD<br>Flushing Water Tank: 119 KLD<br>Fire fighting Tank: 300 KLD |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | From SW to NE |
| | **Quantity of storm water:** | 0.3 m3/sec |
| | **Size of SWD:** | 450 mm X 430 mm |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 335 KLD |
| | **STP technology:** | RMBR Technology |
| | **Capacity of STP (CMD):** | 1 STP of capacity 340 KLD |
| | **Location & area of the STP:** | Below Ground level |
| | **Budgetary allocation (Capital cost):** | 4700000 |
| | **Budgetary allocation (O & M cost):** | 178000 |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Recyclable waste will be generated like empty cement bags & cans, scrap metal etc. Debris & construction waste shall be generated. |
| | **Disposal of the construction waste debris:** | Recyclable waste like empty cement bags & empty paint cans shall be handed over to local vendors. Broken tiles shall be used for china mosaic of terrace. Scrap metals shall be sold to recyclers. |
| **Waste generation in the operation Phase:** | **Dry waste:** | 492 Kg/day |
| | **Wet waste:** | 738 Kg/day |
| | **Hazardous waste:** | Not Applicable |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | 16 Kg/day |
| | **Others if any:** | Not Applicable |
| **Mode of Disposal of waste:** | **Dry waste:** | Will be handed over to Local Recyclers |
| | **Wet waste:** | Will be processed in the OWC. manure obtained shall be used for landscaping / Gardening, Excess manure shall be sold to nearby end users |
| | **Hazardous waste:** | Not Applicable |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | To be used as manure & replacement of saw dust for OWC |
| | **Others if any:** | Not Applicable |
| **Area requirement:** | **Location(s):** | Located at Ground Level |
| | **Area for the storage of waste & other material:** | 53.728 |
| | **Area for machinery:** | 2.772 |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 1000000 |
| | **O & M cost:** | 200000 |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | | Not applicable | | | |
| Capacity of the ETP: | | Not applicable | | | |
| Amount of treated effluent recycled : | | Not applicable | | | |
| Amount of water send to the CETP: | | Not applicable | | | |
| Membership of CETP (if require): | | Not applicable | | | |
| Note on ETP technology to be used | | Not applicable | | | |
| Disposal of the ETP sludge | | Not applicable | | | |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |
| 42.Mode of Transportation of fuel to site | | Not applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 306.58 sq.mt |
| | **No of trees to be cut :** | 1 no. |
| | **Number of trees to be planted :** | 2 nos. |
| | **List of proposed native trees :** | 21 nos. |
| | **Timeline for completion of plantation :** | At the end of 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 | Azardirachta Indica | Neem | 03 | Medicinal Tree |
| 2 | Putranjiva roxburhi | Putranjiva | 02 | Medicinal Tree |
| 3 | Plumeria rubra | Champa tree | 03 | Flowering Tree |

| | | | | |
|---|---|---|---|---|
| 4 | Lagerstroemia flosregineae | Tamhan | 03 | Flowering Tree |
| 5 | Areca catechu | Supari | 05 | Shady tree |
| 6 | Caryota urens | Bherli Maad | 02 | Shady tree |
| 7 | Murraya paniculata | Kunti | 03 | Flowering 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 | Not Applicable | Not Applicable | Not Applicable |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | Reliance |
| | **During Construction Phase: (Demand Load)** | 100 KW |
| | **DG set as Power back-up during construction phase** | 100 kW |
| | **During Operation phase (Connected load):** | 980.7 kW |
| | **During Operation phase (Demand load):** | 834 kW |
| | **Transformer:** | NA |
| | **DG set as Power back-up during operation phase:** | 1 X 320 KVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | Not Applicable |

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

Solar Based Street Lights for street and compound lighting
LED Lights in Common Areas , Podiums , Lobbies

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Common Area Lighting (Existing Bldg.) by Use Of T5 Lamp | 22 % |
| 2 | Common Area Lighting (Existing Bldg.) by Use Of Electronic Ballast | 18 % |
| 3 | Common Area Lighting by Use Of Solar | 100 % |
| 4 | External Area Lighting (Existing Bldg.) by Use Of T5 Lamp | 22 % |
| 5 | External Area Lighting (Existing Bldg.) by Use Of Electronic Ballast | 18 % |
| 6 | External Area Lighting - Use Of Solar | 100 % |

| | | |
|---|---|---|
| 7 | Balwadi,welfare Centre & Society Office (Existing Bldg.) - Use Of T5 Lamp | 22 % |
| 8 | Balwadi,welfare Centre & Society Office (Existing Bldg.) - Use Of Electronic Ballast | 18 % |
| 9 | Balwadi, Welfare Centre & Society Office (Proposed Bldg.) - Use Of Led | 57% |
| 10 | LIFT LOAD - USE OF VFD | 20% |
| 11 | Total Savings | 22 % |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 3570000 |
| | **O & M cost:** | 1780000 |

## 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 | Water for Dust Suppression | 200000 |
| 2 | EHS | Site Sanitation | 200000 |
| 3 | Environmental Monitoring | Environmental Monitoring | 600000 |
| 4 | EHS | Disinfection | 150000 |
| 5 | EHS | Health Check Up | 150000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Water Environment | RWH | 1500000 | 150000 |
| 2 | Solid waste | OWC | 1000000 | 200000 |
| 3 | Water Environment | STP | 4700000 | 150000 |
| 4 | Energy | Solar system | 3570000 | 1780000 |
| 5 | Land Environment | Landscaping | 100000 | 200000 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

| 53.Traffic Management | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | The project site is accessible through 12.00 m wide D.P road. |
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | NA |
| | **Total Parking area:** | 128 sq.m |
| | **Area per car:** | 32 sq.m |
| | **Area per car:** | 32 sq.m |
| | **Number of 2-Wheelers as approved by competent authority:** | NA |
| | **Number of 4-Wheelers as approved by competent authority:** | 4 nos. |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | 6.00 m wide internal roads. |
| | **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** | 8(b) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 09-02-2015 |

## Brief information of the project by SEAC

PP informed that they have completed construction admeasuring 19,000 m2. Further, PP requested to appraise the project as per circular of Environment Dept. dated 21/04/2015 issued on the basis of High Court orders. Committee observed that construction admeasuring 19,000 m2 prior to EC is violation of the provisions of EIA Notification. However, considering High Court orders and subsequent circular of Environment Department dated 21/04/2015, Committee appraised the matter.

The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed. PP stated that total plot area is 3802.40 m2 & total construction area of the project is 27,581.55 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1,1A, presentation & plans submitted are taken on the record.

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit undertaking on legal paper regarding construction undertaken is by them is less than 20,000 m2 & if it is false, PP is liable for further legal action as per the law. PP to submit detailed statement for the construction completed till date. 2. Conditions stipulated in the MCZMAï¿½??s recommendations should be strictly followed.

3. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation,Committee decided to recommend the proposal for* Environmental Clearance to SEIAA, subject to compliance of above points.**

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Proposed Residential Development at Plot Bearing S.No.37 (Old 283/A), At Village Dhokali, Tal. & Dist. Thane (Appraised in 50th A SEAC II meeting and recommended for SEIAA)

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Proposed Residential Development at Plot Bearing S.No.37 (Old 283/A), At Village Dhokali, Tal. & Dist. Thane |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/S. Vijay Associates Wadhwa 301, PLATINA, Plot No. C-59, G block, Bandra Kurla Complex, Mumbai ? 98 |
| **4.Name of Consultant** | Name-Mr. H.K. Desai Address: M/s. Enviro Analysts and Engineers Pvt. Ltd. B-1003, Enviro House, 10thFlr. Western Edge II, Western Express Highway, Borivali (E), Mumbai-400 066. Tel.: 28541647/48/67/68, Fax: 28541290 Mobile No. : 9324430071, Email ID: hkdesai5@gmail.com |
| **5.Type of project** | Proposed Residential Project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Not applicable |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not applicable |
| **8.Location of the project** | Plot bearing S.No.37 (Old 283/A), At Village Dhokali, Tal. & Dist. Thane |
| **9.Taluka** | Thane |
| **10.Village** | Dhokali |
| **11.Area of the project** | Thane Municipal Corporation (TMC) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Commencement Certificate |
| | **IOD/IOA/Concession/Plan Approval Number:** Old 2003/94F (New S505/0100/15) TMC/TDD/1599/15 dated 15th December 2015 |
| | **Approved Built-up Area:** 17316 |
| **13.Note on the initiated work (If applicable)** | Construction is started. Completed construction area till date= 9,350 Sq. m. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not Applicable |
| **15.Total Plot Area (sq. m.)** | 11,352.58 Sq. m. |
| **16.Deductions** | 2460.43 Sq. m. |
| **17.Net Plot area** | balance plot area = 8892.15 Sq. m. |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 17,316.42 |
| | **b) Non FSI area (sq. m.):** 17,022.83 |
| | **c) Total BUA area (sq. m.):** 34,339.25 |
| **19.Total ground coverage (m2)** | 5790.56 on balance plot area |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 65.12 |
| **21.Estimated cost of the project** | 1480000000.00 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Building No. 19 | L. St +U. St + podium + 27 floor | 89.60 |
| 2 | Building No. 20 | U. St + podium + 24 floor | 80.45 |

| | |
|---|---|
| **23.Number of tenants and shops** | Residential units ? 195 nos.<br>Shops - 17 nos. |

| | |
|---|---|
| **24.Number of expected residents / users** | 1,086 Nos. |
| **25.Tenant density per hectare** | 116 T/H |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | Abutting 40 m. wide DP Road |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Minimum 7.5 m wide |
| **29.Existing structure (s) if any** | There was no existing no structure |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | TMC & Recycled Water |
| | **Fresh water (CMD):** | 91 |
| | **Recycled water - Flushing (CMD):** | 46 Cum/day |
| | **Recycled water - Gardening (CMD):** | 6 Cum/day |
| | **Swimming pool make up (Cum):** | 6 Cum/day- make up water |
| | **Total Water Requirement (CMD) :** | 149 Cum/day |
| | **Fire fighting - Underground water tank(CMD):** | 300 Cum |
| | **Fire fighting - Overhead water tank(CMD):** | 20 cum per building |
| | **Excess treated water** | 66 Cum/day |

| | | |
|---|---|---|
| **Wet season:** | **Source of water** | TMC & Recycled Water |
| | **Fresh water (CMD):** | 91 |
| | **Recycled water - Flushing (CMD):** | 46 Cum/day |
| | **Recycled water - Gardening (CMD):** | 0 Cum/day |
| | **Swimming pool make up (Cum):** | 6 Cum/day- make up water |
| | **Total Water Requirement (CMD) :** | 143 Cum/day |
| | **Fire fighting - Underground water tank(CMD):** | 300 Cum |
| | **Fire fighting - Overhead water tank(CMD):** | 20 cum per building |
| | **Excess treated water** | 72 Cum/day |
| **Details of Swimming pool (If any)** | 6 KLD Make up water | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Ground water table water was observed up to 6m |
| | **Size and no of RWH tank(s) and Quantity:** | NA |
| | **Location of the RWH tank(s):** | NA |
| | **Quantity of recharge pits:** | 4 No?s of recharge pits and 1 No?s of roof top units have been proposed |
| | **Size of recharge pits :** | 3.00 m x 3.00 m x 4.00 m |
| | **Budgetary allocation (Capital cost) :** | Rs. 8 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs. 1.5 Lakh/annum |
| | **Details of UGT tanks if any :** | Fire Tank-300 Cum<br>Domestic Water Tank- 92 Cum<br>Flush Water Tank -46 Cum<br><br>Location ? Lower Stilt Level |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | towards north east |
| | **Quantity of storm water:** | |
| | **Size of SWD:** | Size of Trench = 0.60m x 0.60m |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 118 |
| | **STP technology:** | MBBR |
| | **Capacity of STP (CMD):** | 1 No.s of 120 KLD |
| | **Location & area of the STP:** | Lower Ground Level, AREA OF STP:100 Sq.Mts |
| | **Budgetary allocation (Capital cost):** | Rs. 25 Lakhs |
| | **Budgetary allocation (O & M cost):** | Rs. 3 Lakhs/annum |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Steel- 45MT, Block Work- 453 Sq.m. , Internal Gypsum-2100 Sq.m, External Plaster-270 Sq.m, Flooring/Tiling/Dado-1470 Sq.m, Internal Painting- 282 cans, Windows- 219 Sq m, Door Frame/shutter- 20 Nos. |
| | **Disposal of the construction waste debris:** | Steel- Shall be sold to recycler , Block Work- Shall be sold to recycler , Internal Gypsum, External Plaster- Plastering waste Shall be used for raft foundation, Flooring/Tiling/Dado- Tiles shall be used for china mosaic water proofing of terraces. , Internal Painting- Paint cans shall be sold to authorized recyclers., Windows- , Door Frame/shutter- Shall be sold to authorized recycler |
| **Waste generation in the operation Phase:** | **Dry waste:** | 214 Kg/day |
| | **Wet waste:** | 301 Kg/day |
| | **Hazardous waste:** | if generated shall be disposed off as per norms. |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | shall be used as manure |
| | **Others if any:** | No |
| **Mode of Disposal of waste:** | **Dry waste:** | Non-biodegradable waste will be recycled/ reused/sold/handed over to local authorized vendors. |
| | **Wet waste:** | Biodegradable waste will be treated in OWC. Manure obtained will be used for landscaping |
| | **Hazardous waste:** | if generated shall be disposed off as per norms. |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | shall be used as manure |
| | **Others if any:** | No |
| **Area requirement:** | **Location(s):** | Lower Stilt Level |
| | **Area for the storage of waste & other material:** | Biodegradable: No. of bins required of 240 lit capacity-2, No. of bins required of 240 lit capacity-2 |
| | **Area for machinery:** | Total area required- 50.41Sq.mts |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 10 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| 41.Source of Fuel | Not applicable |
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 2. Total RG area under green belt:1662.35 sq. m RG area required on ground: 458.35 sq. m. RG area provided on Ground: 462.72 sq. m. RG area provided on podium: 1,199.63 sq. m |
| | **No of trees to be cut :** | nil |
| | **Number of trees to be planted :** | 115 Nos. |
| | **List of proposed native trees :** | enclosed as below |
| | **Timeline for completion of plantation :** | till completion of 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 | Azadiracta indica | Neem Tree | 10 | Native tree, medicinal value |
| 2 | Anthocephalus cadamba | Kadamb | 10 | Evergreen Tropical tree |
| 3 | Bombax cieba | Semal | 5 | Decisuous Tall tree , flowering tree |
| 4 | Alzibia lebbeck | shirish | 5 | medicinal value |
| 5 | Mangifera indica | Mango | 10 | shady, fruit bearing, prevents soil erosion |
| 6 | Delonix regia | Gulmohar | 10 | ornamental tree |
| 7 | Putranjiva roxburgii | Putranjeeva | 10 | Evergreen tree, medicinal value |
| 8 | Michelia champaca | sonchafa | 3 | fragrant, flowering tree |
| 9 | Cassia fistula | Bahava | 5 | Flowering tree with medicinal value |
| 10 | Tabebuia argentina | silver trumpet tree | 5 | showy tropical flowering tree |
| 11 | Lagerstroemia speciosa | Pride of India | 20 | flowering tree |
| 12 | Erythrina indica | pangara | 8 | spiny deciduous flowering tree |
| 13 | Mimusops elengi | Bakul | 2 | Flowering, food and medicinal value |
| 14 | Plumeria alba | chafa | 2 | flowering tree |
| 15 | Bauhinia purperia | Rakhthchandan | 1 | fragrant tree with medicinal value |
| 16 | Pisonia alba | Moon light tree | 5 | Bird catching tree |
| 17 | Mesua ferrea | Nag Champa | 4 | ornamental 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 | Shrubs shall be provided on podium top. | - | - |

## 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** | - |
| | **During Operation phase (Connected load):** | 5.20 MW |
| | **During Operation phase (Demand load):** | 3.05 MW |
| | **Transformer:** | 3 x 1000 KVA |
| | **DG set as Power back-up during operation phase:** | ? Number and capacity of DG sets to be used: 1 X 625 KVA DG set |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

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

Energy saving measures
? Natural shading through elevation features to minimize heat gain and reduce air conditioning requirement
? Use of low-e glass to reduce power requirement
? Large central atriums for natural cross ventilation
? Solar lightning in common areas , garden and road
? Solar heat water for residential buildings
? Solar street lights will be proposed
? Energy efficient lighting fixtures (LED lights) to all buildings

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Percentage saving through renewable energy | 10.66% |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs 35Lakhs |
| | **O & M cost:** | Rs. 02 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 | Land Environment | Water for Dust Suppression | 2 |
| 2 | Health and Safety | Site Sanitation | 2 |

| | | | |
|---|---|---|---|
| 3 | Environmental Monitoring | Environmental Monitoring - Air, Noise, Water, soil | 6 |
| 4 | Health and Safety | Disinfection | 1.5 |
| 5 | Health and Safety | Health Check Up | 3.6 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Water Environment | RWH | 8 | 1.5 |
| 2 | Land Environment | MSW | 10 | 1.5 |
| 3 | Water Environment | STP | 25 | 3 |
| 4 | Energy System | Energy System | 35 | 2 |
| 5 | Land Environment | Landscaping | 50 | 5 |
| 6 | Risk Assessment | DMP | 420 | 19.9 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | 40 Meter wide Kolshet Road is abutting |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | 3,458.10 Sq.m. |
| | **Total Parking area:** | 10236.9 Sq.m. |
| | **Area per car:** | 25.2 Sq.m. (Overall) |
| | **Area per car:** | 25.2 Sq.m. (Overall) |
| | **Number of 2-Wheelers as approved by competent authority:** | 223 No's |
| | **Number of 4-Wheelers as approved by competent authority:** | 406 No's |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | Width of Internal Roads= 7.5 m (Driveway) |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | NA. Poject is out of ESZ of SGNP as per Notification dated 5th Dec, 2016 |
| | **Category as per schedule of EIA Notification sheet** | 8 (a) |
| | **Court cases pending if any** | no |
| | **Other Relevant Informations** | the said project has been appraised in 50th A SEAC II meeting and recommended to SEIAA. Compliance has been submitted in hard copy in SEIAA dated 22.12.2016, also we will be attaching soft copy of compliance in the said website as per protocol |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 28-07-2016 |

## Brief information of the project by SEAC

Representative of PP, Avinash Lakh & Architect Sandip Prabhu were present during the meeting along with environmental consultant M/s EAEPL. PP informed that they have received CC dated 15/12/2015.

PP informed that they have completed construction admeasuring 9350 m2 as per CC dated 15/12/2015. Further, PP requested to reappraise the project as per circular of Environment Dept. dated 21/04/2015 issued on the basis of High Court orders. Committee observed that construction admeasuring 9350 m2 prior to EC is violation of the provisions of EIA Notification. However, considering High Court orders and subsequent circular of Environment Department dated 21/04/2015, Committee appraised the matter. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 11,352.58 m2 & total construction area of the project is 34,339.25 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP & Architect to submit undertaking on legal paper regarding construction undertaken is by them is less than 20,000 m2 & if it is false, PP is liable for further legal action as per the law. PP to submit detailed statement for the construction completed till date. 2. PP to submit copy of CFO NOC obtained dated 4/2/2014.

3. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for PROPOSED RESIDENTIAL CUM COMMERCIAL PROJECT

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Proposed Construction of Residential cum commercial Project at Plot Bearing S. No. 131, H. No. 5 & 6, S. No. 133, H. No. 2, 3, S. No. 139, H.No. 5, 15, 17/1, S.No. 140, H. No. 2/5, at village - Virar, Tal- Vasai, District- Palghar |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. Hemant Mhatre |
| **4.Name of Consultant** | Dr. D. A. Patil, Mahabal Enviro Engg. Pvt. Ltd |
| **5.Type of project** | MHADA, Residential cum commercial 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** | Not applicable |
| **8.Location of the project** | Plot Bearing S. No. 131, H. No. 5 & 6, S. No. 133, H. No. 2, 3, S. No. 139, H.No. 5, 15, 17/1, S.No. 140, H. No. 2/5, at village -Virar, Tal- Vasai, District- Palghar |
| **9.Taluka** | Vasai |
| **10.Village** | Virar |
| **11.Area of the project** | Vasai-Virar City Municipal Corporation (VVCMC) |
| **12.IOD/IOA/Concession/Plan Approval Number** | CC and Approved Layout plan obtained from VVCMC by its vide letter VVCMC/TP -C.C. VP/5330/3878/2014-15 dated 29.01.2015 |
| | **IOD/IOA/Concession/Plan Approval Number:** CC and Approved Layout plan obtained from VVCMC by its vide letter VVCMC/TP -C.C. VP/5330/3878/2014-15 dated 29.01.2015 |
| | **Approved Built-up Area:** 77620.53 |
| **13.Note on the initiated work (If applicable)** | No work started |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | CC and Approved Layout plan obtained from VVCMC by its vide letter VVCMC/TP -C.C. VP/5330/3878/2014-15 dated 29.01.2015 |
| **15.Total Plot Area (sq. m.)** | 58510 m2 |
| **16.Deductions** | 10,825.24 m2 |
| **17.Net Plot area** | 47,684.76 m2 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 57,749.76 |
| | **b) Non FSI area (sq. m.):** 46,282.1 |
| | **c) Total BUA area (sq. m.):** 1,04,031.86 |
| **19.Total ground coverage (m2)** | 10416.26 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 21.84 % |
| **21.Estimated cost of the project** | 3000000000 |



## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | R zone-Building No. 1 | Wings: A, B & C -(G+16) | - |
| 2 | R zone-Building No. 2 | Wings: A & B-(ST+21) | - |
| 3 | R zone-Building No. 3 | Wings: A ,B,C,D,E & E-(G+16) | - |
| 4 | R zone-Building No. 4 | Wings: A ,B & C-(G+16) | - |
| 5 | R zone-Building No. 5 | ST+16 | - |
| 6 | R zone-Building No. 6 | Wings: A, B & C-(ST+16) | - |

| | | | |
|---|---|---|---|
| 7 | R zone-Building No. 7 | B1 (BUNGALOW)-(G+1) | - |
| 8 | R zone-Building No. 8 | B2 (BUNGALOW)-(G+1) | - |
| 9 | R zone-Building No. 9 | G+7 | - |
| 10 | R zone-C.F.C. 1 | ST+2 | - |
| 11 | G Zone- Building No. 1 | ST+1 | - |
| 12 | G Zone- Building No. 2 | Wings-A,B,C & D: (ST+4) | - |
| 13 | G Zone- BUNGALOW-1 to 11 | G+1 | - |
| 14 | G Zone- ROW HOUSES-1 to 7 | G+1 | - |
| 15 | G Zone- C.F.C. 2 | ST+2 | - |
| 16 | MHADA Building | Wings: A,B,C,D,E,F & G- (ST+4) | - |

| | |
|---|---|
| **23.Number of tenants and shops** | 1,532 Flats with 42 shops. ,11 Bungalows, 7 Row houses and 2 C.F.C.s |
| **24.Number of expected residents / users** | 8,114 Nos |
| **25.Tenant density per hectare** | 271/ha |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 40.0 m wide DP road |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Min 9 m |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | VVCMC |
| | **Fresh water (CMD):** | 703 KLD |
| | **Recycled water - Flushing (CMD):** | 360 KLD |
| | **Recycled water - Gardening (CMD):** | 55 KLD |
| | **Swimming pool make up (Cum):** | - |
| | **Total Water Requirement (CMD) :** | 1063 KLD |
| | **Fire fighting - Underground water tank(CMD):** | As per CFO NOC |
| | **Fire fighting - Overhead water tank(CMD):** | As per CFO NOC |
| | **Excess treated water** | 568 KLD |
| **Wet season:** | **Source of water** | VVCMC |
| | **Fresh water (CMD):** | 495 KLD |
| | **Recycled water - Flushing (CMD):** | 360 KLD |
| | **Recycled water - Gardening (CMD):** | - |
| | **Swimming pool make up (Cum):** | - |
| | **Total Water Requirement (CMD) :** | 1063 KLD |
| | **Fire fighting - Underground water tank(CMD):** | As per CFO NOC |
| | **Fire fighting - Overhead water tank(CMD):** | As per CFO NOC |
| | **Excess treated water** | 623 KLD |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 3 ? 4 m |
| | **Size and no of RWH tank(s) and Quantity:** | 6 RWH tank of total 400 m3 holding capacity |
| | **Location of the RWH tank(s):** | Underground |
| | **Quantity of recharge pits:** | -- |
| | **Size of recharge pits :** | -- |
| | **Budgetary allocation (Capital cost) :** | 48 Lacs |
| | **Budgetary allocation (O & M cost) :** | 2.5 Lacs/year |
| | **Details of UGT tanks if any :** | Under ground |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | Toward South West direction of plot |
| | **Quantity of storm water:** | 10,576.8 m3/hr |
| | **Size of SWD:** | 500 x 600 mm and 700 x 900 mm |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 992 KLD |
| | **STP technology:** | MBBR Technology |
| | **Capacity of STP (CMD):** | Total capacity 1000 KLD (2 x 300 KLD, 1 x 400 KLD) |
| | **Location & area of the STP:** | Ground |
| | **Budgetary allocation (Capital cost):** | 204 Lacs |
| | **Budgetary allocation (O & M cost):** | 41 Lacs/year |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Construction debris: 3,021 m3 |
| | **Disposal of the construction waste debris:** | The construction debris is utilized at site for leveling. |
| **Waste generation in the operation Phase:** | **Dry waste:** | 1,580 kg/day |
| | **Wet waste:** | 2,368 kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 10 m3/day |
| | **Others if any:** | Household E-Waste generation |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Dry garbage will be segregated & disposed off to recyclers |
| | **Wet waste:** | Wet garbage will be composted using Mechanical Composting and used as organic manure for landscaping. |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Sludge use as manure for gardening |
| | **Others if any:** | The hosehold E- waste shall be handed over to E-waste management vendor authorized by MPCB |
| **Area requirement:** | **Location(s):** | Location on Ground |
| | **Area for the storage of waste & other material:** | 1665 m2 |
| | **Area for machinery:** | 90 m2 |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 60 Lacs |
| | **O & M cost:** | 24 Lacs/year |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |

| | |
|---|---|
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 10,988.86 m2 |
| | **No of trees to be cut :** | NA |
| | **Number of trees to be planted :** | 550 Nos. |
| | **List of proposed native trees :** | 550 Nos. |
| | **Timeline for completion of plantation :** | 1 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 | Azadiracta indica | Neem | 73 | Large tree, good for roadside plant |
| 2 | Alstonia scholaris | Satwin | 86 | Shady Tree, white fragrant flowers |
| 3 | Saraca asoka | Sita Ashok | 76 | Shady tree with red-yellow flowers. |
| 4 | Mimusops elengi | Bakul | 83 | Shady tree, small white fragrant flowers |
| 5 | Butea monosperma | Palas | 72 | Medium sized deciduous tree. Beautiful orange |
| 6 | Pongamia pinnata | Karanj | 78 | Shady tree |
| 7 | Anthocephallus cadamba | Kadamb | 82 | Shady, large tree, ball shaped flowers. |
| **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 | Vitex negundo | - | - |
| 2 | Adhatoda vasica | - | - |
| 3 | Plumbago zeylanica | - | - |
| 4 | Ziziphus mauritiana | - | - |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 200 kVA |
| | **DG set as Power back-up during construction phase** | 200 kVA |
| | **During Operation phase (Connected load):** | 7.8 MW |
| | **During Operation phase (Demand load):** | 4 MW |
| | **Transformer:** | - |
| | **DG set as Power back-up during operation phase:** | 1000 kVA capacity : (1 x 500 kVA, 1 x 400 kVA & 1 x 100 kVA) |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | NA |

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

1. Energy efficient lighting using LEDs
2. Use of high energy efficient pumps for fire fighting, UG tanks and STP
3. Solar Street lights are proposed for common areas such as open spaces, pathways, RG etc.
4. Solar Hot Water system will be proposed
5. Natural shading through elevation features to minimize heat gain and reduce air-conditioning requirement

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Total Energy saving is 21.15% as compared to Conventional Base Case | 21.15 % |
| 2 | Total Energy saving from renewable source (Solar Hot Water) is 16.80 % as per Efficient proposed case | 16.80 % |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 167 Lacs |
| | **O & M cost:** | 8.5 Lacs/year |

# 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Water spray for dust suppression | - | 5 |
| 2 | Site sanitation (Toilets) | - | 6 |

| | | | |
|---|---|---|---|
| 3 | Environmental Monitoring | - | 3 |
| 4 | Potable Water Supply to Labour Camp | - | 5 |
| 5 | Health check-up & first aid | - | 6 |
| 6 | Safety Personal Protective Equipment | - | 10 |
| 7 | Traffic Management | - | 3 |
| 8 | Safety nets | - | 12 |
| 9 | Tyre cleaning and Vehicle maintenance | - | 3 |
| 10 | Solid Waste Management & Site maintenance activity | - | 4 |
| 11 | Safety - Training to Workers (Twice in Year), Safety Officer | - | 7 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | STP (Tertiary) | Continuous O & M | 204 | 41 |
| 2 | Solar System | Quarterly | 167 | 8.5 |
| 3 | Rain Water Harvesting | During rainy season (Cleaning of RWH tanks and Filtration chamber) | 48 | 2.5 |
| 4 | Solid waste Composting plant | Continuous O & M | 60 | 24 |
| 5 | Landscape development | Daily | 95 | 14 |
| 6 | Environmental Monitoring | As per the CPCB guidelines through MoEF Approved laboratories | - | 4 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | The Project site is accessible by 40 m wide D.P. Road. |
| **Parking details:** | **Number and area of basement:** | NA |
| | **Number and area of podia:** | Parking below podium RG: 1450.50 m2 |
| | **Total Parking area:** | 14,207.50 m2 |
| | **Area per car:** | - |
| | **Area per car:** | - |
| | **Number of 2-Wheelers as approved by competent authority:** | 1,598 Nos |
| | **Number of 4-Wheelers as approved by competent authority:** | 888 Nos |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | 6 m Min. |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Project site is 6.3 km away from Tungareshwar wild life sanctuary. |
| | **Category as per schedule of EIA Notification sheet** | 8 (a) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 24-09-2014 |



## Brief information of the project by SEAC

Representative of PP, Hemant Mhatre & Architect Shabbir Hussain were present during the meeting along with environmental consultant M/s Mahabal. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 58,510 m2 & total construction area of the project is 1,04,031.86 m2. Project involves 9 residential buildings, 11 bungalows, 7 row houses, 1 MHADA building & 2 common facility centres. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to ensure that no possession shall be given before completion of the sewer lines & storm water drainage line and permission for the connection to the same by the competent authority. Local body to ensure the same.

2. PP to submit storm water drainage calculations considering the upper hilly catchment area.

3. PP to submit revised project specific Disaster Management Plan especially considering upper hilly area.

4. PP to submit letter of commitment for drinking water to the project from Municipal Corporation.

5. PP to ensure that BOD of the treated water should be 5 mg/lit.

6. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

**1)** OC shall not be released by planning authority unless storm water drain and sewer drain connectivity are provided by local planning authority.

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Proposed Intermediate and specialty chemicals (Synthetic organic chemicals) manufacturing unit for API by Galaxy Laboratories Pvt. Ltd. at Plot No. B-10, MIDC Newasa industrial area At Post. Shingve Tukai, Taluka. Newasa Dist. Ahmednagar

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Proposed Intermediate and specialty chemicals (Synthetic organic chemicals) manufacturing unit for API by Galaxy Laboratories Pvt. Ltd. at Plot No. B-10, MIDC Newasa industrial area At Post. Tukai - Shingve, Taluka. Newasa Dist. Ahmednagar |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Galaxy Laboratories Pvt. Ltd. |
| **4.Name of Consultant** | Aditya Environmental Services Pvt. Ltd. |
| **5.Type of project** | Not applicable |
| **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** | Not applicable |
| **8.Location of the project** | Plot No. B-10, MIDC Newasa industrial area At Post. Tukai - Shingve, Taluka. Newasa Dist. Ahmednagar |
| **9.Taluka** | Newasa |
| **10.Village** | Shingvetukai |
| **11.Area of the project** | MIDC Newasa |
| **12.IOD/IOA/Concession/Plan Approval Number** | MIDC Newasa |
| | **IOD/IOA/Concession/Plan Approval Number:** MIDC plot plan approval |
| | **Approved Built-up Area:** 32716.67 |
| **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.)** | 48,400 sq.m |
| **16.Deductions** | Not applicable |
| **17.Net Plot area** | Not applicable |
| **18.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 |
| **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** | 143000000 |

## 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)** | Not applicable |
| **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** | Existing facility has Hydrogenation plant which does not falls under EIA notification. Company has valid Consent to Operate for Hydrogenation facility. |
| **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 | Hydrogen Gas | 250 Nm3/Hr | -- | 250 Nm3/Hr |
| 2 | Furfuraldehyde (Fufural) | -- | 50 TPM | 50 TPM |
| 3 | Furfuryl Alcohol | -- | 30 TPM | 30 TPM |
| 4 | Furfuryl Amine | -- | 40 TPM | 40 TPM |
| 5 | Cyclohexenyl Ethyl Amine (CHEA) | -- | 10 TPM | 10 TPM |
| 6 | Triclabendazole (Crude) | -- | 8.4 TPM | 8.4 TPM |
| 7 | 5-Chloro-4-Amino-2,1,3 Benzothidiazole | -- | 2 TPM | 2 TPM |
| 8 | 2-Furoic Acid | -- | 5 TPM | 5 TPM |
| 9 | Betaphenyl Ethyl Amine (BPEA) | -- | 20 TPM | 20 TPM |
| 10 | Polly Allylamine Hydrochloride (PAAH) | -- | 13.5 TPM | 13.5 TPM |
| 11 | Chlorohexanone (6-Chloro-2-Hexanone) | -- | 20 TPM | 20 TPM |
| 12 | Furan | -- | 50 TPM | 50 TPM |
| 13 | Spent acid (Byproduct) | -- | 42.5 TPM | 42.5 TPM |
| 14 | Sodium hydrosulphide solution (Byproduct) | -- | 15.6 TPM | 15.6 TPM |
| 15 | Potassium bromide salt solution (Byproduct) | -- | 185.5 TPM | 185.5 TPM |

## 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 | 1.8 | 26.2 | 28 | 0.36 | 2.64 | 3 | 1.44 | 23.56 | 25 |
| Industrial Process | 2.2 | 17.8 | 20 | 0 | 0 | 0 | 2.2 | 17.8 | 20 |
| Cooling tower & thermopack | 5 | 78 | 89 | 4.5 | 57.5 | 62 | 0.5 | 26.5 | 27 |
| Gardening | 9 | 19 | 28 | 9 | 19 | 28 | 0 | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | -- |
| | **Size and no of RWH tank(s) and Quantity:** | 1 no. of Storm water / rain water storage tank of 12 x 12.5 x 2 m of 302 KL capacity |
| | **Location of the RWH tank(s):** | Near main gate |
| | **Quantity of recharge pits:** | -- |
| | **Size of recharge pits :** | -- |
| | **Budgetary allocation (Capital cost) :** | 10 Lakh |
| | **Budgetary allocation (O & M cost) :** | 1 Lakh per Annum |
| | **Details of UGT tanks if any :** | Not Applicable |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | -- |
| | **Quantity of storm water:** | -- |
| | **Size of SWD:** | -- |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 25 cmd |
| | **STP technology:** | Not applicable. Sewage will be added in Aeration tank of Proposed Effluent treatment plant. |
| | **Capacity of STP (CMD):** | -- |
| | **Location & area of the STP:** | -- |
| | **Budgetary allocation (Capital cost):** | -- |
| | **Budgetary allocation (O & M cost):** | -- |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Small quantity of debris will be generate. |
| | **Disposal of the construction waste debris:** | Construction waste debris will be reused for leveling of plot. |
| **Waste generation in the operation Phase:** | **Dry waste:** | Fly Ash- 1850 TPA |
| | **Wet waste:** | Spent corn cob- 5000 TPA |
| | **Hazardous waste:** | ETP sludge, Distillation residue, Distillation residue (chlorinated), Contaminated filters/ bags, Process residue (iron sludge), Spent catalyst, Spent charcoal, Contaminated Drums/ Barrels/ Liners, |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | Not Applicable |
| | **Others if any:** | Not Applicable |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | Fly ash will be sent to brick manufacturer / secured landfill. |
| | **Wet waste:** | Spent corn con will be burnt as fuel in boiler/ Thermic Fluid heater. |
| | **Hazardous waste:** | Hazardous waste will be disposed off as per Hazardous waste rule, 2016 |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | Not Applicable |
| | **Others if any:** | Not Applicable |
| **Area requirement:** | **Location(s):** | Details given in EIA report. |
| | **Area for the storage of waste & other material:** | Details given in EIA report. |
| | **Area for machinery:** | Details given in EIA report. |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 2 Lakh |
| | **O & M cost:** | 5 Lakh per Annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | -- | 6-9 | 6.5-9 | 6.5-9 |
| 2 | Chemical Oxygen Demand | mg/L | 2500-3000 | <250 | 250 |
| 3 | Biological Oxygen Demand | mg/L | 1000-1500 | <100 | 100 |
| 4 | Total Dissolved Solids | mg/L | 1100-1200 | <2100 | 2100 |
| 5 | Total Suspended Solids | mg/L | 150-200 | <100 | 100 |
| 6 | Oil & Grease | mg/L | <10 | <10 | 10 |
| 7 | Chlorides | mg/L | 250-300 | <600 | 600 |
| 8 | Sulphates | mg/L | 250-300 | <1000 | 1000 |

| | |
|---|---|
| Amount of effluent generation (CMD): | 72 cmd |
| Capacity of the ETP: | 75 cmd |
| Amount of treated effluent recycled : | 72 cmd |
| Amount of water send to the CETP: | Not Applicable. Unit will maintain Zero Liquid Discharge facility. |
| Membership of CETP (if require): | Not Applicable |
| Note on ETP technology to be used | Pre-treatment tank > Oil & Grease trap > Collection tank > Neutralization tank > Pri. clarifier > Aeration tank > Sec. clarifier > Sand filter > Activated carbon filter > Treated water tank |
| Disposal of the ETP sludge | ETP sludge will be sent to CHWTSDF facility. |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Chemical sludge from waste water treatment | 35.3 | TPA | 0 | 30 | 30 | CHWTSDF (landfill) |
| 2 | Distillation Residue | 20.3 | TPA | 0 | 275 | 275 | CHWTSDF/ Used as Fuel in Boiler |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | Distillation Residue (chlorinated) | 20.3 | TPA | 0 | 25 | 25 | CHWTSDF |
| 4 | Contaminated filter/ Bags | 33.2 | TPA | 0 | 2 | 2 | CHWTSDF (incineration) |
| 5 | Process residue (iron sludge) | 28.1 | TPA | 0 | 45 | 45 | CHWTSDF (landfill) |
| 6 | Spent Catalyst | 28.2 | TPA | 0 | 225 | 225 | CHWTSDF/ Authorized Recycler/ Return to manufacturer |
| 7 | Spent Charcoal | 28.3 | TPA | 0 | 40 | 40 | CHWTSDF/ Used as Fuel in Boiler |
| 8 | Contaminated Drums/ Barrels/ liners | 33.1 | Nos./A | 0 | 500 | 500 | MPCB authorized Drum 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 | IBR Boiler (Existing) | Coal- 240 kg/day | 1 | 30 | -- | -- |
| 2 | Reactor (Existing) | -- | 2 | 11 | -- | -- |
| 3 | 320 KVA DG set (Existing) | HSD- 64 Lit/Hr | 3 | 3.5 | -- | -- |
| 4 | 3 TPH Boiler | 15 TPD | 4 | 30 | 0.6 | 180 |
| 5 | 6 lakh kcal/hr Thermic Fluid Heater | 1.7 TPD | 5 | 30 | 0.35 | 240 |
| 6 | HCl Scrubber | -- | 6 | 18 | -- | Ambient temp. |
| 7 | Ammonia scrubber | -- | 7 | 18 | -- | Ambient temp. |
| 8 | H2S scrubber | -- | 8 | 18 | -- | Ambient temp. |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Coal | 0.24 TPD | 15 TPD | 15.24 TPD |
| 2 | Furnace Oil | -- | 1.7 TPD | 1.7 TPD |
| 3 | HSD | 64 Lit/Hr | -- | 64 Lit/Hr |
| 41.Source of Fuel | | From nearby venors | | |
| 42.Mode of Transportation of fuel to site | | By Road | | |

## 43.Green Belt Development

| | |
|---|---|
| **Total RG area :** | Green Belt area: 11,718.63 sq. m. |
| **No of trees to be cut :** | Not Applicable |
| **Number of trees to be planted :** | Details given in EIA report |
| **List of proposed native trees :** | Details given in EIA report |
| **Timeline for completion of plantation :** | Details given in EIA report |

## 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 | -- | -- | -- | -- |
| 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 :** | Maharashtra State Electricity Distribution Co. Ltd |
| | **During Construction Phase: (Demand Load)** | 320 KVA |
| | **DG set as Power back-up during construction phase** | 320 KVA DG set (in case of emergency) |
| | **During Operation phase (Connected load):** | 320 KVA |
| | **During Operation phase (Demand load):** | 320 KVA |
| | **Transformer:** | Not Applicable |
| | **DG set as Power back-up during operation phase:** | 320 KVA DG set (in case of emergency) |
| | **Fuel used:** | HSD: 64 Lit/Hr (in case of emergency) |
| | **Details of high tension line passing through the plot if any:** | Not Applicable |

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

--

## 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 |
|---|---|---|
| Air pollution (Boiler, Thermic Fluid Heater, Scrubber) | -- | Dust collector / bag filter/ Adequate Stack height |
| Water Pollution (Efflunet generation) | -- | Effluent treatment plant |

| | | |
|---|---|---|
| Noise pollution | -- | Enclosure/ PPE |
| Solid & Hazardous waste | -- | Disposed to CHWTSDF / Recycler |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 10 Lakhs |
| | **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 | Air Pollution Control | 20 | 2 |
| 2 | Monitoring | Environment Monitoring | 5 | 2 |
| 3 | Water | Water Pollution Control | 45 | 5 |
| 4 | Solid waste | Hazardous waste & Solid waste management | 2 | 5 |
| 5 | Green Belt | Green Belt Development | 2 | 3 |
| 6 | Health & Safety | Occupational Health & Safety | -- | 2 |
| 7 | CSR activities | Social welfare & upliftment | -- | 12 |
| 8 | Other Green Initiatives | Rain Water Harvesting | 10 | 1 |
| 9 | Other Green Initiatives | Solar Power/LED | 5 | -- |
| 10 | Other Green Initiatives | Energy Conservation | 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 |
|---|---|---|---|---|---|---|---|
| Methanol | Existing | within plot | 4 Nos. each 15 KL | 15 KL | 132 | Nearby source | By Road tanker |
| Hydrogen Gas | Existing | within plot | 120 Nos. (2.49 Kg per cylinder) | 299 Kg | -- | Nearby source | Pipeline |
| Methanol | Proposed | within plot | 1 Nos. 15 KL | 15 KL | same as above | Nearby source | By Road tanker |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Toluene | Proposed | within plot | 2 Nos. each 15 KL | 15 KL | 1.4 TPM | Nearby source | By Road tanker |
| Furnace Oil | Proposed | within plot | 1 No. 15 KL | 15 KL | 51 | Nearby source | By Road tanker |
| Ammonia tonner | Proposed | within plot | 1 No | -- | 12.3 TPM | Nearby source | By Road |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Not Applicable |
| **Parking details:** | **Number and area of basement:** | Not Applicable |
| | **Number and area of podia:** | Not Applicable |
| | **Total Parking area:** | 5,817.76 sq. m. |
| | **Area per car:** | Not Applicable |
| | **Area per car:** | Not Applicable |
| | **Number of 2-Wheelers as approved by competent authority:** | Not Applicable |
| | **Number of 4-Wheelers as approved by competent authority:** | Not Applicable |
| | **Public Transport:** | Not Applicable |
| | **Width of all Internal roads (m):** | 6 m wide road |
| | **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 | 20-09-2016 |
|---|---|---|

## Brief information of the project by SEAC

PP gave a detailed presentation of their EIA report pertaining to manufacturing of APIs and Specialty Agro based Chemicals at their facility in Newasa MIDC. In addition to the existing facility for manufacturing of Hydrogen (18.72 lacs Nm3/annum) the proposed envisages 2984 TPA of such products in addition to 2923 TPA by-products. The Committee considered the EIA report and its presentation.

## DECISION OF SEAC

After discussion the Committee made the following observations:

1. The process generates large quantum of Chloro compounds both in liquid effluents and solid wastes. The Committee feels that Chlorine should be totally eliminated from effluents to achieve BOD/COD ratio to 0.3-0.4. Similarly solid chloro compounds in the hazardous wastes should not sent to the CHWTSDF, since incineration can generate harmful Dioxenes and Furans. For this purpose PP should compulsorily eliminate Chloro compounds at source through Fenton/ H2O2 treatment so as to mineralize the mother liquor after 1st and 2nd crops. The ensuing effluent treatment scheme is depicted in ***Annexure 7.1***. The MPCB should verify the provisions of pre-treatment envisaged above before granting Consent to Operate.

2. The emissions from 3 TPH boiler using coal as a fuel and 6 lac kcal/hr thermic fluid heater should be passed through bag filter of suitable efficiency to achieve an outlet TPM of less than 100 mg/Nm3. Stack height for both boiler and thermic fluid heater should not be less than 30m.

3. The Consent certificate from MIDC for total water requirement of 100 CMD is given in the ***Annexure 7.2.***

4. The PP shall effect maximum solvent recovery. The spent solvents containing spent H2SO4 and Sodium Hydrosulphide should be disposed of to vendors authorised by MPCB and should not be indiscriminately disposed of in the environment. The aqueous salt layer containing Bromine compound should be treated for crystallization of KBr and should be sold as by-product to authorised vendors only. 5. ***Annexure 7.3*** indicates the diagram showing various hazard management facilities. There is a contingency of off-site emergency, hence hazard management plan shall be shared with the District Administration i.e. District Magistrate, Ahmednagar. There should be adequate dyke containment system for Ammonia, Chlorine and CS2 (Carbon Disulphide). The baseline studies indicates that all aspects of environmental impact were within limit. However since the project is located in a fairly remote industrial area which does not have a CETP, the effluent management should be strictly followed by the PP. The Committee decided to **recommend the project from EC,** subject to the above conditions (1-5).

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

**1)** Consent to operate shall be granted by MPCB only if PP has installed Zero Liquid Discharge facility

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Residential Development with Shops

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Residential Development with Shops at Village Kanjur, Kanjurmarg (E), Mumbai |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s. Kanakia Spaces Realty Pvt Ltd. |
| **4.Name of Consultant** | M/s. Ultra-Tech |
| **5.Type of project** | Housing project . Category 8 (B2) |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | NA |
| **8.Location of the project** | C.T.S No. 1015, 1015/1 to 3 of Village Kanjur, Kanjurmarg (East) Mumbai ? 400 042 State-Maharashtra |
| **9.Taluka** | Kurla |
| **10.Village** | Kanjur |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai (M.C.G.M.) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Received IOD (No. CE/1247/BPES/AS) dt. 22.12.2009 and Amended IOD (No. CE/1247/BPES/AS) dt. 31.12.2010 |
| | **IOD/IOA/Concession/Plan Approval Number:** CE/1247/BPES/AS and Amended - CE/1247/BPES/AS |
| | **Approved Built-up Area:** 25621.01 |
| **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.)** | 11500.60 |
| **16.Deductions** | 1231.05 |
| **17.Net Plot area** | 10269.55 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 25621.01 |
| | **b) Non FSI area (sq. m.):** 21109.02 |
| | **c) Total BUA area (sq. m.):** 46730.03 |
| **19.Total ground coverage (m2)** | 6398.74 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 62 |
| **21.Estimated cost of the project** | 2860000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Wing A to C | Basement + Ground + Podium/Stilt + 21 Upper Floors | 69.90 |
| 2 | Wing D & E | Basement + Ground + Podium/Stilt + 20 Upper Floors | 67.15 |
| 3 | Wing F | Basement + Ground + Podium/Stilt + 1 Upper Floor | 12.05 |
| 4 | Wing G | Basement + Ground Floor | 4.50 |

| | |
|---|---|
| **23.Number of tenants and shops** | Flats: 414 Nos.<br>Shops: 6 Nos. |
| **24.Number of expected residents / users** | Total Occupancy: 2088 Nos. |
| **25.Tenant density per hectare** | 408 |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 18.30m wide Kanjur Village Road |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Minimum 7.5 m |
| **29.Existing structure (s) if any** | Debris/Excavation material partly shall be reused and partly shall be disposed to authorized landfill sites |
| **30.Details of the demolition with disposal (If applicable)** | Debris/Excavation material partly shall be reused and partly shall be disposed to authorized landfill sites |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | M.C.G.M. |
| | **Fresh water (CMD):** | 186 |
| | **Recycled water - Flushing (CMD):** | 94 |
| | **Recycled water - Gardening (CMD):** | 19 |
| | **Swimming pool make up (Cum):** | 2 |
| | **Total Water Requirement (CMD) :** | 301 |
| | **Fire fighting - Underground water tank(CMD):** | 300 KL |
| | **Fire fighting - Overhead water tank(CMD):** | 75 KL |
| | **Excess treated water** | 106 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | M.C.G.M. |
| | **Fresh water (CMD):** | For Domestic: From M.C.G.M. = 173 KLD & From RWH tank = 13 KLD |
| | **Recycled water - Flushing (CMD):** | 94 |
| | **Recycled water - Gardening (CMD):** | 0 |
| | **Swimming pool make up (Cum):** | 2 |
| | **Total Water Requirement (CMD) :** | 282 |
| | **Fire fighting - Underground water tank(CMD):** | 300 KL |
| | **Fire fighting - Overhead water tank(CMD):** | 75 KL |
| | **Excess treated water** | 125 |
| **Details of Swimming pool (If any)** | Volume of swimming pool = 2703 | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 5m to 6m below ground level |
| | **Size and no of RWH tank(s) and Quantity:** | 1 RWH tank of capacity 120 KL |
| | **Location of the RWH tank(s):** | Basement |
| | **Quantity of recharge pits:** | NA |
| | **Size of recharge pits :** | NA |
| | **Budgetary allocation (Capital cost) :** | Rs. 15.00 Lakh |
| | **Budgetary allocation (O & M cost) :** | Rs. 0.66 Lakh/annum |
| | **Details of UGT tanks if any :** | Location of the UGT tanks: Basement Level |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | The storm water collected through the storm water drains of adequate capacity will be discharged into the external SWD. |
| | **Quantity of storm water:** | 0.21 m3/sec |
| | **Size of SWD:** | 3 discharge points of size 450mm wide channel with slope 1: 300 |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | 243 |
| | **STP technology:** | MBBR (Moving Bed Bio Reactor) |
| | **Capacity of STP (CMD):** | 270 KL |
| | **Location & area of the STP:** | Basement Level. Area : 260 Sq. m. |
| | **Budgetary allocation (Capital cost):** | Rs. 74.30 Lakh |
| | **Budgetary allocation (O & M cost):** | Rs. 15.35 Lakh/annum |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Debris/Excavation material partly shall be reused and partly shall be disposed to authorized landfill sites. |
| | **Disposal of the construction waste debris:** | The construction waste shall be partly reused within plot and partly shall be disposed to Authorized landfill site. |
| **Waste generation in the operation Phase:** | **Dry waste:** | 282 kg/day |
| | **Wet waste:** | 652 kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 36 Kg/day |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Non recyclable: To M.C.G.M. and Recyclable: To recyclers |
| | **Wet waste:** | Organic Waste Converter (OWC) |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Use as manure within the premises for plants. |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | Basement |
| | **Area for the storage of waste & other material:** | 50 Sq.m. |
| | **Area for machinery:** | 12 Sq. m. |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs.9.00 Lakh |
| | **O & M cost:** | Rs. 2.71 Lakh /annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | | Not applicable | | | |

| | |
|---|---|
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |
| 42.Mode of Transportation of fuel to site | | Not applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 2703.30 Sq. m. |
| | **No of trees to be cut :** | 7 nos. |
| | **Number of trees to be planted :** | 191 nos. |
| | **List of proposed native trees :** | As given below in List of proposed plantation on ground |
| | **Timeline for completion of plantation :** | Before occupation |

## 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 | Areca chatechu | Supari | 10 | It is a medium-sized and palm tree, The seed contains alkaloids such as arecaidine and arecoline, which, Used as an interior landscaping species, Nuts are used for chewing. |
| 2 | Mimusops elengi | Bakul | 15 | Shady medium-sized evergreen tree, small white fragrant flowers, Its timber is valuable, the fruit is edible, and it is used in traditional medicine |

| | | | | |
|---|---|---|---|---|
| 3 | Azadirachta indica | Neem | 13 | Large tree, fast-growing evergreen tree, drought resistance, Medicinal properties, good for roadside plantation |
| 4 | Cassia fistula | Bahava | 15 | Medium sized deciduous tree. Beautiful yellow flowers, it is relatively drought tolerant and slightly salt tolerant. It has medicinal properties, Butterfly host plant. |
| 5 | Casuarina equisetifolia | Suru | 5 | The wood of this tree is used for shingles, fencing, and is said to make excellent hot-burning firewood., are also grown for erosion prevention, and in general as wind breaking elements. |
| 6 | Lagestroemia flos-regianae | Tamhan | 15 | State flower tree of Maharashtra Medium sized tree, beautiful purple flowers, it has medicinal properties, wood is commercially used. Helps to control soil erosion |
| 7 | Michelia champaca | Son Chapha | 25 | Medium sized evergreen tree, strongly fragrant yellow flowers used in perfume industry, Butterfly host plant |
| 8 | Murraya paniculata | Kamini | 15 | Traditionally, Murraya paniculata is used both in traditional medicine as an analgesic and for wood (for tool handles). In the West, Murraya paniculata is cultured as an ornamental tree or hedge because of its hardiness, wide range of soil tolerance (M. paniculata may grow in alkaline, clayey, sandy, acidic and loamy soils), and is suitable for larger hedges |
| 9 | Neolamarkia cadamba | Kadamba | 5 | It is a quick growing , large traffic like spreading branches, its fragment orange flowers attracts pollinators, it helps in improving physical and chemical properties of soil, Shady, large tree, ball shaped flowers. It acquires profitable medicinal and commercial properties. |
| 10 | Plumeria alba | Chapha | 10 | P. alba is often cultivated as an ornamental plant.n addition, the flowers are edible and eaten as fritters, while the heart of the wood is part of a traditional medical preparation taken as a vermifuge or as a laxative. |
| 11 | Saraca asoca | Sita Ashok | 28 | Shady evergreen tree with red-yellow flowers. |
| 12 | Delonix regia | Gulmohar | 20 | Grown as an ornamental tree,Shady trees, orange-red petals attracts birds and petals. It is planted as an ornamental tree. |

| | | | | |
|---|---|---|---|---|
| 13 | Peltophorum pterocarpum | Copper Pod | 15 | The tree is widely grown in tropical regions as an ornamental tree,The wood has a wide variety of uses, including cabinet-making[6] and the foliage is used as a fodder crop |
| **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 KW |
| | **DG set as Power back-up during construction phase** | as per requirement |
| | **During Operation phase (Connected load):** | 8935 KW |
| | **During Operation phase (Demand load):** | 4119 KW |
| | **Transformer:** | 2Nos ? 1000kva & 1No. ? 630Kva with diversity factor |
| | **DG set as Power back-up during operation phase:** | 1 DG set of 625 kVA |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | NA |

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

? Use of Solar lights for Common area and external lighting
? Use LED lights
? Use of high efficiency motor pumps with Sensors

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | ? Use of Solar lights for Common area and external lighting ? Use LED lights ? Use of high efficiency motor pumps with Sensors | 24 % |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs.38.00 Lakh (Solar system) |
| | **O & M cost:** | Rs. 1.90 Lakh/annum (Solar system) |

## 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 Suppression | 2.16 |
| 2 | Air Environment | Air & Noise Quality Monitoring - On site sensors | 10.00 |
| 3 | Air Environment | Air & Noise Quality Monitoring - By outside MOEF Approved Laboratory | 0.66 |
| 4 | Water Environment | Drinking water analysis | 0.54 |
| 5 | Land Environment | Site Sanitation | 5.00 |
| 6 | Health & Hygiene | Disinfection- Pest Control | 3.60 |
| 7 | Health & Hygiene | Health Check Up of workers | 13.50 |
| 8 | Cost towards disaster management | ---- | 752.00 |

### 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, Noise Environment & Biological Environment | Cost for Gardening | 14.87 | 1.20 |
| 2 | Air, Noise Environment & Biological Environment | Cost for Ambient air & Noise Monitoring | *No set up cost is involved | 0.22 |
| 3 | Air, Noise Environment & Biological Environment | Cost for DG Stack Exhaust Monitoring | *No set up cost is involved | 0.05 |
| 4 | Water Environment | Waste water treatment - Cost for sewage Treatment Plant | 56.30 | 14.32 |
| 5 | Water Environment | Cost for Waste water Monitoring - On site sensors | 18.00 | 1.00 |
| 6 | Water Environment | Cost for Waste water Monitoring - By outside MOEF Approved Laboratory | *No set up cost is involved | 0.03 |
| 7 | Water Environment | Water Conservation (Rain Water Harvesting System) - Cost for RWH tank | 12.00 | 0.60 |

| | | | | |
|---|---|---|---|---|
| 8 | Water Environment | Water Conservation (Rain Water Harvesting System) - Cost for treatment unit for rain water tanks | 3.00 | 0.01 |
| 9 | Water Environment | Water Conservation (Rain Water Harvesting System) - Cost for Rainwater Monitoring | *No set up cost is involved | 0.05 |
| 10 | Land Environment (Solid Waste Management) | Cost for Treatment of biodegradable garbage in OWC | 9.00 | 2.63 |
| 11 | Land Environment (Solid Waste Management) | Cost for monitoring of organic manure | *No set up cost is involved | 0.08 |
| 12 | Energy Conservation | Solar system | 38.00 | 1.90 |
| 13 | Cost towards Disaster management | -- | 393.50 | 33.57 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | 1 entry and 1 exist |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | 1 Basement , |
| | **Number and area of podia:** | 1 Podium, |
| | **Total Parking area:** | 9829.47 Sq. mt. |
| | **Area per car:** | As per NBC |
| | **Area per car:** | As per NBC |
| | **Number of 2-Wheelers as approved by competent authority:** | Permissible: Nil, Provision: 145 Nos. |
| | **Number of 4-Wheelers as approved by competent authority:** | Permissible: 565 Nos., Provision: 565 Nos. |
| | **Public Transport:** | NA |
| | **Width of all Internal roads (m):** | Minimum 6.0 mt. |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Sanjay Gandhi National Park: Within 2.00Km |
| | **Category as per schedule of EIA Notification sheet** | Category 8 (a) |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 06-07-2016 |

## Brief information of the project by SEAC

Representative of PP, Devang Shah & Architect Manoj Duggal were present during the meeting along with environmental consultant M/s Ultratech. PP informed that they have received development permission from MCGM dated 17.05.2015 and I to R permission dated 17/07/2016. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 11,500.60 m2 & total construction area of the project is 46,730.03 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to provide air cleaning system in basements. 2. Width of entry and exit gates should be 18 m.

3. Only 30% natural ventilation is available for the STP. PP to provide 30 air exchangers for adequate ventilation in the basement where STP is located.

4. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for "Karrm Panchtatva 2" Proposed Residential & Commercial project at S. No. 55, 93, 94, 107-A, Village- Kasgaon, Tehshil- Shahpur, District – Thane, 421601

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | ?Karrm Panchtatva 2? Proposed Residential & Commercial project |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | KARRM INFRASTRUCTURE PVT LTD |
| **4.Name of Consultant** | Enviro Analysts & Engineers Pvt. Ltd. |
| **5.Type of project** | Residential & Commercial Housing 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** | S. No. 55, 93, 94, 107-A |
| **9.Taluka** | Shahpur |
| **10.Village** | Kasgaon |
| **11.Area of the project** | Kasgaon Gram Panchayat |
| **12.IOD/IOA/Concession/Plan Approval Number** | Plans are approved by Thane town planning region |
| | **IOD/IOA/Concession/Plan Approval Number:** ??. ???.????? /???? /??.??????? /??? ?????? /??????? /? ? ? ? |
| | **Approved Built-up Area:** 76393.26 |
| **13.Note on the initiated work (If applicable)** | NA |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Plans approved by Thane town Planning region |
| **15.Total Plot Area (sq. m.)** | 68800.00 |
| **16.Deductions** | 3440 |
| **17.Net Plot area** | 65360 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 76393.26 |
| | **b) Non FSI area (sq. m.):** 12692.81 |
| | **c) Total BUA area (sq. m.):** 89086.07 |
| **19.Total ground coverage (m2)** | 10722.89 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 15.58 |
| **21.Estimated cost of the project** | 1180000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Type 1 (15 nos. of building with 2 wings in each building) | G+7 | 23.65 |
| 2 | Type 2 (13 nos. of building with 2 wings in each building) | G+7 | 23.65 |
| 3 | Type 3 (2 nos. of building with 2 wings in each building) | G+5 | 17.85 |

| | |
|---|---|
| **23.Number of tenants and shops** | 3218 Flats, 69 shops and 30 society offices |

| | |
|---|---|
| **24.Number of expected residents / users** | 16288 |
| **25.Tenant density per hectare** | 499.70 |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 15 m |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | 9 m (min) |
| **29.Existing structure (s) if any** | No structure (Vacant Plot) |
| **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 | NA | NA | NA | NA |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | Water resource Department |
| | **Fresh water (CMD):** | 1500 |
| | **Recycled water - Flushing (CMD):** | 729 |
| | **Recycled water - Gardening (CMD):** | 37 |
| | **Swimming pool make up (Cum):** | 0 |
| | **Total Water Requirement (CMD) :** | 2266 |
| | **Fire fighting - Underground water tank(CMD):** | 0 |
| | **Fire fighting - Overhead water tank(CMD):** | 10000 liter in each building's wing |
| | **Excess treated water** | 871 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | Water Resource Department and Terrace rain water |
| | **Fresh water (CMD):** | 1500 |
| | **Recycled water - Flushing (CMD):** | 729 |
| | **Recycled water - Gardening (CMD):** | 0 |
| | **Swimming pool make up (Cum):** | 0 |
| | **Total Water Requirement (CMD) :** | 2229 |
| | **Fire fighting - Underground water tank(CMD):** | 0 |
| | **Fire fighting - Overhead water tank(CMD):** | 10000 liter in each building's wing |
| | **Excess treated water** | 908 |
| **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 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 1-6 m |
| | **Size and no of RWH tank(s) and Quantity:** | Total 4 RWH Tanks with 40 CUM, 210 CUM, 170 CUM, 150 CUM is proposed |
| | **Location of the RWH tank(s):** | under ground |
| | **Quantity of recharge pits:** | Not proposed |
| | **Size of recharge pits :** | Not Applicable |
| | **Budgetary allocation (Capital cost) :** | 3000000 |
| | **Budgetary allocation (O & M cost) :** | 500000 |
| | **Details of UGT tanks if any :** | Domestic tank , Flushing Tank and RWH tank is proposed. |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | Natural Pattern from SE to NW |
| | **Quantity of storm water:** | 2.27 cum/sec |
| | **Size of SWD:** | 1.5 m width x 1.2 m depth |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | Grey Water Generation: 1162 KLD and Black Waste Water Generation: 656 KLD |
| | **STP technology:** | Grey Water Treatment Technology: MBBR followed by Phytorid and Black Water treatment technology: MBBR |
| | **Capacity of STP (CMD):** | 1 no. of Grey Water treatment Plant of 1280 KLD and 1 no. of Black Water Treatment Plant of 720 KLD. |
| | **Location & area of the STP:** | STP is proposed on ground |
| | **Budgetary allocation (Capital cost):** | 15100000 |
| | **Budgetary allocation (O & M cost):** | 2700000 |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | 6463.9 cum of excavated soil including 3898.56 cum of Top soil, 144210 Nos of empty cement bags, 18026.25 cft of aggregates, 120 T scrap, 1800 Nos empty paint cans,1050 Sqm of broken tiles. |
| | **Disposal of the construction waste debris:** | 2565.34 Cum of Excavated soil will be used in backfilling and rest 3898.56 cum (top soil) shall be used for landscaping, aggregates will be reuse on site for making road, Empty cement bags, scrap and empty paint can will be sold to authorised recycler, broken pieces of tiles shall be used for china mosaic waterproofing of terraces. |
| **Waste generation in the operation Phase:** | **Dry waste:** | 3253 kg/day |
| | **Wet waste:** | 4842 kg/day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 90 kg/day |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Handed over to authorised recycler |
| | **Wet waste:** | Will be treated onsite in OWC |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | Used as manure |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | on ground |
| | **Area for the storage of waste & other material:** | 399 sqm |
| | **Area for machinery:** | 12.3 sqm |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 3000000 |
| | **O & M cost:** | 500000 |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | NA | NA | NA | NA | NA |

| | |
|---|---|
| Amount of effluent generation (CMD): | NA |
| Capacity of the ETP: | NA |
| Amount of treated effluent recycled : | NA |
| Amount of water send to the CETP: | NA |
| Membership of CETP (if require): | NA |
| Note on ETP technology to be used | NA |
| Disposal of the ETP sludge | NA |

## 38.Hazardous Waste Details

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

## 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 | NA | NA | NA | NA | NA | NA |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | NA | NA | NA | NA |

| | |
|---|---|
| 41.Source of Fuel | NA |
| 42.Mode of Transportation of fuel to site | NA |

## 43.Green Belt Development

| | |
|---|---|
| **Total RG area :** | 7262.44 sq.m |
| **No of trees to be cut :** | 0 |
| **Number of trees to be planted :** | 1030 |
| **List of proposed native trees :** | Neem , Gulmohar, Ashoka , Mango, Gamhar, Jamun, Awla, Asan, Arjun, Ber, Bahava, Maharakh, Bherali mad |
| **Timeline for completion of plantation :** | End of the 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 | Azadirachta indica | Neem | 80 | Medicinal Plant |
| 2 | Delonix regia | Gulmohar | 80 | Ornamental plant |
| 3 | Saraca asoca | Ashoka | 80 | Ever green tree |
| 4 | Mangifera indica | Mango | 80 | Fruit bearing tree |
| 5 | Gmelina arborea | Gamhar | 80 | medicinal plant |
| 6 | Syzygium cumini | Jamun | 80 | fruit bearing tree |
| 7 | Phyllanthus emblica | Awla | 80 | fruit bearing tree |
| 8 | Terminalia Tomentosa | Asan | 80 | ornamental |

| | | | | |
|---|---|---|---|---|
| 9 | Terminalia arjuna | Arjun | 90 | medicinal |
| 10 | Ziziphus mauritiana | Ber | 90 | fruit bearing |
| 11 | Cassia fistula | Bahava | 60 | flowering tree |
| 12 | Ailanthus excelsa | Maharakh | 80 | flowering tree |
| 13 | Caryota urens | Bherali mad | 70 | flowering 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)** | 100 KVA |
| | **DG set as Power back-up during construction phase** | 82.5 KVA (2 nos.) |
| | **During Operation phase (Connected load):** | 17.45 MVA |
| | **During Operation phase (Demand load):** | 4.45 MVA |
| | **Transformer:** | 1500 KVAx3 nos. |
| | **DG set as Power back-up during operation phase:** | For Services : 6Nos. x 35 KVA , Sector A: 1 nos. x 15 KVA , Sector B: 1 nos. x 82.5 KVA , Sector C: 1 nos. x 62.5 KVA and Sector D: 1 nos.x 50 KVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

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

70% of common area lighting and infra lighting will be on solar rest 30% will be on LED. Use of VFD in proposed lift. Use of energy efficient motor in WTP, STP, Domestic water pumping, flushing water pumping system. Solar hot water system is proposed.

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | 70% use of solar for common area lighting | 100% |
| 2 | 70% use of solar for infra. lighting | 100% |
| 3 | 30% use of LED for common area lighting | 10% |
| 4 | 30% use of LED for infra. lighting | 7.14% |
| 5 | Use of VFD for proposed lift | 20% |

## 50.Details of pollution control Systems

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

| | | |
|---|---|---|
| NA | NA | NA |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 16500000 |
| | **O & M cost:** | 1500000 |

## 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 | 3.0 |
| 2 | Health and Safety | Site Sanitation & Safety | 4.0 |
| 3 | Environment Monitoring | Air, Noise and Water | 3.5 |
| 4 | Health and Safety | Disinfection | 0.85 |
| 5 | Health and Safety | Health Checkup of labors | 3.8 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Water Environment | Sewage Treatment Plant | 151 | 27 |
| 2 | Rain Water Harvesting | RWH System | 30 | 5 |
| 3 | Water Environment | Water treatment plant | 95 | 20 |
| 4 | Solid Waste Management | Organic Waste Convertor | 30 | 5 |
| 5 | Energy Saving | Solar Energy system | 165 | 15 |
| 6 | Green belt Development | Landscaping | 187 | 13 |
| 7 | Disaster Management | Disaster Management Plan | 330.27 | 21.38 |

## 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:** | 1 |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | Not Proposed |
| | **Number and area of podia:** | Not Proposed |
| | **Total Parking area:** | 4248.50 |
| | **Area per car:** | 27 |
| | **Area per car:** | 27 |
| | **Number of 2-Wheelers as approved by competent authority:** | 680 nos of 2 wheeler and 680 nos. of Cycles |
| | **Number of 4-Wheelers as approved by competent authority:** | 21 nos of cars |
| | **Public Transport:** | Not Applicalble |
| | **Width of all Internal roads (m):** | Min width of internal road 6 m and maximum width of the internal road is 15 m |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | No protected area within 10 km from the project site |
| | **Category as per schedule of EIA Notification sheet** | 8 (a) |
| | **Court cases pending if any** | No |
| | **Other Relevant Informations** | The proposed project was heard in SEAC-II in its 49th SEAC-II meeting as item no 23 and is recommended to SEIAA for grant of environmental clearance |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 03-05-2016 |

## Brief information of the project by SEAC

Representative of PP, Namdev Jadhav & Architect Mihir Kotak were present during the meeting along with environmental consultant M/s EAEPL. PP informed that there is change in name of PP from Karrm Panchtatva 3 to Karrm Panchtatva 2.ï¿½?? PP also informed that all the plans for the project are approved by Thane Town Planning region with 1.3 (1.1 +0.2 (premium)) FSI. The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 68,800 m2 & total construction area of the project is 89,086.07 m2. Height of the building is 23.65 m. Number of tenants are 3218 flats. Expected population is 16,288. Water demand is 2218 KLD & solid waste generation is 8095 kg/day. PP has provided separate STP for grey water (1280 KLD) & sewage water (720 KLD). Dedicated fire station in the project is proposed by PP. PP also informed that Operation & maintenance cost by bear by him till the time Grampanchayat takes over the Fire Station. PP informed that they will be utilizing excess treated water on the nearby agricultural lands. PP also submitted agreement with farmers for 8 hectors of land & storage arrangements for monsoon season. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record.

## DECISION OF SEAC

**During discussion following points emerged:** 1. It is observed that there are no sewer lines & no storm water drainage lines exist in the project area.

2. Further, PP informed that entire treated water should be reused / recycled in the project itself to ensure the zero discharge outside the project boundary. PP to submit details accordingly. PP to submit detailed water budget indicating fool proof mechanism achieving zero discharge.

3. PP to ensure that BOD of treated water should be less than 5 mg/lit. PP to present appropriate technology to achieve the same.

4. PP to submit detailed calculations of waste water utilization after treatment with the farmers and necessary storage arrangement during monsoon season.

5. PP to submit details of Operation & Maintenance cost required for the MSW and sewage treatment during operation of the project.

6. It is observed that nallah is passing through the project site. PP to ensure that no sewage, treated or untreated, should be discharged in the nallah

. 7. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Reisdential and Commercial Construction project

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Yashwin Anand |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s. Vilas Javdekar & Sanjeevani Developers LLP |
| **4.Name of Consultant** | Not applicable |
| **5.Type of project** | Housing prokect- Residential and Commercial construction 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** | Not applicable |
| **8.Location of the project** | S. no. 24/3/1, 24/3/2, 24/3/3, 24/4, 24/5A, 24/7C/1, 24/7C/2, 24/6, 24/7A, 24/5B, Mauje- Sus, Pune |
| **9.Taluka** | Mulshi |
| **10.Village** | Sus |
| **11.Area of the project** | PMRDA (Town Planning) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Sanctioned by PMRDA |
| | **IOD/IOA/Concession/Plan Approval Number:** PMRDA - CR NO. 859-16-17 Dated 29-11-2016 |
| | **Approved Built-up Area:** 33420.17 |
| **13.Note on the initiated work (If applicable)** | Compound wall |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not Applicable |
| **15.Total Plot Area (sq. m.)** | 14,370 sqm |
| **16.Deductions** | 2647.42 sqm |
| **17.Net Plot area** | 11,722.58 sqm |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** Residential FSI area: 15,184.25 sqm, Amenity FSI area: 2482.42 sqm, Total FSI: 17,666.67 sqm |
| | **b) Non FSI area (sq. m.):** Residential Non FSI area: 13,670.07 sqm, Amenity Non FSI area: 2083.43 sqm, Total FSI: 15,753.50 sqm |
| | **c) Total BUA area (sq. m.):** Residential: 28,854.32 sqm, Amenity: 4565.85 sqm, Total: 33,420.17 sqm |
| **19.Total ground coverage (m2)** | 3613.94 sqm |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 25 % |
| **21.Estimated cost of the project** | 480000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Building A | P+11 | 34.20 m |
| 2 | Building B | P+11 | 34.20 m |
| 3 | Building C | P+11 | 34.20 m |
| 4 | Building D | P+11 | 34.20 m |
| 5 | Commercial: Amenity Building | P+ 5 | 19.73 m |
| 6 | Clubhouse | G+1 | 7.92 m |

| | |
|---|---|
| **23.Number of tenants and shops** | Tenements: 266<br>No. of Offices: 20 |

| | |
|---|---|
| **24.Number of expected residents / users** | Residential: 1330, Commercial: 352, Total: 1682 |
| **25.Tenant density per hectare** | 250 tenement/ha |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 24 m |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | 9 m |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | Sus Gram Panchayat |
| | **Fresh water (CMD):** | 134 KL |
| | **Recycled water - Flushing (CMD):** | 72 KL |
| | **Recycled water - Gardening (CMD):** | 30 KL |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 236 KL |
| | **Fire fighting - Underground water tank(CMD):** | 200 KL |
| | **Fire fighting - Overhead water tank(CMD):** | 100 KL |
| | **Excess treated water** | 84 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | Sus Gram Panchayat |
| | **Fresh water (CMD):** | 134 KL |
| | **Recycled water - Flushing (CMD):** | 72 KL |
| | **Recycled water - Gardening (CMD):** | 0 |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 206 KL |
| | **Fire fighting - Underground water tank(CMD):** | 200 KL |
| | **Fire fighting - Overhead water tank(CMD):** | 100 KL |
| | **Excess treated water** | 114 |
| **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 | Not applicable | 134 | 134 | Not applicable | 10 | 10 | Not applicable | 186 | 186 |
| Gardening | Not applicable | 30 | 30 | Not applicable | 30 | 30 | Not applicable | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 64 m |
| | **Size and no of RWH tank(s) and Quantity:** | Not applicable |
| | **Location of the RWH tank(s):** | Not applicable |
| | **Quantity of recharge pits:** | 7 no. with borewell |
| | **Size of recharge pits :** | 1 m x 2 m x 1.5 m |
| | **Budgetary allocation (Capital cost) :** | Rs 1,98,8000/- |
| | **Budgetary allocation (O & M cost) :** | Rs 13,200/- per annum |
| | **Details of UGT tanks if any :** | Domestic UGT: 191 KL<br>Flushing UGT: 74 KL (considered in STP)<br>Fire UGT: 200 KL |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | As per contour |
| | **Quantity of storm water:** | 8066 cum/year |
| | **Size of SWD:** | 300 mm to 600 mm with slope 1:200 |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 186 KLD |
| | **STP technology:** | MBBR |
| | **Capacity of STP (CMD):** | 1 no. with capacity:198 KL |
| | **Location & area of the STP:** | Please refer layout |
| | **Budgetary allocation (Capital cost):** | Rs 60,00,000/- |
| | **Budgetary allocation (O & M cost):** | Rs 12,33,300/- per annum |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Not applicable |
| | **Disposal of the construction waste debris:** | Land filling on same site |
| **Waste generation in the operation Phase:** | **Dry waste:** | 280 kg/day |
| | **Wet waste:** | 420 kg/day |
| | **Hazardous waste:** | Not applicable |
| | **Biomedical waste (If applicable):** | Not applicable |
| | **STP Sludge (Dry sludge):** | 28.25 kg/day |
| | **Others if any:** | Not applicable |
| **Mode of Disposal of waste:** | **Dry waste:** | Through Authorized vendors |
| | **Wet waste:** | Mechanical composter |
| | **Hazardous waste:** | Not applicable |
| | **Biomedical waste (If applicable):** | Not applicable |
| | **STP Sludge (Dry sludge):** | Manure |
| | **Others if any:** | Not applicable |
| **Area requirement:** | **Location(s):** | Please refer layout |
| | **Area for the storage of waste & other material:** | 37.5 sqm |
| | **Area for machinery:** | 15 sqm |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs 15,00,000/- |
| | **O & M cost:** | Rs 1,50,000/- per annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 1 | pH | Not applicable | 6.0-8.5 | 5.5-7.0 | Not applicable |
| 2 | Oil & Grease | mg/l | 10 – 20 | < 10 | Not applicable |
| 3 | BOD | mg/l | 200-250 | < 10 | Not to exceed 10 |
| 4 | COD | mg/l | 350-450 | <60 | Not to exceed 100 |
| 5 | Total Suspended solids | mg/l | 150-200 | <10 | Not to exceed 50 |
| 6 | Total nitrogen | mg/l | 120 | <50 | Not applicable |
| 7 | Nitrate | mg/l | 15-16 | <10 | Not applicable |
| 8 | Dissolve Phosphate | mg/l | 13-15 | <5 | Not applicable |
| 9 | Fecal coliform | MPN | 1000000 | Nil | Not applicable |

| | |
|---|---|
| Amount of effluent generation (CMD): | Not applicable |
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

| | |
|---|---|
| 41.Source of Fuel | Not applicable |
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 1380.72 sqm |
| | **No of trees to be cut :** | Not applicable |
| | **Number of trees to be planted :** | 231 |
| | **List of proposed native trees :** | As per below list |
| | **Timeline for completion of plantation :** | 1 year |

## 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 | Bauhinia alba | Kanchan white | 22 | Native, Drought tolerant, flowering, ornamental, attracts insects |
| 2 | Bauhinia purpurea | Kanchan | 35 | Medicinal, drought tolerant |
| 3 | Crataeva nurvula | Vayvarna | 20 | Medicinal, drought tolerant |
| 4 | Cordia sebestena | Cordia speci | 25 | Medicinal, drought tolerant, bird attracting, hardy |
| 5 | Dillenia indica | Karmal | 45 | Drought tolerant, edible fruits, well flowering, honey bee attracting species, host plant for butterfly |
| 6 | Erythrina indica | Pangara | 3 | Native, drought tolerant, hanrdy, flower and insect attracting species |
| 7 | Lagerstromia speciosa | Taman | 24 | Native, medicinal, soil erosion control |
| 8 | Mangifera indica | Mango | 15 | Native, drought tolerant, edible fruits, bird attracting |
| 9 | Mimusops elengi | Bakul | 42 | Medicinal value, fragrant flowers, butterfly larvae host plant, fast growing |
| **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 | Not applicable | Not applicable | Not applicable |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | MSEDCL |
| | **During Construction Phase: (Demand Load)** | 30 KW |
| | **DG set as Power back-up during construction phase** | 40 kVA x 1 |
| | **During Operation phase (Connected load):** | 1229.24 KW |
| | **During Operation phase (Demand load):** | 496 KW |
| | **Transformer:** | 630 KVA x 1 |
| | **DG set as Power back-up during operation phase:** | 160 KVA x 1 |
| | **Fuel used:** | diesel |
| | **Details of high tension line passing through the plot if any:** | Not applicable |

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

? Use of T5+ LED fixtures with electronic Ballast against T8+ CFL
? Motion sensors are proposed for parking areas & use of LED in common area
? Use of non conventional energy i.e. Solar water heating system.
? Energy efficient transformer
? Solar lighting for common areas.

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Use of T5 + LED | 26937 kwh/annum |
| 2 | Energy saving by LED in common and parking area | 17432.4 kwh/annum |
| 3 | Solar water heater | 445725 kwh/annum |
| 4 | Street lighting | 11957.4 kwh/annum |
| 5 | Transformer saving | 8830.08 kwh/annum |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs 42,09,625/- |
| | **O & M cost:** | Rs 2,10,482/- per 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 | Erosion Control | Dust control measures, barricading | Rs 4,00,000 |

| | | | |
|---|---|---|---|
| 2 | Site safety | Safety nets, safety equipments | Rs 3,50,000 |
| 3 | Site sanitation | Toilets and cleanliness for labourers | Rs 1,50,000 |
| 4 | Disinfection and health checkups | monitoring of health of labourers and hygiene | Rs 1,00,000 |
| 5 | Environmental monitoring | Air, water, soil monitoring | Rs 1,00,000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | STP | Installation and civil cost for 198 KLD capacity | Rs 60,00,000 | Rs 12,33,300 |
| 2 | Drainage line cost | upto final disposal | Rs 5,60,000 | Rs 17,000 |
| 3 | Rain water harvesting | internal piping | Rs1,98,000 | Rs13,200 |
| 4 | Storm water networking | upto final disposal | Rs10,46,000 | Rs 31,000 |
| 5 | storm water line cost | upto final disposal | Rs 6,00,000 | Rs 18,000 |
| 6 | Solid waste management | Installation and operation | Rs15,00,000 | Rs 1,50,000 |
| 7 | Green belt development | Plantation of trees and lawn | Rs 64,67,140 | Rs 3,70,214 |
| 8 | Energy saving measures (including solar water heater) | Installation and operation | Rs 42,09,625 | Rs 2,10,482 |
| 9 | Environmental monitoring | Air, water, soil, noise monitoring | 0 | Rs 1,60,000 |
| 10 | Safety, traini ng and awareness | Fire safety | Rs 9,00,000 | 0 |
| 11 | Water tanker supply | in case of emergency | Fixed amount will be taken from the purchaser at the time of purchase (Rs 1,00,000/- per flat) | 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | 1 |
| **Parking details:** | **Number and area of basement:** | 0 |
| | **Number and area of podia:** | 0 |
| | **Total Parking area:** | 4726 sqm |
| | **Area per car:** | 30 sqm |
| | **Area per car:** | 30 sqm |
| | **Number of 2-Wheelers as approved by competent authority:** | 322 |
| | **Number of 4-Wheelers as approved by competent authority:** | 109 |
| | **Public Transport:** | Not applicable |
| | **Width of all Internal roads (m):** | 9 m |
| | **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** | 8 a (B-2) |
| | **Court cases pending if any** | No |
| | **Other Relevant Informations** | Not applicable |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 18-05-2016 |



## Brief information of the project by SEAC

PP submitted their application for prior Environment Clearance for total plot area of 14,370.00 Sq.Mtrs, BUA of 35,491.82 Sq. Mtrs and FSI area of 17,791.48 Sq. Mtrs. PP proposes to construct 4 nos. of residential buildings, 1 no. of Amenity building having maximum height of 37.05 Mtrs and a club house. The case was earlier considered in 48thmeeting of the SEAC - III held from 7th to 10th June 2016 and 54th meeting of the SEAC - III held from 19th to 23rd September 2016.This committee took up the compliance report and other documents submitted by the Project Proponent for examination. The proposal is appraised as category 8 (a) B2.

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit IOD/IOA/Concession Document/Plan Approval or any other form of documents as applicable clarifying its conformity with local planning rules and provisions there under as per the Circular dated 30.01.2014 issued by the Environment Department, Govt. of Maharashtra.

**SEAC decided to recommend the proposal for Prior Environmental Clearance, subject to PP complying with the above conditions**

**Specific Conditions by SEAC:**

## SEIAA DECISION

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Expansion of Residential Project " Raheja Residency"

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Expansion of Residential Project " Raheja Residency" |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr. D. D. Bhagwat |
| **4.Name of Consultant** | Mahabal Enviro Engineers Pvt. Ltd. |
| **5.Type of project** | Residential Project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Expansion Project |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not obtained as the plinth of existing buildings completed prior to 07.07.2004 |
| **8.Location of the project** | C.T.S. No. 827A/1A & 827A/2, Malad (East), Mumbai, Maharashtra |
| **9.Taluka** | Borivali |
| **10.Village** | Malad |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai (MCGM) |
| **12.IOD/IOA/Concession/Plan Approval Number** | Yes approved plan received from MCGM |
| | **IOD/IOA/Concession/Plan Approval Number:** Approved Plan No. CHE/7127/BP/WS/AP dt. 08.08.2014 & 19.03.2016 |
| | **Approved Built-up Area:** 51172.54 |
| **13.Note on the initiated work (If applicable)** | Construction area of Existing buildings (Wing A to E) is 33823.85 m2, (Plinth Completed prior to 7.7.2004) |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Not Applicable |
| **15.Total Plot Area (sq. m.)** | 57,252.10 m2 |
| **16.Deductions** | 1,517.30 m2 |
| **17.Net Plot area** | 55,734.80 m2 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 1,26,900 m2 |
| | **b) Non FSI area (sq. m.):** 1,18,100 m2 |
| | **c) Total BUA area (sq. m.):** 2,45,000 m2 |
| **19.Total ground coverage (m2)** | 29851 m2 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 52.13% |
| **21.Estimated cost of the project** | 4546300000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Building A | S + 10 floors | 36.15 |
| 2 | Building B & C | S + 7 Floors | 26.15 |
| 3 | Building D & E | S + 20 Floors | 66.35 |
| 4 | Building F, G & H | B + S + 20 Floors | 69.15 |
| 5 | Building I, J, K, L & M | LS + US + 21 Floors | 68.85 |
| 6 | Building N | LS + US + 14 Floors | 47.15 |
| 7 | Building P | B+LS+S+17 | 54.75 |
| 8 | Building R, S, T, U, V & W | B+LS+US+20 | 69.60 |

| | | | |
|---|---|---|---|
| 9 | Club House | B+G+1 | 9.80 |

| | |
|---|---|
| **23.Number of tenants and shops** | 1666 Nos. |
| **24.Number of expected residents / users** | 8330 Nos. |
| **25.Tenant density per hectare** | 291/ha |
| **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 project site is accessible by 36.6 m wide Reservoir Road off General Arun Kumar Vaidya Marg from West side and 18.30 m wide road from North and East side |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | min 6 m |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MCGM |
| | **Fresh water (CMD):** | 762 |
| | **Recycled water - Flushing (CMD):** | 375 |
| | **Recycled water - Gardening (CMD):** | 70 |
| | **Swimming pool make up (Cum):** | 12 |
| | **Total Water Requirement (CMD) :** | 1137 |
| | **Fire fighting - Underground water tank(CMD):** | As per CFO NOC |
| | **Fire fighting - Overhead water tank(CMD):** | As per CFO NOC |
| | **Excess treated water** | 594 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | MCGM |
| | **Fresh water (CMD):** | 601 |
| | **Recycled water - Flushing (CMD):** | 375 |
| | **Recycled water - Gardening (CMD):** | - |
| | **Swimming pool make up (Cum):** | 12 |
| | **Total Water Requirement (CMD) :** | 1137 |
| | **Fire fighting - Underground water tank(CMD):** | As per CFO NOC |
| | **Fire fighting - Overhead water tank(CMD):** | As per CFO NOC |
| | **Excess treated water** | 664 |
| **Details of Swimming pool (If any)** | Swimming Pool is provided | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 5 - 6m |
| | **Size and no of RWH tank(s) and Quantity:** | 18 RWH Tanks with total capacity of 450 m3 |
| | **Location of the RWH tank(s):** | Below Ground |
| | **Quantity of recharge pits:** | - |
| | **Size of recharge pits :** | - |
| | **Budgetary allocation (Capital cost) :** | 80.5 lakh |
| | **Budgetary allocation (O & M cost) :** | 8.1 Lakh/year |
| | **Details of UGT tanks if any :** | 18 Nos. of separate UG tanks are provided. |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | Towards South side |
| | **Quantity of storm water:** | 5552.26 m3/hr |
| | **Size of SWD:** | 600 mm x 800 mm and 750 mm x 1000 mm |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | 1050 KLD |
| | **STP technology:** | MBBR |
| | **Capacity of STP (CMD):** | 3 STP with total capacity of 1250 KLD (400 KLD + 425 KLD + 425 KLD) |
| | **Location & area of the STP:** | Ground (Area: 940 m2) |
| | **Budgetary allocation (Capital cost):** | 250 Lakh |
| | **Budgetary allocation (O & M cost):** | 50 Lakh/year |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Construction Debris: 7114 m3 |
| | **Disposal of the construction waste debris:** | The construction debris will be utilized at site for Road Paving and plinth filling |
| **Waste generation in the operation Phase:** | **Dry waste:** | 1666 kg/d |
| | **Wet waste:** | 2499 kg/d |
| | **Hazardous waste:** | not applicable |
| | **Biomedical waste (If applicable):** | not applicable |
| | **STP Sludge (Dry sludge):** | 10 KLD |
| | **Others if any:** | not applicable |
| **Mode of Disposal of waste:** | **Dry waste:** | Dry garbage will be segregated & disposed off to recyclers |
| | **Wet waste:** | Wet garbage will be composted using Mechanical Composting Technology and used as organic manure for landscaping |
| | **Hazardous waste:** | not applicable |
| | **Biomedical waste (If applicable):** | not applicable |
| | **STP Sludge (Dry sludge):** | Sludge use as manure for gardening |
| | **Others if any:** | not applicable |
| **Area requirement:** | **Location(s):** | Ground |
| | **Area for the storage of waste & other material:** | 80 m2 |
| | **Area for machinery:** | 32 m2 each |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 120 Lakh |
| | **O & M cost:** | 48 Lakh/Year |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | | Not applicable | | | |

| | |
|---|---|
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |
| 42.Mode of Transportation of fuel to site | | Not applicable | | |

## 43.Green Belt Development

| | |
|---|---|
| **Total RG area :** | 13,966.42 m2 |
| **No of trees to be cut :** | No trees on site |
| **Number of trees to be planted :** | 793 |
| **List of proposed native trees :** | as below |
| **Timeline for completion of plantation :** | 2 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 | 41 | Semi-evergreen tree with medicinal value |
| 2 | ALBIZIA LEBBECK | SHIRISH | 39 | Shady tree, yellowish green fragrant flowers |
| 3 | ALSTONIA SCHOLARIS | SAPTAPARN | 45 | Shady, large evergreen Tree, white fragrant flowers |
| 4 | BAUHINEA PURPUREA | KANCHAN | 37 | Shady Tree |
| 5 | ERYTHRINA INDICA | PANGARA | 40 | Medium sized deciduous tree. Bright scarlet flowers. |

| | | | | |
|---|---|---|---|---|
| 6 | CASSIA FISTULA | BAHAVA | 35 | Medium sized deciduous tree. Beautiful yellow flowers, Butterfly host plant |
| 7 | PONGAMIA PINNATA / GLABRA | KARANJ | 51 | Shady tree. |
| 8 | MIMOSUPS ELENGII | BAKUL | 50 | Shady tree, small white fragrant flowers |
| 9 | PLUMERIA ALBA | CHAPHA | 160 | Medium sized evergreen tree, fragrant yellow flowers, Butterfly host plant |
| 10 | ANTHOCEPHALLUS CADAMBA | KADAMB | 56 | Shady, large deciduous tree, fast-growing graceful tree, ball shaped flowers. |
| 11 | MILLINGTONIA HORTENSIS | INDIAN CORK TREE | 3 | Shady Tree |
| 12 | LAGERSTROEMIA FLOS-REGINEAE | TAMHAN | 40 | State flower tree of Maharashtra Medium sized tree, beautiful purple flowers |
| 13 | MILICIA EXCELSA | KHAYA | 3 | MEdium sized decidous tree |
| 14 | MANGIFERA INDICA | MANGO | 46 | Large, shady tree, fruity plant |
| 15 | SYZYGIUM CUMINI | JAMUN | 38 | Shady tree, white juicy fruit |
| 16 | PSIDIUM GUAJAVA | GUAVA | 29 | Medium sized tree, fruity plant |
| 17 | MANILKARA ZAPOTA | CHIKU | 45 | Medium sized tree, fruity plant |
| 18 | ANNONA RETICULATA | CUSTARD APPLE | 35 | Medium sized tree, fruity plant |
| **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 :** | Reliance Energy |
| | **During Construction Phase: (Demand Load)** | 500 kVA |
| | **DG set as Power back-up during construction phase** | 500 kVA |
| | **During Operation phase (Connected load):** | 26 MW |
| | **During Operation phase (Demand load):** | 21 MW |
| | **Transformer:** | - |
| | **DG set as Power back-up during operation phase:** | Total 1125 kVA (62.5 kVA X 18) |
| | **Fuel used:** | Diesel |
| | **Details of high tension line passing through the plot if any:** | No |

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

Energy efficient lighting using LED
Use of high energy efficient pumps for fire fighting, UG tanks and STP
Solar Street lights are proposed for common areas such as open spaces, pathways, RG etc.
Solar hot water will be provided

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Total Savings | 23.08% |
| 2 | Saving through solar hot water | 13.25% |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 130 lakh |
| | **O & M cost:** | 6.5 lakh / year |

# 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Water spray for dust suppression | - | 5 |
| 2 | Site sanitation and Potable Water Supply to Labour | - | 10 |

| | | | |
|---|---|---|---|
| 3 | Environmental Monitoring | (As per the CPCB guidelines through MoEF Approved laboratories – Ambient Air-RSPM, PM2.5, SO2, NOx, CO), Noise: Leq day time and Night Time) | 4 |
| 4 | Health check-up & first aid | - | 5 |
| 5 | Safety Personal Protective Equipment | (Helmets, Safety Shoes, Safety Belt, Googles, Hand Gloves etc.) | 12 |
| 6 | Traffic Management | (Sign Boards, Persons at entry exit and Parking area) | 4 |
| 7 | Safety nets | - | 25 |
| 8 | Storm water Management | SWD along plot boundary and Sedimentation Pits | 4 |
| 9 | Tyre cleaning and Vehicle maintenance | - | 4 |
| 10 | Safety Training to Workers (Twice in Year), Safety Officer | - | 8 |
| 11 | Disinfection | - | 3 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | STP (Tertiary) | Continuous O & M | 250 | 50 |
| 2 | Solar Hot Water | Weekly | 130 | 6.5 |
| 3 | Rain Water Harvesting | During rainy season (Cleaning of RWH tanks and Filtration chamber) | 80.5 | 8.1 |
| 4 | Solid waste Composting plant | Continuous O & M | 120 | 48 |
| 5 | Landscape Development | Daily | 140 | 21 |
| 6 | Environmental Monitoring | As per the CPCB guidelines through MoEF Approved laboratories | - | 4 |

## 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 |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | No junction near site |
| **Parking details:** | **Number and area of basement:** | 1 Basement with 25,460 m2 area |
| | **Number and area of podia:** | 1 Podium with 24,940 m2 area |
| | **Total Parking area:** | Gross parking area: 50,400 m2 |
| | **Area per car:** | - |
| | **Area per car:** | - |
| | **Number of 2-Wheelers as approved by competent authority:** | 210 Nos. |
| | **Number of 4-Wheelers as approved by competent authority:** | 2126 Nos. |
| | **Public Transport:** | - |
| | **Width of all Internal roads (m):** | Min 6 m |
| | **CRZ/ RRZ clearance obtain, if any:** | Not Applicable |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | The plot boundary is at 40 m from the boundary of SGNP. The phase 1 development i.e. buildings A to H are beyond 100 m from SGNP. For the portion of development of Phase II affected by 100 m application is submitted for NBWL NOC. |
| | **Category as per schedule of EIA Notification sheet** | 8(b) |
| | **Court cases pending if any** | Bombay High Court. Suit No. 1628 of 2008. The only orders relevant to the proposed are the order dated 19.07.2012 disposing of Appeal Nos. 817 of 2010 and 806 of 2010 in the said Suit; there is no restriction on the development which is being carried on / is to be carried on by the Applicant on the said land. |
| | **Other Relevant Informations** | We have already applied for NBWL vide our letter dt. 15.12.2015 |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 10-12-2015 |

## Brief information of the project by SEAC

Representative of PP, D.D. Bhagwat & Architect Sharad Kale were present during the meeting along with environmental consultant M/s Mahabal. PP informed that they have received approved plans vide No. CHE/7127/BP/WS/AP dated 08.08.2014 & 19.03.2016. PP informed that existing buildings (Wing A to H) admeasuring total construction area of 35,126.52 m2 have been completed prior to 7/07/2004 notification. PP submitted plinth checking certificate dated 05/02/2004, 30/06/2004 & 29/06/2004 issued by MCGM .

PP also informed that the proposal comprised of 7 numbers of residential buildings with 21 wings.The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. It is noted that the project is earlier considered in 44th meeting of SEAC II in which ToR was issued. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed PP stated that total plot area is 57,252.10 m2 & total construction area proposed in this meeting of the project is 2,45,000 m2. Committee noted that the project under 8a (B1) category of EIA Notification, 2006. Consolidated statements, form 1, 1A, presentation & plans submitted are taken on the record

## DECISION OF SEAC

**During discussion following points emerged:**

1. It is also observed that proposed project site is abutting the SGNP and partly falls within 30 m buffer zone from its boundary. As per Hon. NGT, Pune order dated July 20, 2015 given in the application no. 34/2015, construction cannot be allowed in 100 m area. 2. PP, if applicable, to obtain NOC from Wild Life Board in terms of OM of MoEF dated 30/03/2015. Further, it is informed that part of the project falls within 30 m of SGNP. PP & concerned Municipal Corporation to ensure the compliance of the NGT order dated 03/12/2015 in the application MA.No.125/2014 before issuing commencement certificate for further construction permissions in the area.

3. PP to submit shadow analysis and heat island effect and measures to reduce the impacts.

4. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honi¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

A site visit will be conducted by the MPCB to ascertain issues discussed in the SEIAA

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to defer the proposal till PP submits the additional information as per above conditions within 30 days

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Application for Amendment in Environmental clearance for Proposed Residential tower building and Multi Storied Public Parking Lot building on Plot bearing CS No 2/1629 & 1A/1629 Of Lower Parel division, Plot No 249 & 249 A 248B Of Worli estate scheme no 52, Worli Mumbai

**General Information:** Venue: Maharashtra State Finance Corporation (MSFC), United India Building, 1st Floor, Sir P.M.Road, Fort,Mumbai-01 Time : 10.00 AM

| | |
|---|---|
| **1.Name of Project** | Amendment in EC for Proposed Residential tower building and Multi Storied Public Parking Lot building on Plot bearing CS No 2/1629 & 1A/1629 Of Lower Parel division, Plot No 249 & 249 A 248B Of Worli estate scheme no 52, Worli Mumbai |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | M/s K Raheja Pvt. Ltd |
| **4.Name of Consultant** | M/s. Enviro Analysts & Engineers Pvt. Ltd. |
| **5.Type of project** | Residential tower building plus public parking lot Project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Amendment in EC for Proposed Residential tower building and Multi Storied Public Parking Lot building |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | EC has been received vide letter no : SEAC -2010/CR-323/TC-2 dated 11th June. 2014. |
| **8.Location of the project** | Plot bearing CS No 2/1629 & 1A/1629 Of Lower Parel division, Plot No 249 & 249 A 248B Of Worli estate scheme no 52, Worli Mumbai |
| **9.Taluka** | mumbai |
| **10.Village** | worli |
| **11.Area of the project** | MCGM |
| **12.IOD/IOA/Concession/Plan Approval Number** | concession document |
| | **IOD/IOA/Concession/Plan Approval Number:** EB/1105/GS/A |
| | **Approved Built-up Area:** 55676.00 |
| **13.Note on the initiated work (If applicable)** | The PPL building has been constructed on site. As regards Residential building the work up to 20th habitable floors is completed. Total 1,13,496.53 Sq. M. is constructed on site |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | not applicable |
| **15.Total Plot Area (sq. m.)** | 20117.24 sqm |
| **16.Deductions** | 647.93 sqm |
| **17.Net Plot area** | 19469.31 sqm |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 54138.85 |
| | **b) Non FSI area (sq. m.):** 105600.37 |
| | **c) Total BUA area (sq. m.):** 159739.22 |
| **19.Total ground coverage (m2)** | 14448.17 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 74.21% |
| **21.Estimated cost of the project** | 8829800000 |

## 22.Number of buildings & its configuration

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

| | | | |
|---|---|---|---|
| 1 | 1 | 8 parking floors i.e. 2B+G+5 parking floors + stilts +6 structural/service floors+3 fire check floors+45 habitable floors. the 5th parking floor above the public parking lot will be for residential parking. Stilt for residential Parking & 1st part floor for welfare center for residential user in Plot bearing CS No 1A/1629 of LP division. | Residential - 227.30 m MPPL-18.80 m |

| | |
|---|---|
| **23.Number of tenants and shops** | 160 Nos |
| **24.Number of expected residents / users** | 800 Nos |
| **25.Tenant density per hectare** | 80 tenants/hector |
| **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 site is accessible from 18.30 mt. wide Natvarya Baburao Pendarkar Marg on north side and 18.30 mt wide Sudam Kalu Ahire Marg on west side, both off Anne Besant Road. |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Minimum 9.00 m |
| **29.Existing structure (s) if any** | Existing HSBC sheds which will be demolished |
| **30.Details of the demolition with disposal (If applicable)** | 4110 MT |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | MCGM |
| | **Fresh water (CMD):** | Residential -72 KLD MPPL-2 KLD |
| | **Recycled water - Flushing (CMD):** | Residential -36 KLD MPPL- 3 KLD |
| | **Recycled water - Gardening (CMD):** | 27 KLD |
| | **Swimming pool make up (Cum):** | cum |
| | **Total Water Requirement (CMD) :** | Residential -135 KLD MPPL- 5 KLD |
| | **Fire fighting - Underground water tank(CMD):** | 400 cum |
| | **Fire fighting - Overhead water tank(CMD):** | cum |
| | **Excess treated water** | 20 KLD |
| **Wet season:** | **Source of water** | MCGM |
| | **Fresh water (CMD):** | Residential -72 KLD MPPL-2 KLD |
| | **Recycled water - Flushing (CMD):** | Residential -36 KLD MPPL- 3 KLD |
| | **Recycled water - Gardening (CMD):** | 0 KLD |
| | **Swimming pool make up (Cum):** | cum |
| | **Total Water Requirement (CMD) :** | Residential -108 KLD MPPL- 5 KLD |
| | **Fire fighting - Underground water tank(CMD):** | 400 cum |
| | **Fire fighting - Overhead water tank(CMD):** | cum |
| | **Excess treated water** | 105 KLD |
| **Details of Swimming pool (If any)** | .. | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 1.5 m ? 12.0 m bgl |
| | **Size and no of RWH tank(s) and Quantity:** | Residential ? 122 KL stilt ? 57 KL |
| | **Location of the RWH tank(s):** | Ground and basement |
| | **Quantity of recharge pits:** | 23 |
| | **Size of recharge pits :** | 1.5 m |
| | **Budgetary allocation (Capital cost) :** | Rs 27 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs 1.35 Lakhs /Annum |
| | **Details of UGT tanks if any :** | Domestic Water Tank Residential -90 KL<br>MPPL-5 KL<br>Flushing Water Tank Residential -36 KL<br>MPPL-5 KL<br>Fire Water Tank Residential -300 KL<br>MPPL- 100 KL<br>Rain Water Harvesting Tank Residential ? 122 KL<br>stilt ? 57 KL<br>Location of tank Basement /Ground for RWH |
| | | |
| **35.Storm water drainage** | **Natural water drainage pattern:** | The SWD has been proposed as per the SWD remarks granted by MCGM under no Dy.Ch.E/SWD/249 Dated 21.07.2012 |
| | **Quantity of storm water:** | The SWD has been proposed as per the SWD remarks granted by MCGM under no Dy.Ch.E/SWD/249 Dated 21.07.2012 |
| | **Size of SWD:** | The SWD has been proposed as per the SWD remarks granted by MCGM under no Dy.Ch.E/SWD/249 Dated 21.07.2012 |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 97 KLD |
| | **STP technology:** | Residential ?SBR MPPL- MBBR |
| | **Capacity of STP (CMD):** | Residential ?125 KL MPPL- 10 KL |
| | **Location & area of the STP:** | Basement & ground |
| | **Budgetary allocation (Capital cost):** | Rs 65 Lakhs |
| | **Budgetary allocation (O & M cost):** | Rs 8 lakhs /annum |
| **36.Solid waste Management** | | |
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Empty cement bags- 200 nos, Steel= 3 ton , Metal = 200 sqft, Aerocan lightweight block= 250 nos, sand =200 sqft, Tiles/Marble & granite= 50 sqft, Aluminum windows =5 kg |
| | **Disposal of the construction waste debris:** | Steel cut pieces shall be used as spacers and chairs in the structure and wastage of steel (balance non usable steel of odd lengths) is sent for recycling,Wastage of sand will be used for bedding for flooring purpose. They shall also be used for backfilling and filler material for leveling of internal roads and pavements |
| **Waste generation in the operation Phase:** | **Dry waste:** | 160 Kg/day |
| | **Wet waste:** | 240 Kg/day |
| | **Hazardous waste:** | not applicable |
| | **Biomedical waste (If applicable):** | not applicable |
| | **STP Sludge (Dry sludge):** | 3 Kg/day |
| | **Others if any:** | not applicable |

| | | |
|---|---|---|
| **Mode of Disposal of waste:** | **Dry waste:** | To be hand over to Local Recyclers for recycling |
| | **Wet waste:** | To be processed in the OWC. Manure obtained shall be used for landscaping / Gardening, Excess manure shall be sold to nearby end users. |
| | **Hazardous waste:** | Not Applicable |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | To be used as a manure |
| | **Others if any:** | Not Applicable |
| **Area requirement:** | **Location(s):** | ground |
| | **Area for the storage of waste & other material:** | 110 sqm |
| | **Area for machinery:** | 2.03 m x 1.37m x 1.65m i.e 2.5Sq.m |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs 12 Lakhs |
| | **O & M cost:** | Rs 2.4 lakhs /annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | Not applicable | | | | |
| Capacity of the ETP: | Not applicable | | | | |
| Amount of treated effluent recycled : | Not applicable | | | | |
| Amount of water send to the CETP: | Not applicable | | | | |
| Membership of CETP (if require): | Not applicable | | | | |
| Note on ETP technology to be used | Not applicable | | | | |
| Disposal of the ETP sludge | Not applicable | | | | |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | Not applicable | | | |

| | |
|---|---|
| 42.Mode of Transportation of fuel to site | Not applicable |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | RG area on Ground - 5283.49 Sqm. (28 %) |
| | **No of trees to be cut :** | not applicable |
| | **Number of trees to be planted :** | 338 nos |
| | **List of proposed native trees :** | Barringtonia ,Terminalia mantaly ,Millettia pinnata ,Lagerstroemia |
| | **Timeline for completion of plantation :** | At the end of 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 | Barringtonia | Indian oak | 15 | ornamental tree |
| 2 | Terminalia mantaly | Madagascar almond | 9 | ornamental tree |
| 3 | Millettia pinnata | Karanj Tree | 15 | shadow tree |
| 4 | Lagerstroemia | Crape Myrtle | 22 | flowering trees |
| **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 | not applicable | not applicable | not applicable |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | TaTa/Reliance |
| | **During Construction Phase: (Demand Load)** | 80 kW |
| | **DG set as Power back-up during construction phase** | 100 kVA |
| | **During Operation phase (Connected load):** | 11169 Kw |
| | **During Operation phase (Demand load):** | 4825 Kw |
| | **Transformer:** | Residential ?1 X 2000 kVA MPPL- 500 kVA |
| | **DG set as Power back-up during operation phase:** | Residential ?1 X 2000 kVA MPPL- 500 kVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | Not applicable |

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

? Design with low lighting power density of 0.8 w/sft or less in common areas by using LED?S for general lighting with occupancy sensors & timer based controls
? Design with low lighting power density of 0.2 watts/sft or less in the parking areas with T5
using energy efficient 5 star rated equipments
External Light Design with low lighting power density of 0.2 watts/sft or less in the building exterior areas with use of LED?S
Use of efficient VRF or equivalent system with filters like MER

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Total Energy saving% | 26% |
| 2 | % saving through renewable energy w.r.t total saving | 10% |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 90 lakhs |
| | **O & M cost:** | Rs. 4.5 lakhs |

## 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 | Water Sprinkling, Green Belt Development, Covered storage area | 6 |
| 2 | Noise Environment | Noise Baricades and Green Belt Developments | 4 |
| 3 | Water Environment | Modular STP , Drainage with sedimentation tanks | 5 |
| 4 | Good Health Practices | Site Sanitation & Health Care | 4 |
| 5 | Environment Monitoring | Air,water,noise soil monitoring during construction phase | 3 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Solid waste management | OWC | 12 | 2.4 |
| 2 | waste water management | STP | 65 | 8 |
| 3 | electrical savings | Energy savings | 90 | 4.5 |
| 4 | RHW | RWH system | 27 | 1.35 |
| 5 | RG area | Landscaping | 105 | 21 |
| 6 | disaster management plan | DMP | 650 | 39 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | The site is accessible from 18.30 mt. wide Natvarya Baburao Pendarkar Marg on north side and 18.30 mt wide Sudam Kalu Ahire Marg on west side, both off Anne Besant Road. |
| **Parking details:** | **Number and area of basement:** | 2 nos |
| | **Number and area of podia:** | 5 nos |
| | **Total Parking area:** | 39253.38 sqm |
| | **Area per car:** | Basement= 33 sqm ,Gr. Flr. = 25 sqm , Podium= 30.9 sqm |
| | **Area per car:** | Basement= 33 sqm ,Gr. Flr. = 25 sqm , Podium= 30.9 sqm |
| | **Number of 2-Wheelers as approved by competent authority:** | residential- 23, MPPL- 20 |
| | **Number of 4-Wheelers as approved by competent authority:** | 456 |
| | **Public Transport:** | 803 |
| | **Width of all Internal roads (m):** | 6.00 m |
| | **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** | B1 |
| | **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** | 15-03-2016 |

## Brief information of the project by SEAC

Representative of PP, Nikhi Mehta & Architect Kasturi Parekar were present during the meeting along with environmental consultant M/s EAEPL. PP informed that plans of the project are approved on 21/03/2016. PP informed that they have received earlier EC vide letter dated 22/07/2011 which is amended on 11/06/2014 for total construction area of 1,29,818 m2. PP informed that they have completed construction admeasuring 1,11,636.20 m2 prior to EC. Expansion is due to amalgamation of adjoining plot admeasuring 5478.33 m2 & due to increase in incentive FSI from 0.40 to 0.50 against Public Parking Lot.

The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. It is noted that the project was earlier considered in 46th & 50th meeting of SEAC II in which TOR was approved. PP submitted EIA report in the meeting. All issues related to environment, including air, water, land, soil, ecology and biodiversity and social aspects were discussed. PP stated that total plot area is 20,117.24 m2 & total construction area proposed in this meeting of the project is 1,59,739.22 m2. Committee noted that the project is under 8a (B1) category of EIA Notification, 2006. Consolidated statements, synopsis of compliances, form 1, 1A, presentation & plans submitted are taken on the record.

## DECISION OF SEAC

### During discussion following points emerged:

1. PP to submit HRC permission for expansion up to 45 floors.

2. PP to submit copy of IOD.

3. PP to submit corrected statement showing level of services in Traffic analysis report**.** PP to submit revised traffic analysis report.

4. PP to submit storm water drainage calculations for entire project area. PP to submit revised storm water drainage design for proposed project site. It should be in consonance with / integrated with storm water outside the plot boundary.

5. PP to achieve 12% energy savings through renewable component & submit revised energy calculations indicating the same.

6. PP to ensure that BOD of the treated water should be 5 mg/lit.

7. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Honï¿½??ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for Environmental Clearance to SEIAA, subject to compliance of above points.***

**Specific Conditions by SEAC:**

## SEIAA DECISION

Site visit to be conducted by the MPCB to ascertain issues discussed in the SEIAA

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to defer the proposal till PP submits the additional information as per above conditions within 30 days

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Royal Mudhol Hospital & Research Centre

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Royal Mudhol Hospital & Research Centre |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr Vijaysinh Maurya |
| **4.Name of Consultant** | PECS (Pollution and Ecology Control Services) |
| **5.Type of project** | Multispecialty Hospital& Research Centre |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Not applicable |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not applicable |
| **8.Location of the project** | Survey No. 127A/2 Ghorpade Peth, Pune Tal- Haveli Dist- Pune. |
| **9.Taluka** | Haveli |
| **10.Village** | Pune |
| **11.Area of the project** | Pune Municipal Corporation |
| **12.IOD/IOA/Concession/Plan Approval Number** | Not applicable |
| | **IOD/IOA/Concession/Plan Approval Number:** Not applicable |
| | **Approved Built-up Area:** 2.0 |
| **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.)** | 12262.50 sqm |
| **16.Deductions** | 0 sqm |
| **17.Net Plot area** | 12262.50 sqm |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 15209.83 sqm |
| | **b) Non FSI area (sq. m.):** 18347.49 sqm |
| | **c) Total BUA area (sq. m.):** 33557.32 sqm |
| **19.Total ground coverage (m2)** | 3468.67 sqm |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 28.28% |
| **21.Estimated cost of the project** | 980000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | Hospital Building | 2 basements + 8 floors (service floor after 2nd floor) | 30 mtrs |

| | |
|---|---|
| **23.Number of tenants and shops** | 310 no of hospital beds |
| **24.Number of expected residents / users** | 1395 nos |
| **25.Tenant density per hectare** | 1137 users per hector |
| **26.Height of the building(s)** | |

| | |
|---|---|
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 36 mtr wide road on south side & 9 mtr wide access road in the west side |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Minimum 9 meters turning radius |
| **29.Existing structure (s) if any** | Yes. Original structures constructed by PMC now handed over and shall be demolished after construction work is completed. These existing buildings shall be used as labour camp, site office etc |
| **30.Details of the demolition with disposal (If applicable)** | Demolition shall be carried out for the old structures once the construction of the main building is complete. Till then the old structures shall be used as labour camp, site office etc. |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | Pune Municipal Corporation |
| | **Fresh water (CMD):** | 99.38 cum |
| | **Recycled water - Flushing (CMD):** | 41.00 cum |
| | **Recycled water - Gardening (CMD):** | 9.06 cum |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 210.64 cum |
| | **Fire fighting - Underground water tank(CMD):** | 150 cum |
| | **Fire fighting - Overhead water tank(CMD):** | 20 cum |
| | **Excess treated water** | NIL |

| | | |
|---|---|---|
| **Wet season:** | **Source of water** | Pune Municipal Corporation |
| | **Fresh water (CMD):** | 99.38 cum |
| | **Recycled water - Flushing (CMD):** | 41.00 cum |
| | **Recycled water - Gardening (CMD):** | NA |
| | **Swimming pool make up (Cum):** | NA |
| | **Total Water Requirement (CMD) :** | 201.58 cum |
| | **Fire fighting - Underground water tank(CMD):** | 150 cum |
| | **Fire fighting - Overhead water tank(CMD):** | 20 cum |
| | **Excess treated water** | 7.00 cum |
| **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 | Not applicable | 99.38 | 99.38 | Not applicable | 10 | 10 | Not applicable | 89.38 | 89.38 |
| Cooling tower & thermopack | Not applicable | 61.20 | 61.20 | Not applicable | 0 | 0 | Not applicable | 0 | 0 |
| Gardening | Not applicable | 9.06 | 9.06 | Not applicable | 0 | 0 | Not applicable | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 10 mtr |
| | **Size and no of RWH tank(s) and Quantity:** | NA |
| | **Location of the RWH tank(s):** | NA |
| | **Quantity of recharge pits:** | 6 nos |
| | **Size of recharge pits :** | Diameter – 2 mtrs & depth – 5 mtrs |
| | **Budgetary allocation (Capital cost) :** | Rs 12.02 lac |
| | **Budgetary allocation (O & M cost) :** | Rs 1.00 lac |
| | **Details of UGT tanks if any :** | Commercial:<br>• Domestic UG tank Capacity : 149.0 cum<br>• Flushing UG tank Capacity : 101.00 cum<br>• Fire UG tank Capacity : 150 cum |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | West to East |
| | **Quantity of storm water:** | 7221.90 cum/year |
| | **Size of SWD:** | 600 mm |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 119.48 cum |
| | **STP technology:** | MBBR Technology based STP |
| | **Capacity of STP (CMD):** | 1 nos & 125 cum capacity of STP |
| | **Location & area of the STP:** | behind the building (North boundary) & 107 sqm of area |
| | **Budgetary allocation (Capital cost):** | Rs 63.84 lacs (including civil cost) |
| | **Budgetary allocation (O & M cost):** | Rs 9.77 lacs |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | Negligible |
| | **Disposal of the construction waste debris:** | Excess excavated soil to be dumped at sites mentioned by PMC through its licensed contractors. |
| **Waste generation in the operation Phase:** | **Dry waste:** | 175 kg/day |
| | **Wet waste:** | 522 kg/day |
| | **Hazardous waste:** | 546 kg/day approx |
| | **Biomedical waste (If applicable):** | 74 kg/day approx |
| | **STP Sludge (Dry sludge):** | Negligible |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Handed over to SWACH |
| | **Wet waste:** | OWC |
| | **Hazardous waste:** | Handed over to the authorized agency as per segregation (PASSCO) |
| | **Biomedical waste (If applicable):** | Handed over to PASSCO |
| | **STP Sludge (Dry sludge):** | OWC |
| | **Others if any:** | NA |
| **Area requirement:** | **Location(s):** | OWC behind the building, at the far end of the plot |
| | **Area for the storage of waste & other material:** | 29 sqm & 46.5 sqm (separate areas for wet, biomedical and dry waste) |
| | **Area for machinery:** | 18 sqm |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs 14.75 lacs |
| | **O & M cost:** | Rs 3.27 lacs |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | pH | Not applicable | 7 - 9 | 6 - 7 | 5.5 to 9.0 |
| 2 | Biochemical Oxygen Demand (BOD) | mg/l | 80 - 250 | = 10 | 30.00 |
| 3 | Chemical Oxygen Demand (COD) | mg/ l | 400 - 500 | = 30 | 250.00 |
| 4 | Total Suspended Solids (TSS) | mg/l | 80 - 100 | = 10 | 100.00 |
| 5 | Oil & Grease | mg/l | Nil | Nil | Nil |
| 6 | Fecal Coliform | Nos./100ml | 1000000/100 | Nil | Nil |
| 7 | Total Coliform | Nos./100ml | 10000000/100 | Nil | Nil |

| | |
|---|---|
| Amount of effluent generation (CMD): | 13.5 KLD |
| Capacity of the ETP: | 15 KLD |
| Amount of treated effluent recycled : | Shall be sent to STP |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Advanced oxidation Process (AOP) |
| Disposal of the ETP sludge | OWC |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Human Anatomical Waste – (human tissues, organs, body parts) | Category No. I | Kg/day | Not applicable | 74 approx | 74 approx | incineration/deep burial by authorized agency |
| 2 | Microbiology & Biotechnology Waste – wastes from laboratory cultures, stocks or specimens of micro-organisms live or attenuated vaccines | Category No. 3 | Kg/day | Not applicable | 78 approx | 78 approx | Local micro-autoclaving/ microwaving/incineration through authorized agency |
| 3 | Waste sharps – (needles, syringes, scalpels, blades, glass, etc. that may cause puncture and cuts. This includes both used and unused sharps) | Category No. 4 | Kg/day | Not applicable | 78 approx | 78 approx | disinfection (chemical treatment/ autoclaving/microwaving and mutilation/shredding and shall be handed over to authorized agency for proper disposal |
| 4 | Discarded Medicines and Cytotoxic drugs wastes comprising of outdated, contaminated and discarded medicines | Category No. 5 | Kg/day | Not applicable | 78 approx | 78 approx | incineration/ disposal in secured landfills through authorized agency |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | Solid Waste (Items contaminated with blood, and body fluids including cotton, dressings, soiled plaster casts, lines, beddings, other material contaminated with blood) | Category No. 6 | Kg/day | Not applicable | 78 approx | 78 approx | incineration by authorized agency |
| 6 | Solid Waste (Wastes generated from disposable items other than the waste sharps such as tubing's, catheters, intravenous sets etc). | Category No. 7 | Kg/day | Not applicable | 78 approx | 78 approx | disinfection by chemical treatment autoclaving/ microwaving and mutilation/ shredding by authorized agency |
| 7 | Liquid Waste (waste generated from laboratory and washing, cleaning, housekeeping and disinfecting activities) | Category No. 8 | Kg/day | Not applicable | 78 approx | 78 approx | Disinfection by chemical treatment and discharge into drains which are connected to ETP & STP. |
| 8 | Chemical Waste (Chemicals used in production of biological, chemicals used in disinfection, as insecticides, etc.) | Category No. 10 | Kg/day | Not applicable | 78 approx | 78 approx | chemical treatment and discharge into drains which shall be connected to ETP & STP |

## 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 | 2 units | HSD (150 liters per day) | 2 | 6 | 0.3 | 700 deg C |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | HSD | Not applicable | 990 lits | 990 lits |
| 41.Source of Fuel | | Petrol pump located at 200 m from site | | |
| 42.Mode of Transportation of fuel to site | | Through barrels by transport vehicle | | |

## 43.Green Belt Development

| | |
|---|---|
| **Total RG area :** | 1227.11 sqm |
| **No of trees to be cut :** | Nil |
| **Number of trees to be planted :** | 157 Nos |
| **List of proposed native trees :** | Attached below |
| **Timeline for completion of plantation :** | Before completion is obtained |

## 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 | Albizia lebbeck | Shirish | 9 | Shady tree, yellowish green fragrant flowers |
| 2 | Azadiracta indica | Neem | 10 | Evergreen tree, fast growing |
| 3 | Anthocephallus cadamba | Kadamb | 1 | Shady, large tree, ball shaped flowers. |
| 4 | Lagerstroemia flos-regineae | Tamhan | 14 | State flower tree of Maharashtra. Medium sized tree, beautiful purple flowers |
| 5 | Murraya paniculata | Kunti | 9 | Small tree, Fragrant white flowers, Butterfly host plant |
| 6 | Manilkara zapota | Chikku | 7 | Medium size , fruit bearing tree |
| 7 | Mangifera indica | Mango | 10 | Tall, fruit bearing tree |
| 8 | Syzygium cumini | Jambhul | 9 | Dense ornamental, fruit bearing tree |
| 9 | Ficus retusa | Nandruk | 14 | Medium sized evergreen tree, Shady tree. |
| 10 | Michelia champaca | Son chafa | 10 | Medium sized evergreen tree, fragrant yellow flowers, Butterfly host plant |
| 11 | Terminalia arjuna | Arjuna | 6 | Large evergreen tree |
| 12 | Lagerstromia Lanceolata | Crape-myrtle | 6 | Medium deciduous tree. Flowers attract many birds. |
| 13 | Dalbergia latifolia | Shisham | 9 | Drought tolerant |
| 14 | Terminalia paniculata | Kindal | 2 | Drought tolerant |
| 15 | Tabebuia avellanedae | Tabebuia pink | 6 | Large deciduous tree. Pink flowers |
| 16 | Tabebuia argentea | Tabebuia yellow | 19 | Decidous tree, ornamental, yellow flowers |
| 17 | Swietenia mahagoni | Mahagony | 2 | Large evergreen tree |
| 18 | Eucalyptus citriodora | Nilgiri | 10 | Tall, semi-deciduous, indicator for water |
| 19 | Barringtonia racemosa | Cornbeefwood | 4 | Drought tolerant |
| **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)** | 33 KW |
| | **DG set as Power back-up during construction phase** | 40 KVA |
| | **During Operation phase (Connected load):** | 3580.70 KW |
| | **During Operation phase (Demand load):** | 2558.76 KW |
| | **Transformer:** | 1500 KVA - 2 nos |
| | **DG set as Power back-up during operation phase:** | 1600 KVA - 2 nos |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

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

Replacing T5 fitting in stair case with 24 W LED.
Replacing 2 x 18W Down lighter in lift lobby with 24W LED.
Replacing 70W MHL Street lights with 24W LED.
Providing 60% of Street lights on solar.
Replacing normal lighting with LED for Landscape.
Using VFD's for Lift machines, we can save 10% of consumption.
By using Regenerative type lifts, we can save 30% of Consumption.
By using Energy efficient motors, we can save 10% of energy.
By using Energy efficient motors, we can save 10% of energy.
B

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | Landscape Lighting (LED Lighting instead of Normal) | 2920.00 KW |
| 2 | CFL Lights in Lobby, Staircase & Corridors (T5 instead of T8 & LED instead of Normal) | 20288.16 KW |
| 3 | Solar PV system for 20% of above lights (Lobby, Staircase & corridor) | 12582.86 KW |
| 4 | All other Lighting | 0.00 KW |
| 5 | VFD's on Lifts | 10512.00 KW |
| 6 | Lifts Regenerative type | 31536.00 KW |
| 7 | External Lighting (Solar as well LED instead of Metal Halide) | 3495.24 KW |
| 8 | Common Basement Lighting (T5 Instead of T8) | 2628.00 KW |
| 9 | Domestic Pumps | 350.40 KW |
| 10 | Flushing Pumps | 175.20 KW |
| 11 | STP | 1752.00 KW |
| 12 | HVAC system | 0.00 KW |

| | | |
|---|---|---|
| 13 | Basement Ventilation Load | 0.00 KW |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Waste water generated | NA | STP - (capacity of 125 KLD) |
| Biodegradable Waste generated | NA | OWC - (capacity of 550 kgs/day ) |
| Non Biodegradable waste generated | NA | SWACH-Agreement executed for non biodegradable waste |
| DG Set | NA | DG Set - (capacity of 1600 KVA – 2 Nos ) |
| Medical waste generated | NA | PASSCO - Agreement shall be executed prior to the functioning of the hospital begins (as per the rules of PASSCO) |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | 28,80,000 |
| | **O & M cost:** | 1,45,000 |

## 51.Environmental Management plan Budgetary Allocation

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

| Serial Number | Attributes | Parameter | Total Cost per annum (Rs. In Lacs) |
|---|---|---|---|
| 1 | Water for dust suppression | To reduce dust generated during transportation, debris generation etc | 9,25,000 |
| 2 | Site sanitation | prevention of human contact with the wastes of human excretion etc | 2,50,000 |
| 3 | Enviro monitoring | Ambient Air quality, Noise Level, Exhaust from DG Set, Drinking Water, | 2,91,000 |
| 4 | Disinfection | To prevent any outbreak of diseases | 1,00,000 |
| 5 | Health & check up of labor | To ensure health of the working staff inorder to reduce any health complication and infections generated on site during construction phase | 2,00,000 |
| 6 | Modular STP | Waste water treatment generated from toilet use by labour | 10,35,000 |
| 7 | Water for labour | Water fro consumption, toilet use, bathing, washing utensils etc | 11,68,000 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | STP | Waste water treatment including ETP & STP | 63,84,000 | 9,77,000 |
| 2 | RWH | as per no of pits | 12,02,400 | 1,00,000 |
| 3 | Gardening | Landscape development | 9,00,000 | 6,00,000 |
| 4 | Energy saving measures | Solar PV & Solar water heater | 28,80,000 | 1,45,000 |
| 5 | Biomedical waste disposal | Estimated cost to be incurred at the time of execution | 5,00,000 | 6,00,000 |
| 6 | OWC | for Biodegradable waste treatment | 13,24,000 | 3,23,070 |
| 7 | Enviro monitoring | Ambient Air quality, Noise Level, Exhaust from DG Set, Drinking Water, Sewage from STP, As per EP act, Manure | 0 | 6,06,000 |
| 8 | DG Set | In case of power failure | 2,40,00,000 | 41,00,000 |
| 9 | Site disinfection of reusable material | disinfection of reusable material through autoclaves and others | 3,00,000 | 2,00,000 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | 1 nos |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | 1 Nos & 6265 sqm |
| | **Number and area of podia:** | 1 Nos & 987.90 sqm |
| | **Total Parking area:** | 8240.80 sqm |
| | **Area per car:** | 12.5 sqm per car |
| | **Area per car:** | 12.5 sqm per car |
| | **Number of 2-Wheelers as approved by competent authority:** | 326 nos |
| | **Number of 4-Wheelers as approved by competent authority:** | 98 nos |
| | **Public Transport:** | Not proposed |
| | **Width of all Internal roads (m):** | 6 mtrs |
| | **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** | NA |
| | **Court cases pending if any** | NIL |
| | **Other Relevant Informations** | NA |
| | **Have you previously submitted Application online on MOEF Website.** | No |
| | **Date of online submission** | - |

## Brief information of the project by SEAC

PP submitted their application for prior Environment Clearance for total plot area of 12,262.50 Mtrs, BUA of 30,45.27 Sq. Mtrs. and FSI area of 14,39.22 Sq. Mtrs. PP proposes to construct 1 nos. of Hospital building having maximum height of 30.00 Mtrs. The case was earlier considered in 46thmeeting of the SEAC - III held from 25th to 29th April, 2016. This committee took up the compliance report and other documents submitted by the Project Proponent for examination. The proposal is appraised as category 8 (a) B2.

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP informed that they have obtained full potential sanction.
2. PP to obtain and submit drainage connection NOC to the project
3. PP to obtain and submit NOC for E-waste disposal.
4. PP to include STP pumping cost in EMP.

**SEAC decided to recommend the proposal for Prior Environmental Clearance, subject to PP complying with the above conditions.**

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for New construction project

**General Information:** SEIAA Meeting 109 on 18th April 2017

| | |
|---|---|
| **1.Name of Project** | Bhagyasthan II |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Mr.NileshPalresha |
| **4.Name of Consultant** | Ultra-Tech (Environmental Consultancy and laboratory) |
| **5.Type of project** | Residential Development with Convenient Shopping |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | New |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | Not applicable |
| **8.Location of the project** | S.No. 626,662,625,661,652,654 |
| **9.Taluka** | Haveli |
| **10.Village** | Kesnand |
| **11.Area of the project** | PMRDA |
| **12.IOD/IOA/Concession/Plan Approval Number** | BHA / CR NO. 1647 / 16-17 DATED 20.08.2016 |
| | **IOD/IOA/Concession/Plan Approval Number:** BHA / CR NO. 1647 / 16-17 DATED 20.08.2016 |
| | **Approved Built-up Area:** 83669.91 |
| **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.)** | 37,227.81 m2 |
| **16.Deductions** | 5,683.83 m2 |
| **17.Net Plot area** | 31,543.98 m2 |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 44,034.95 m2 |
| | **b) Non FSI area (sq. m.):** 39,634.96 m2 |
| | **c) Total BUA area (sq. m.):** 83,669.91 m2 |
| **19.Total ground coverage (m2)** | 6,216.48 m2 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 19.70% |
| **21.Estimated cost of the project** | 1200000000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | A BUILDING , 1No. | P+15 | 46.80 |
| 2 | B BUILDING , 1No | P+15 | 46.80 |
| 3 | C BUILDING , 1No | P+15 | 46.80 |
| 4 | D BUILDING , 1No | P+15 | 46.80 |
| 5 | E BUILDING , 1No | P+15 | 46.80 |
| 6 | F BUILDING , 1No | P+15 | 46.80 |
| 7 | G BUILDING , 1No | P+10 | 33.00 |
| 8 | Commercial | G+1 | 8 |
| 9 | Amenity 1 | P+G+1 | 10.00 |

| | | | |
|---|---|---|---|
| 10 | Amenity 2 | B+G+1 | 9.00 |
| 11 | Amenity 2 | B+G+1 | 9.00 |

| | |
|---|---|
| **23.Number of tenants and shops** | 1158 Tenements,40 shops, 40 offices, Multipurpose hall, Conference hall |
| **24.Number of expected residents / users** | Residential 5790 ,Commercial 264 |
| **25.Tenant density per hectare** | 368 |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | Nearest Fire station is Yerwada fire station 14 Km |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Turning radius for easy access of fire tender movement from all around the building is 9 m |
| **29.Existing structure (s) if any** | No |
| **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 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | Grampanchayat Kesnand |
| | **Fresh water (CMD):** | 522 |
| | **Recycled water - Flushing (CMD):** | 265 |
| | **Recycled water - Gardening (CMD):** | 15 |
| | **Swimming pool make up (Cum):** | 00 |
| | **Total Water Requirement (CMD) :** | 802 |
| | **Fire fighting - Underground water tank(CMD):** | 600 |
| | **Fire fighting - Overhead water tank(CMD):** | 20 CMD per building |
| | **Excess treated water** | 465 |

| | | |
|---|---|---|
| **Wet season:** | **Source of water** | Grampanchayat Kesnand |
| | **Fresh water (CMD):** | 522 |
| | **Recycled water - Flushing (CMD):** | 265 |
| | **Recycled water - Gardening (CMD):** | 00 |
| | **Swimming pool make up (Cum):** | 00 |
| | **Total Water Requirement (CMD) :** | 783 |
| | **Fire fighting - Underground water tank(CMD):** | 600 |
| | **Fire fighting - Overhead water tank(CMD):** | 20 CMD per building |
| | **Excess treated water** | 480 |
| **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** |
| Fresh water requirement | 0 | 522 | 522 | 0 | 26 | 26 | 0 | 496 | 496 |
| Domestic | 0 | 265 | 265 | 0 | 0 | 0 | 0 | 265 | 265 |
| Gardening | 0 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | 6 metre BGL in rainy season, 15.17 m BGL in summer season, 11 m BGL in winter season |
| | **Size and no of RWH tank(s) and Quantity:** | Not applicable |
| | **Location of the RWH tank(s):** | Not applicable |
| | **Quantity of recharge pits:** | 4 nos. |
| | **Size of recharge pits :** | |
| | **Budgetary allocation (Capital cost) :** | Rs. 8 Lakhs/annum |
| | **Budgetary allocation (O & M cost) :** | Rs. 2 Lakhs/annum |
| | **Details of UGT tanks if any :** | Domestic UGT: 784 KLD<br>Flushing UGT: 410 KLD<br>Fire UGT : 600 KLD |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | North to South |
| | **Quantity of storm water:** | 0.17 m3/min |
| | **Size of SWD:** | 150-200 mm diameter pipe |
| | | |
| **Sewage and Waste water** | **Sewage generation in KLD:** | 761 |
| | **STP technology:** | MBBR |
| | **Capacity of STP (CMD):** | Total 3 STP- 2 no. of 350 , 1 no. of 60 |
| | **Location & area of the STP:** | STP 1:Near Wing D ,STP 2:Near Wing A, STP 3: Near Wing G, STP area: For 350 KLD: 180 m2 For 60 KLD: 48 m2 |
| | **Budgetary allocation (Capital cost):** | Rs. 248.60 Lakhs |
| | **Budgetary allocation (O & M cost):** | Rs 34. 96 Lakhs/annum |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | 30 Kg/day |
| | **Disposal of the construction waste debris:** | Backfilling |
| **Waste generation in the operation Phase:** | **Dry waste:** | 782 Kg/day |
| | **Wet waste:** | 1823 Kg/day |
| | **Hazardous waste:** | Negligible |
| | **Biomedical waste (If applicable):** | Not applicable |
| | **STP Sludge (Dry sludge):** | 152 Kg/day |
| | **Others if any:** | Not any |
| **Mode of Disposal of waste:** | **Dry waste:** | Handed over to authorized agency SWACH |
| | **Wet waste:** | Treated in OWC |
| | **Hazardous waste:** | Will be handed over to authorized agency as and when required |
| | **Biomedical waste (If applicable):** | Not applicable |
| | **STP Sludge (Dry sludge):** | Will be used as manure for gardening |
| | **Others if any:** | Not any |
| **Area requirement:** | **Location(s):** | OWC 1-Near Wing A OWC 2 ?Near UGT OWC 3: Near wing G |
| | **Area for the storage of waste & other material:** | OWC 1-87.12 m2 , OWC 2 ?18.88 m2 ,OWC 3 -87.12 m2 |
| | **Area for machinery:** | OWC 1-2.88 m2, OWC 2 ?1.12 m2, OWC 3 -2.88 m2 |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 55.5 Lakhs |
| | **O & M cost:** | Rs. 13.2 Lakhs/annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | Not applicable | | | | |
| Capacity of the ETP: | Not applicable | | | | |
| Amount of treated effluent recycled : | Not applicable | | | | |
| Amount of water send to the CETP: | Not applicable | | | | |
| Membership of CETP (if require): | Not applicable | | | | |
| Note on ETP technology to be used | Not applicable | | | | |
| Disposal of the ETP sludge | Not applicable | | | | |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | 250 kVA | 41 | 2 | 5 | 200 | 175 |
| 2 | 150 kVA | 23 | 1 | 5 | 150 | 125 |
| 3 | 62.5 kVA | 14 | 1 | 5 | 100 | 125 |
| 4 | 630 k VA | 41 | 2 | 5 | 400 | 280 |
| 5 | 315 kVA | 31 | 1 | 5 | 250 | 195 |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | HSD | Not applicable | HSD | 41 L/hr,23 L/hr,14 L/hr,41 L/hr,31 L/hr |
| 41.Source of Fuel | | Authorized Fuel distribution centre | | |
| 42.Mode of Transportation of fuel to site | | By road | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 3711.06 m2 |
| | **No of trees to be cut :** | 10 |
| | **Number of trees to be planted :** | 340 |
| | **List of proposed native trees :** | All are native trees |
| | **Timeline for completion of plantation :** | 2 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 | Ailanthus excelsa | Maharukh | 16 | Medicinal value, To control soil erosion |
| 2 | Albizzia lebecck | Shirish | 16 | Medicinal for Skin, Fragrant flowers, To control soil erosion, Bird attracting species ( Para kids eat seeds ). |
| 3 | Anthocephalus cadamba | Kadamb | 16 | Medicinal value, To control soil erosion, Birds, squirrels, monkey eat fruits. |
| 4 | Azardirachta indica | Neem | 20 | Medicinal value, To control soil erosion.To improve soil erosion |
| 5 | Bauhinia blakiana | Kanchanraj | 16 | Every part of the plant is medicinal, Drought tolerant species. |
| 6 | Bauhinia purpurea | Gulabi kanchan | 16 | Every part of the plant is medicinal ,Drought tolerant species. |
| 7 | Butea monosperma | Palas | 16 | Medicinal value, Bird attracting species , To control soil erosion. |
| 8 | Cassia fistula | Bahawa | 16 | Medicinal value, Drought tolerant species, Very ornamental, Well flowering plant, Honey bee attracting species, Host plant for Butterfly. |
| 9 | Choclospermum religiosum | Sonsawar | 16 | Medicinal value, Native species |
| 10 | Cordia dichotoma | Bhokar | 16 | Medicinal value, Edible fruits, |
| 11 | Dalbergia sissoo | Shisav | 20 | Medicinal value, Bird attracting species |
| 12 | Ficus arnottiana | Payar | 16 | Drought tolerant species, Bird attracting species. To control soil erosion. |
| 13 | Ficus glomerata | Umber | 12 | Medicinal value, Edible fruits, Bird attracting species |
| 14 | Ficus retusa | Nandruk | 12 | Medicinal value, Bird attracting species, Drought tolerant species, Hardy plant. |
| 15 | Phyllanthus emblica | Awala | 12 | Medicinal value |
| 16 | Mangifera indica | Mango | 12 | Edible fruit, Bird attracting spe |
| 17 | Michellia champaca | Sonchafa | 12 | Medicinal value, Fragrant flowers, Butterfly larvae host plant, Bird attracting species, Fast growing |
| 18 | Pongamia pinnata | Karanj | 12 | Medicinal value, Drought tolerant species, To control soil erosion. Hardy plant. |
| 19 | Saraca indica | Sitaashok | 12 | Medicinal value, Religious plant |
| 20 | Syzygium cumini | Jamun | 12 | Medicinal value, Edible fruit. |
| 21 | Bahunia racemosa | Apta | 04 | Every part of the plant is medicinal, Drought tolerant species. |
| 22 | Caryot aurens | Fishtail palm | 04 | Grown in any type of soil. Very Hardy. |
| 23 | Citrus species | Lemon | 04 | Medicinal value, Edible fruit |
| 24 | Erythrina indica | Pangara | 04 | Medicinal value, Edible fruit |

| | | | | |
|---|---|---|---|---|
| 25 | Gmelina arborea | Shivan | 04 | Medicinal value, Drought tolerant species, Bird attracting species |
| 26 | Mimosups elengii | Bakul | 04 | Fragrant flowers, Medicinal value, To control soil erosion. |
| 27 | Murraya koenigii | Kadipatta | 04 | Medicinal value, Edible leaves. |
| 28 | Aegle marmelos | Bel | 04 | Medicinal value |
| 29 | Nyctanthes arbor tristis | Parijatak | 04 | Fragrant flowers, Medicinal va |
| 30 | Putranjiva roxburghii | Putmjiva | 04 | Medicinal value, Drought tolerant species, |
| 31 | Roystonea regia | Bottle palm | 04 | Ornamental plant, Medicinal value, Birds & bats eat fruits. |
| 32 | Total | -- | 340 | -- |
| **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 | Neriumolender pink | 2' | 177 nos. |
| 2 | Adhatoda vasica | 2' | 177 nos. |
| 3 | Cassia auriculata | 2' | 177 nos. |
| 4 | Cymopogon floxsus | 1' | 354 |
| 5 | Plumbago capensis | 1' | 354 |
| 6 | Tabernaemontana coronaria dwarf | 1'6" | 236 |
| 7 | Stachytarpheta indica | 1' | 354 |
| 8 | Stachytarpheta indica | 1' | 354 |
| 9 | Cestrum nocturnum | 1'6" | 236 |
| 10 | Beloperone guttata | 1' | 354 |
| 11 | Jasminum sambac | 1' | 354 |
| 12 | Hedychium flavescens | 1' | 354 |
| 13 | Calliandra emarginata | 2' | 177 |
| 14 | Cassia biflora | 2' | 177 |
| 15 | Ficusbenjamina black | 3' | 118 |
| 16 | Ficusbenjamina starlight | 3' | 118 |
| 17 | Alpinia specious | 1' | 354 |
| 18 | Euphorbia carcasana | 1' 6" | 236 |
| 19 | Psuedoerenthemum reticulum | 1' | 354 |
| 20 | Heliconia psittacorum | 1' | 354 |
| 21 | Acalypha wilkesiana | 1' 6" | 236 |
| 22 | Murraya exotica | 1' 6" | 236 |
| 23 | Allamanda neriifolia | 1' 6" | 236 |
| 24 | Hibiscus roseasinensis | 2' | 177 |
| 25 | Caesalpinia pulcherrima | 2' | 177 |
| 26 | Ixoradufii red | 2' | 177 |
| 27 | Lagerstroemia indica | 2' | 177 |

| | | | |
|---|---|---|---|
| 28 | Lantana camera | 1'1' | 354 |
| 29 | Eranthemum laxiflorum | 1' 6" | 236 |
| 30 | Galphimia glauca | 1' | 354 |
| 31 | Vitex negundo | 1' 6" | 236 |
| 32 | Caesalpinia bonducella | 1' 6" | 236 |
| 33 | Ziziphus mauritiana | 3' | 118 |
| 34 | Cassia tora | 3' | 118 |
| 35 | Passiflora edulis | 1' 6" | 236 |
| 36 | Clematis gauriana | 1' | 354 |

## 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** | 62.5 KVA |
| | **During Operation phase (Connected load):** | 6115 KW |
| | **During Operation phase (Demand load):** | 4892 KW |
| | **Transformer:** | 630 kVA-9 nos for residential 630 KVA -2 nos. and 315 kVA-1 no ., for amenity |
| | **DG set as Power back-up during operation phase:** | 2 no. of 250 kVA,1 no. of 315 kVA, 2 no of 630 kVA, 1 no. of 62.5, 1 no. of 150 kVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | Not any |

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

Energy saving measures: CFL, LED, SOlar, Timer etc
Detail calculation and % of saving: 362976 KWH/year and 15% enrgy saving per year

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | CFL, LED, SOlar, Timer etc | 362976 KWH/year and 15% enrgy saving per year |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| STP | 0 | 3 STP : 2 of 350 KLD, 1 of 60 KLD MBBR technology |
| OWC | 0 | Organic waste composter |
| DG set | 0 | As per CPCB guidelines |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 15.92 Lakh |
| | **O & M cost:** | Rs. 2.38 Lakh/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 | Water | Tanker water for construction, water monitoring | 1.34 |
| 2 | Air | Water For Dust Suppression ,air and noise monitoring | 1.97 |
| 3 | Noise | Noise monitoring | 1.20 |
| 4 | Soil | Top soil preservation and gardening | 9.00 |
| 5 | Socio | Safety, First Aid, Health Hygiene Facilities, Disinfection at site,Health Check Up,Crèches for children,Personal Protective Equipment,CFL lamps for labor hutments | 44.29 |
| 6 | Site sanitaion | Mobile toilets | 10.2 |
| 7 | Total | -- | 68.03 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | Water | Rain Water Harvesting, STP | 256.80 | 36.96 |
| 2 | Solid waste | OWC | 62 | 6.7 |
| 3 | Environmental monitoring | NA | 0 | 23.28 |
| 4 | Land | Gardening | 79.06 | 12.64 |
| 5 | Energy conservation | Solar water heating | 15.92 | 2.38 |
| 6 | Total | -- | 413.58 | 81.96 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | 1 |
| **Parking details:** | **Number and area of basement:** | 0 |
| | **Number and area of podia:** | 1 podium on building D |
| | **Total Parking area:** | Stilt car park - 6216.sq.m. Open car park - 4851.50 sq.m. Basement car parking - 1079 sq.m. |
| | **Area per car:** | Stilt floor - 35.72 sq.m. Open car park - 31.30 sq.m. Basement - 41.50 sq.m |
| | **Area per car:** | Stilt floor - 35.72 sq.m. Open car park - 31.30 sq.m. Basement - 41.50 sq.m |
| | **Number of 2-Wheelers as approved by competent authority:** | 1570 |
| | **Number of 4-Wheelers as approved by competent authority:** | 345 |
| | **Public Transport:** | Kesnanadgaon bus depot -0.34 Km |
| | **Width of all Internal roads (m):** | 9 m |
| | **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** | 8 a (B2) |
| | **Court cases pending if any** | not any |
| | **Other Relevant Informations** | Online application was made on MoEF state portal on 10.10.2015 having proposal no. SIA/MH/NCP/31639/2015 .The project was recommended during 52 SEAC III meeting. |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 16-10-2015 |

## Brief information of the project by SEAC

PP submitted their application for prior Environmental clearance for total plot area of 37227.81Sq. Mtrs, BUA of 83666.91Sq. Mtrs, and FSI area of 44034.95 Sq. Mtrs. PP proposes to construct 7 nos. of residential buildings, 1 no.of commercial building having maximum height of 45.00 Mtrs, Amenity building consisting of multipurpose hall ,40 shops, 40 offices and one conference hall. The case was earlier considered in 48thmeeting of the SEAC - III held from 7th to 10th June 2016. This committee took up the compliance report and other documents submitted by the Project Proponent for examination. The proposal is appraised as category 8 (a) B2.

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit IOD/IOA/Concession Document/Plan Approval or any other form of documents as applicable clarifying its conformity with local planning rules and provisions there under as per the Circular dated 30.01.2014 issued by the Environment Department, Govt. of Maharashtra. 2. PP to submit affidavit that no occupancy will be given till sustained availability of water to the project site.

**SEAC decided to recommend the proposal for Prior Environmental Clearance, subject to PP complying with above conditions.**

**Specific Conditions by SEAC:**

## SEIAA DECISION

Approved.

**Specific Conditions by SEIAA:**

## FINAL RECOMMENDATION

SEIAA have decided to grant the proposal for Prior Environmental Clearance subject to above conditions

## SEIAA Meeting 2017

**SEIAA Meeting number:** 109 **Meeting Date** April 18, 2017

**Subject:** Environment Clearance for Amendment of "Kalpataru Solitaire" at Vile Parle, Mumbai

**General Information:** Venue: Maharashtra State Finance Corporation (MSFC), United India Building, 1st Floor, Sir P.M.Road, Fort,Mumbai-01 Time : 10.00 AM

| | |
|---|---|
| **1.Name of Project** | ?Kalpataru Solitaire? at Vile Parle, Mumbai |
| **2.Type of institution** | Private |
| **3.Name of Project Proponent** | Name: M/s. Kalpataru Ltd. ?Address: 91, Kalpataru Synergy, Opp. Grand Hyatt, Santacruz (E), Mumbai 400 055. ?Telephone number: (022) 30645000 ?Mobile number: 9594015533 ?Email ID: jagdish.talreja@kalpataru.com |
| **4.Name of Consultant** | Mr. H.K. Desai Enviro Analysts & Engineers Pvt. Ltd.,B-1003, Enviro House Western Edge II, Behind Metro Mall Western Express Highway Borivali (E), Mumbai-400066 |
| **5.Type of project** | Housing Project |
| **6.New project/expansion in existing project/modernization/diversification in existing project** | Amendement |
| **7.If expansion/diversification, whether environmental clearance has been obtained for existing project** | EC obtained on 11th December, 2015 vide letter SEAC2013/CR-100/TC-1. |
| **8.Location of the project** | Residential Building on plot bearing C.T.S. No.25A/3 of Village Vile Parle (W), of JVPD scheme, Vile Parle (W), Mumbai. |
| **9.Taluka** | mumbai |
| **10.Village** | vile parle |
| **11.Area of the project** | Municipal Corporation of Greater Mumbai (M.C.G.M.) |
| **12.IOD/IOA/Concession/Plan Approval Number** | IOD |
| | **IOD/IOA/Concession/Plan Approval Number:** CHE/WS/0254/K/337 (NEW) |
| | **Approved Built-up Area:** 18929 |
| **13.Note on the initiated work (If applicable)** | ? Total constructed work (FSI+ Non FSI): 23,376.591 sq.mt. ? Date and area details in the necessary approvals issued by the competent authority (attach scan copies): Last CC dt. 21-07-2015 for the Amended Plans dt. 18-04-2015. |
| **14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)** | Concession Document approved on date 04-oct-2012. |
| **15.Total Plot Area (sq. m.)** | 4,009.20 Sq. mt. |
| **16.Deductions** | nil |
| **17.Net Plot area** | 4,009.20 Sq. mt. |
| **18.Proposed Built-up Area (FSI & Non-FSI)** | **a) FSI area (sq. m.):** 20,568.06 |
| | **b) Non FSI area (sq. m.):** 12,377.96 |
| | **c) Total BUA area (sq. m.):** 32,946.02 |
| **19.Total ground coverage (m2)** | 1,499.34 |
| **20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)** | 37.39 % |
| **21.Estimated cost of the project** | 1378600000 |

## 22.Number of buildings & its configuration

| Serial number | Building Name & number | Number of floors | Height of the building (Mtrs) |
|---|---|---|---|
| 1 | One building of 2 wings | Wing A & Wing B 3 Basements + Ground + 16 residential floors Fitness Centre & Swimming pool. | 50.60 mt. |

| | |
|---|---|
| **23.Number of tenants and shops** | Flats: 135 Nos. |

| | |
|---|---|
| **24.Number of expected residents / users** | 675 nos |
| **25.Tenant density per hectare** | 414 |
| **26.Height of the building(s)** | |
| **27.Right of way (Width of the road from the nearest fire station to the proposed building(s)** | 18.30 mt. |
| **28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation** | Plot has existing roads on all four sides |
| **29.Existing structure (s) if any** | Existing building on site |
| **30.Details of the demolition with disposal (If applicable)** | DThe debris generated have been partly disposed off to dumping sites with permission from M.C.G.M. & partly reused on site |

## 31.Production Details

| Serial Number | Product | Existing (MT/M) | Proposed (MT/M) | Total (MT/M) |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |

## 32.Total Water Requirement

| | | |
|---|---|---|
| **Dry season:** | **Source of water** | M.C.G.M. & Tanker water of potable quality |
| | **Fresh water (CMD):** | 61 |
| | **Recycled water - Flushing (CMD):** | 30 |
| | **Recycled water - Gardening (CMD):** | 5 |
| | **Swimming pool make up (Cum):** | 15 |
| | **Total Water Requirement (CMD) :** | 111 |
| | **Fire fighting - Underground water tank(CMD):** | 150 |
| | **Fire fighting - Overhead water tank(CMD):** | . |
| | **Excess treated water** | 37 |

| | | |
|---|---|---|
| Wet season: | **Source of water** | MCGM/recyled water/ RWH Tank |
| | **Fresh water (CMD):** | 61 |
| | **Recycled water - Flushing (CMD):** | 30 |
| | **Recycled water - Gardening (CMD):** | 0 |
| | **Swimming pool make up (Cum):** | 15 |
| | **Total Water Requirement (CMD) :** | 106 |
| | **Fire fighting - Underground water tank(CMD):** | 150 |
| | **Fire fighting - Overhead water tank(CMD):** | . |
| | **Excess treated water** | 42 |
| **Details of Swimming pool (If any)** | Swimming pool: From tanker water of potable quality = 15 KLD | |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **34.Rain Water Harvesting (RWH)** | **Level of the Ground water table:** | Between 2mt. - 3mt. |
| | **Size and no of RWH tank(s) and Quantity:** | Not Applicable |
| | **Location of the RWH tank(s):** | Not Applicable |
| | **Quantity of recharge pits:** | 4 nos. of recharge pits with bore well along with Grease cum distilling chamber. |
| | **Size of recharge pits :** | 4 nos. of recharge pits with bore well along with Grease cum distilling chamber. |
| | **Budgetary allocation (Capital cost) :** | Rs. 12.00 Lakhs |
| | **Budgetary allocation (O & M cost) :** | Rs.0.60 Lakhs/Annum |
| | **Details of UGT tanks if any :** | at basement level |

| | | |
|---|---|---|
| **35.Storm water drainage** | **Natural water drainage pattern:** | The storm water collected through the storm water drains of adequate capacity will be discharged in to the municipal storm line |
| | **Quantity of storm water:** | 0.08 m3/sec |
| | **Size of SWD:** | 450 mm wide X 920 mm deep |

| | | |
|---|---|---|
| **Sewage and Waste water** | **Sewage generation in KLD:** | 79 |
| | **STP technology:** | MBBR |
| | **Capacity of STP (CMD):** | 85 |
| | **Location & area of the STP:** | basement level |
| | **Budgetary allocation (Capital cost):** | Rs. 20.00 Lakhs |
| | **Budgetary allocation (O & M cost):** | Rs. 5.00 Lakhs/Annum |

## 36.Solid waste Management

| | | |
|---|---|---|
| **Waste generation in the Pre Construction and Construction phase:** | **Waste generation:** | The debris generated have been partly disposed off to dumping sites with permission from M.C.G.M. & partly reused on site |
| | **Disposal of the construction waste debris:** | ? Quantity of the top soil to be preserved: Negligible ? Disposal of the construction waste debris: Construction waste will be partly reused for backfilling, counterweight of raft, road works & landscaping etc. and partly disposed off to designated dumping site |
| **Waste generation in the operation Phase:** | **Dry waste:** | 135 Kg/Day |
| | **Wet waste:** | 203 Kg/Day |
| | **Hazardous waste:** | NA |
| | **Biomedical waste (If applicable):** | NA |
| | **STP Sludge (Dry sludge):** | 10 Kg |
| | **Others if any:** | NA |
| **Mode of Disposal of waste:** | **Dry waste:** | Shall be handed over to local recyclers |
| | **Wet waste:** | Organic Waste Converter (OWC) |
| | **Hazardous waste:** | Not Applicable |
| | **Biomedical waste (If applicable):** | Not Applicable |
| | **STP Sludge (Dry sludge):** | Use as manure within the premises for plants |
| | **Others if any:** | no |
| **Area requirement:** | **Location(s):** | Ground floor |
| | **Area for the storage of waste & other material:** | 45.66 Sq. mt |
| | **Area for machinery:** | . |
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs.5.00 Lakhs |
| | **O & M cost:** | Rs. 1.10 Lakhs/Annum |

## 37.Effluent Charecterestics

| Serial Number | Parameters | Unit | Inlet Effluent Charecterestics | Outlet Effluent Charecterestics | Effluent discharge standards (MPCB) |
|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Amount of effluent generation (CMD): | | Not applicable | | | |

| | |
|---|---|
| Capacity of the ETP: | Not applicable |
| Amount of treated effluent recycled : | Not applicable |
| Amount of water send to the CETP: | Not applicable |
| Membership of CETP (if require): | Not applicable |
| Note on ETP technology to be used | Not applicable |
| Disposal of the ETP sludge | Not applicable |

## 38.Hazardous Waste Details

| Serial Number | Description | Cat | UOM | Existing | Proposed | Total | Method of Disposal |
|---|---|---|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 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 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 40.Details of Fuel to be used

| Serial Number | Type of Fuel | Existing | Proposed | Total |
|---|---|---|---|---|
| 1 | Not applicable | Not applicable | Not applicable | Not applicable |
| 41.Source of Fuel | | Not applicable | | |
| 42.Mode of Transportation of fuel to site | | Not applicable | | |

| | | |
|---|---|---|
| **43.Green Belt Development** | **Total RG area :** | 827.67 sq.m. |
| | **No of trees to be cut :** | 12 |
| | **Number of trees to be planted :** | 24 |
| | **List of proposed native trees :** | as below |
| | **Timeline for completion of plantation :** | at the end of cosstruction 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 | Michelia champaca | Sonchapha | 4 | flowering |
| 2 | Bauhinia purpurea | Butterfly tree | 4 | Every part of the plant is medicinal ,Drought tolerant species. |
| 3 | Alistonia scholaris | Devils tree/ Satvin | 4 | flowering |
| 4 | Millingtonia hortensis | Cork Tree | 4 | shady |
| **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 | Vitex nergundo | 2 | . |
| 2 | Adatoda vasica | 2 | . |
| 3 | Plumbago zeylinica | 2 | . |
| 4 | Tabernamontana | 2 | . |
| 5 | Bougavvillae sps. | 2 | . |
| 6 | Alamanda cathartica | 2 | . |
| 7 | Tecoma guadichaudi | 2 | . |

## 47.Energy

| | | |
|---|---|---|
| **Power requirement:** | **Source of power supply :** | TATA |
| | **During Construction Phase: (Demand Load)** | 100 KW |
| | **DG set as Power back-up during construction phase** | 100 KVA |
| | **During Operation phase (Connected load):** | 1139kw |
| | **During Operation phase (Demand load):** | 2740 kw |
| | **Transformer:** | NA |
| | **DG set as Power back-up during operation phase:** | 1 D.G. set of capacity 600 kVA |
| | **Fuel used:** | HSD |
| | **Details of high tension line passing through the plot if any:** | NA |

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

E? Energy saving measures:
o Common area lighting with CFL/T5 Lamps
o Energy efficient fluorescent lamps & CFL lamps with high frequency ballast which give more light output for the same watts consumed and therefore require less nos. of fixtures
o Solar systems shall be provided
o Equipment efficiency standards
o Power factor be maintained between 0.95 and unity for major equipment like lift, STP etc. This will reduce electrical power distribution losses in the installation
o Timers & moti

## 49.Detail calculations & % of saving:

| Serial Number | Energy Conservation Measures | Saving % |
|---|---|---|
| 1 | As above | 21% |

## 50.Details of pollution control Systems

| Source | Existing pollution control system | Proposed to be installed |
|---|---|---|
| Not applicable | Not applicable | Not applicable |

| | | |
|---|---|---|
| **Budgetary allocation (Capital cost and O&M cost):** | **Capital cost:** | Rs. 7.50 Lakhs |
| | **O & M cost:** | Rs. 0.15 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 | Air Environment | Water for Dust Suppression | 12.96 |
| 2 | Land Environment | Site Sanitation | 5.00 |
| 3 | Environmental Monitoring | Environmental Monitoring | 2.16 |
| 4 | EHS | Disinfection | 3.60 |
| 5 | EHS | Health Check up | 5.40 |

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

| Serial Number | Component | Description | Capital cost Rs. In Lacs | Operational and Maintenance cost (Rs. in Lacs/yr) |
|---|---|---|---|---|
| 1 | water | STP cost | 20 | 5.00 |
| 2 | water | Rain Water Harvesting (8 nos. of recharge pits) | 12 | 0.60 |
| 3 | Environment | Environmentalmonitoring | MOEF approved agency for Monitoring. Hence no set up cost | 11.13 |
| 4 | energy | Solar system | 7.50 | 0.15 |
| 5 | land | Gardening | 4.55 | 0.73 |
| 6 | solid waste | Cost for Treatment of biodegradablegarbage in Organic Waste Converter | 5.00 | 1.10 |
| 7 | Other maintenance | SWM, Water tanks, DG | . | 1.62 |

## 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 |
|---|---|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## 52.Any Other Information

No Information Available

## 53.Traffic Management

| | | |
|---|---|---|
| | **Nos. of the junction to the main road & design of confluence:** | Two entry and exit to the main road |

| | | |
|---|---|---|
| **Parking details:** | **Number and area of basement:** | 3 basement |
| | **Number and area of podia:** | nil |
| | **Total Parking area:** | 4,988.68 Sq. mt. (excluding services) |
| | **Area per car:** | 16.68 Sq. mt. |
| | **Area per car:** | 16.68 Sq. mt. |
| | **Number of 2-Wheelers as approved by competent authority:** | . |
| | **Number of 4-Wheelers as approved by competent authority:** | 299 Nos. |
| | **Public Transport:** | Nil |
| | **Width of all Internal roads (m):** | 4.50 to 6.00 mt. wide Internal driveways. |
| | **CRZ/ RRZ clearance obtain, if any:** | NA |
| | **Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries** | Arabian Sea ? Within 1.20 Km. Mahim Creek ? Approx. 6.70 Km Mithi river ? Approx. 4.85 Km Western Express High Way- 2.00 Km |
| | **Category as per schedule of EIA Notification sheet** | shedule 8 a, category B |
| | **Court cases pending if any** | NA |
| | **Other Relevant Informations** | Nil |
| | **Have you previously submitted Application online on MOEF Website.** | Yes |
| | **Date of online submission** | 29-02-2016 |



## Brief information of the project by SEAC

Representative of PP, Manisha Vishwasrao, J.H. Talreja was present during the meeting along with environmental consultant M/s EAEPL. PP informed that they have received earlier EC vide letter dated SEAC- 2013/CR-100/TC-1 dated 11/12/2015. Proposal is an amendment in EC. It is informed that there has been addition of built up area due to additional FSI allotted by MHADA. Additional B.U. Area is proposed to be utilized by increasing the floor plate. As per letter issued by MHADA, a condition w.r.t. Ceiling on carpet area of tenement is deleted. Hence tenement of higher carpet area is proposed. Due to the proposed amendment there is reduction in the environmental parameters. Committee noted comparative changes due to proposed expansion/amendment

The project proposal was discussed on the basis of presentation made and documents submitted by the proponent. PP stated that total plot area is 4009.20 m2 & total construction area of the project is 32,946.02 m2. Committee noted that the project under 8a (B2) category of EIA Notification, 2006. Consolidated statements, form 1,1A, presentation & plans submitted are taken on the record.

## DECISION OF SEAC

**During discussion following points emerged:**

1. PP to submit compliance report with comparative statements of conditions stipulated in earlier EC. 2. PP to explore possibility of shifting entrance of South east corner to the North.

3. PP, if applicable, to leave clear cut side margin of 6 m from the boundary of the plot and open space and non-paved RG area should be on ground as per the orders of Hon???ble Supreme Court (Civil Appeal No. 11150 of 2013 and SLP (Civil) No. 33402/2012) dated 17th December 2013.

***After deliberation, Committee decided to recommend the proposal for*** **Environmental Clearance to SEIAA, subject to compliance of above points.**

**Specific Conditions by SEAC:**

## SEIAA DECISION

The points raised by SEAC II have not been complied with. Deferred

**Specific Conditions by SEIAA:**

**1)** PP to submit affidavit that they are using minimum 10% for solar lighting

## FINAL RECOMMENDATION

SEIAA have decided to defer the proposal till PP submits the additional information as per above conditions within 30 days