atmosphere
live it

The Wadhwa Group
Landmarks planned with passion

DATE:

To,
The Member Secretary
(Infrastructure and Miscellaneous projects + CRZ/
/New Construction Projects and Industrial Estate)
Ministry of Environment, Forests and Climate Change
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi – 110 003

**Sub:** Application for Amendment in Environmental Clearance for Residential complex 'Atmosphere' at CTS no. 784/1, 785, 786, 788, 790, 791, 792A, 793 & 848 of village Nahur, Mumbai proposed by Atmosphere Realty Pvt. Ltd.

**Reference**: EC Letter- SEAC-2015/Cr-41/TC-1 dated 1st February, 2016.

Dear Sir,

With reference to above subject this is an application for the Environmental Clearance to the Ministry of Environment, Forest and Climate change, Government of India, as per provisions of EIA Notification, amended till date; for Amendment in proposed Residential Complex at CTS no. 784/1, 785, 786, 788, 790, 791, 792A, 793 & 848 of village Nahur, Mumbai

This is a Residential project, thus seeking prior environmental clearance under Schedule 8(b), Category B.

We, thereby, submit Form 1, Form 1A for your kind reference.

Kindly do needful at earliest about Environmental Clearance.

Yours sincerely,

For Atmosphere Realty Pvt. Ltd.

**Authorized Signatory**

**Atmosphere Realty Private Limited (Previously known as Man Chandak Developers Private Limited)**
**Registered Office Address**: 808, Krushal Commercial Complex, Above Shoppers Stop, G.M. Road, Chembur (W), Mumbai – 400089. **E**: office@maninfra.com **W**: www.atmosphereliveit.com **CIN**: U70102MH2007PTC166974
**Site Address**: Atmosphere, Mulund-Goregaon Link Road, Near Fortis Hospital, Mulund (W), Mumbai – 400080.
**Sales Office**: **T**: +91 22 25628409 **F**: +91 22 67308401 **E**: atmosphere@thewadhwagroup.com

MAN CHANDAK

# ATMOSPHERE: Comparative Statement [For Amendment/Expansion project submission]

| Sr. No. | Project Details | | Details | | |
|---|---|---|---|---|---|
| | | Unit | As per EC Received dated 1st February 2016 | For proposed Amendment / expansion | Remarks |
| 1 | Plot area | Sq.m. | 56,509.50 sq.m | 56,509.50 sq.m | - |
| 2 | Deduction in plot area | | Area under road= 6632.46 sq.m<br>Area under railway reservation = 4278.90<br>Plot not in possession = 401.12sq.m<br>Total deduction = 12,312.48 sq.m | Area under road= 6632.46 sq.m<br>Area under railway reservation = 4278.90<br>Plot not in possession = 401.12sq.m<br>Total deduction = 12,312.48 sq.m | - |
| 3 | Net Plot area | Sq.m. | 44,197.02 sq.m | 44,197.02 sq.m | - |
| 4 | Permissible FSI | Sq.m. | 1,13,230.35 sq.m | 1,13,176.21 sq.m | Reduced by 54.14sq.m. (as per MCGM approval) |
| 5 | FSI area | Sq.m. | 1,13,230.35 sq. m | 1,13,174.30 sq. m | Reduced by 56.05sq.m. |
| 6 | Non FSI area | Sq.m. | 1,47,607.36 sq.m | 1,47,802.40 sq.m. | Increased by 195.04 sq.m. |
| 7 | Total Built up area (Construction area) | Sq.m. | 2,60,837.71 sq. m | 2,60,976.70 sq.m. | Construction Area has Increased by<br>138.99sq.m. |
| 8 | Ground-coverage Area : (sqm)<br>% on net plot | | 43% | 43.85% | Marginal Increase of 0.85% |
| 10 | ***Building Configuration*** | | | | |
| | Buildings wise | Wings | Configuration | | |
| | Tower1 | Wings A,B,C | 2B+St+ 1st Podium + 2nd to 4th (Pt) Podiums + 5th to 37th Floors with fire check floor between 21st & 22nd Floor | 2B+St+ 1st Podium + 2nd to 4th (Pt) Podiums + 5th to 43rd Floors with fire check floor between 21st & 22nd Floor and G +2nd (Pt.) Amenity block with Club-house on podium | Tower I : The number of floors for Wings A,B,C has increased to 43 floors from 37 floors<br>Tower II : The no of floors has Reduced from 42 floors to 35 floors in |

| | | | | | |
|---|---|---|---|---|---|
| | | | | top | Wings D,E,F,G. |
| | Tower 2 | Wings D,E,F,G | Basement +G +2P+St +1st to 42nd Floors with fire check between 38th & 39th & fire check & service floor in between 18th & 19th Floor | Basement+ G+2P+St +1st to 35th Floors & fire check & service floor in between 18th & 19th Floor. | |
| 11 | ***Number of tenants and shops*** | | | | |
| | Residential Tenements | In Nos. | 1173 Flats | 1191 Flats<br>Tower I : 721 Flats<br>Tower II : 470 Flats | No. of tenants increased by 18 nos. |
| 12 | ***No. of expected Residents*** | | | | |
| | Residential | Nos. | 5865 no's | 5955 no's | No. of expected residents increased by 90nos. |
| | Total | | 5865 no's | 5955 no's | |
| 13 | ***Height of the building*** | | | | |
| | Building wise | In m | Tower A,B & C = 124.70M<br>Tower D,E,F, & G = 154.65M | Tower A,B & C = 141.35M<br>Tower D,E,F, & G= 127.25M | Height of Tower A,B & C increased by 16.65m<br>Height of Tower D,E,F & G decreased by 27.4m |
| 14 | Total water requirement | KLD | 873KLD | 917 KLD | Total water requirement increased by 44 KLD<br>Total STP Capacity increased by 50KLD |
| 15 | STP capacity | KLD | 680 KLD | 730 KLD | |
| 17 | STP Technology | | MBBR | MBBR | - |
| 18 | Bio degradable waste | Kg/ Day | 1759 Kg | 1786 Kg | Total solid waste generation increased by 45kg/day |
| 19 | Non-biodegradable waste | Kg/ Day | 1173 Kg | 1191 Kg | |
| 20 | Total Solid waste generation | Kg/Day | 2932 Kg | 2977 Kg | |
| | **No. of Parking** | | | | |
| 22 | 4 Wheelers | Nos. | Req; =2221<br>Provd =2267 | Req.=2154<br>Provd =2167 | 4 wheeler parkings (required ) decreased by 67Nos.<br>4 wheeler parkings (proposed) decreased by |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | 100Nos. |
| | | | | | |
| 23 | ***Green Belt Development*** | | | | |
| | Required R.G. with percentage to the plot | Sq.m. | 12119.0 sq.m | 11,299.25 sq.m. | Required RG area has reduced by 819.75sq.m. |
| | Ground RG area (%) | | | 11,486.73 sq.m. | - |
| | Podium RG area (%) | | | 6,470.20 sq.m. | - |
| | Total provided RG area (%) | | | 17,956.93 sq.m. | - |
| | Tree details in Nos. | To be cut | | Same as earlier EC | - |
| | | To be retain | | | |
| | | Transplanted | | | |
| | proposed trees | Nos. | 716 | 716 | - |
| 24 | ***Power Requirement*** | | | | |
| | D.G.sets | Nos.<br>Capacity | 3 nos: 1000 kVA<br>1 nos: 500 kVA. | 2 nos: 750 kVA<br>2 nos: 500 kVA. | Total capacity of 4DG sets decreased by 250kVA |

**FORM-1**

**(I) Basic Information**

| Sr. No. | Item | Details |
|---|---|---|
| 1 | Name of the Project | Atmosphere |
| 2 | Sr. No. in the Schedule | 8(b) B1 |
| 3 | Proposed capacity/area /length/tonnage to be handled/command area/lease area/ number of wells to be drilled | FSI area : 1,13,174.30 sq. m<br>Non FSI: 1,47,802.40 sq.m.<br>Construction area: 2,60,976.70 sq.m. |
| 4 | New/Expansion/Modernization | EXPANSION |
| 5 | Existing Capacity/Area etc. | **EARLIER EC RECEIVED ON 1st February 2016** |
| 6 | Category of Project i.e. 'A' or 'B' | B |
| 7 | Does it attract the general condition? If Yes, Please specify | No |
| 8 | Does it attract the specific condition? If yes, Please specify | No |
| 9 | Location | Nahur |
| | Plot/Survey/Khasra No. | CTS no. 784/1, 785, 786, 788, 790, 791, 792A, 793 & 848 of village Nahur, Mumbai |
| | Tehsil | Nahur |
| | District | Mumbai |
| | State | Maharashtra |
| 10 | Nearest railway station/airport along with distance in kms. | Nahur railway station (0.2 Km) |
| 11 | Nearest Town, City, District Headquarters along with distance in kms. | Mumbai |
| 12 | Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given) | Municipal Corporation of Greater Mumbai |
| 13 | Name of the applicant | Atmosphere Realty Pvt. Ltd. |
| 14 | Registered Address | 808, Krushal Commercial Complex, Above Shoppers Stop, G.M. Road, Chembur (West), Mumbai 400 089 |
| 15 | Address for Correspondence: | - |
| | Name | - |
| | Designation(Owner/Partner/CEO) | - |
| | Address | - |
| | Pin Code | 400089 |
| | E-mail | atmosphere@thewadhwagroup.com<br>abhay@chandakgroup.com |
| | Telephone No. | 022-67308400 |

| | | |
|---|---|---|
| | Fax No. | 022-67308401 |
| 16 | Details of Alternative Sites examined, If any. Location of these sites should be shown on a topo sheet | No |
| 17 | Interlinked Projects | No |
| 18 | Whether separate application of interlinked project has been submitted? | NA |
| 19 | If yes, date of submission | NA |
| 20 | If no, reason | NA |
| 21 | Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given.<br>(a) The Forest (Conservation) Act, 1980?<br>(b) The Wildlife (Protection) Act, 1972?<br>(c) The C.R.Z. Notification, 1991? | NA |
| 22 | Whether there is any Government Order/Policy relevant/relating to the site? | No |
| 23 | Forest land involved (hectares) | NA |
| 24 | Whether there is any litigation pending against the project and/or land in which the project is propose to be set up?<br>(a) Name of the Court<br>(b) Case No.<br>(c) Orders/directions of the Court, if any and its Relevance with the proposed project. | NA |

** Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area of mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.)*

**(II) Activity**

**1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 1.1 | Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan) | No | Project lies in Special Industrial Zone (I3 Zone). I to R is received. |
| 1.2 | Clearance of existing land, vegetation and building? | Yes | There are 3 Structures on site. Industrial shed had already been demolished. Two building exists at site. |
| 1.3 | Creation of new land uses | Yes | Project is proposed in I3 zone. |
| 1.4 | Pre-construction investigations e.g. bore houses, soil testing? | Yes | The project terrain is flat. |
| 1.5 | Construction works? | Yes | RCC work is completed till 26th floor for wings A & B & |

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| | | | till 20th floor For wing C. Podium beyond building is completed up to 3rd level. |
| 1.6 | Démolition Works? | Yes | Existing structures are partly demolished |
| 1.7 | Temporary sites used for construction works or housing of construction workers? | No | All the construction Works and labor housing will be done on site. |
| 1.8 | Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations | Yes | Tower I - 2B+St+ 1st Podium + 2nd to 4th (Pt) Podiums + 5th to 43rd Floors with fire check floor between 21st & 22nd Floor and G +2nd (Pt.) Amenity block with Club-house on podium top<br><br>Tower II - Basement+ G+2P+St +1st to 35th Floors & fire check & service floor in between 18th & 19th Floor. |
| 1.9 | Underground works including mining or tunneling? | No | - |
| 1.10 | Reclamation works? | No | - |
| 1.11 | Dredging? | No | - |
| 1.12 | Offshore structures? | No | - |
| 1.13 | Production and manufacturing Process? | No | - |
| 1.14 | Facilities for storage of goods or materials? | Yes | Existing structures will be used for storage. After the usage those will be demolished. |
| 1.15 | Facilities for treatment or disposal of solid waste or liquid effluents? | Yes | STP and OWC will be developed and maintained during operation phase. |
| 1.16 | Facilities for long term housing of operational workers? | Yes | Temporary Labor camps on site shall be provided. |
| 1.17 | New road, rail or sea traffic during construction of operation? | No | - |
| 1.18 | New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.? | No | - |
| 1.19 | Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? | No | - |
| 1.20 | New or diverted transmission lines or pipelines? | Yes | Underground water supply, sewerage lines, transmission line will be provided. |
| 1.21 | Impoundment, damming, | No | - |

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| | culverting, realignment or other changes to the hydrology of watercourses or aquifers? | | |
| 1.22 | Stream crossings? | Yes | Pipe box drain is passing through the plot. |
| 1.23 | Abstraction or transfers of water from ground or surface waters? | No | No |
| 1.24 | Changes in water bodies or the land surface affecting drainage or run-off | No | The project location is in well developed urbanized area. SWD network is available around the project. SWD network designed for project shall be connected to the SWD provided by corporation. This will be in line with the natural drainage pattern of area and the same shall be approved by corporation. |
| 1.25 | Transport of personnel or materials for construction, operation or decommissioning? | Yes | There will be transport of construction materials and some personnel (construction staff). |
| 1.26 | Long-term dismantling or decommissioning or restoration works? | Not Applicable | Not Applicable |
| 1.27 | Ongoing activity during decommissioning which could have an impact on the environment? | Not Applicable | Not Applicable |
| 1.28 | Influx of people to an area in either temporarily or permanently? | Yes | Workers will be deployed on site from nearby places or through contractor on temporary basis.<br>After development of project influx of around 5865 people will occur. |
| 1.29 | Introduction of alien species? | No | Indigenous species will be planted. |
| 1.30 | Loss of native species or genetic diversity? | -no | **RG area under green belt:**<br>**1.** RG on ground: 11,486.73 Sq.mt<br>**2.** RG on podium: 6,470.20 sq.mt<br>**3.** Total RG Area : 17,956.93 sq.mt |
| 1.31 | Any other actions? | -no | NA. |

**2. Use of Natural resources for construction or operation of Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply).**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 2.1 | Land specially undeveloped or agricultural land (ha) | No | - |

| | | | |
|---|---|---|---|
| 2.2 | Water (expected source & competing users) unit KLD | No | Around 250 labors will come to site during peak construction phase. 100 shall be provided with temporary housing facilities.<br>Workers: 20 KLD<br>Construction: 20 KLD<br>Operation phase: Total water demand of the project is expected to be 917KLD approximately and the water requirement will be met by the MCGM.<br>No ground water extraction is proposed for the activities during construction and operation phase. |
| 2.3 | Minerals (MT) | No | NA |
| 2.4 | Construction material – stone, aggregates, and/soil (expected source-MT) | Yes | The construction materials will be procured from local dealer. |
| 2.5 | Forests and timber (source-MT) | No | - |
| 2.6 | Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW) | Yes | **Construction Phase:**<br>Requirement – 100 kW<br>**Operation Phase** :<br>Source of Power –MSETCL<br>Connected Load- 19.59 MW<br>Maximum demand – 6.5 MW |
| 2.7 | Any other natural resources (use appropriate standard units) | No | No |

**3.0 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 3.1 | Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies) | No | There will be negligible amount of Waste oil generated from the DG sets to be used as power back up source.<br>Discarded containers of paints, solvents etc. during construction phase. They will be stored separately and will be handed over only to authorized processor for the facility |

| | | | |
|---|---|---|---|
| 3.2 | Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases) | No | Regular Pest control and adequate fumigation will be done will be done. |
| 3.3 | Affect the welfare of people e.g. by changing living conditions? | Yes | Project will provide well planned residential infrastructure as well as add to the aesthetic appeal of the surrounding moreover this project will develops many job opportunities in the vicinity area, thus positive impact on living condition. |
| 3.4 | Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc., | No | There are school and other infrastructures within 500 m radius area of the project. However traffic planning and waste management during construction and operation phase shall mitigate the adverse effect, if any. |
| 3.5 | Any other causes | No | Not Applicable |

**4.0 Production of solid wastes during construction or operation or decommissioning (MT/month)**

| Sr. No. | Information/Checklist Confirmation | Yes/ No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 4.1 | Spoil, overburden or mine wastes | No | NA |
| 4.2 | Municipal waste (domestic and or commercial wastes) | Yes | Total waste generated: 2977 kg/day<br>Biodegradable waste= 1786 kg/day<br>Non Biodegradable waste = 1191 kg/day<br>Bio degradable waste will treated in OWC to use as manure<br>Non bio degradable waste will be handed over to authorized vendors. |
| 4.3 | Hazardous wastes (as per hazardous waste management rules) | Yes | Waste oil generated from D.G. shall be stored at separate location duly marked and will be send to the CPCB authorized recyclers. |
| 4.4 | Other industrial process wastes | No | Not Applicable |
| 4.5 | Surplus product | No | Not Applicable |

| | | | |
|---|---|---|---|
| 4.6 | Sewage sludge or other sludge from effluent treatment | Yes | Dried sludge from STP will be used as manure for the plants. |
| 4.7 | Construction or demolition wastes | Yes | Construction waste will be used within project only. Unusable and excess construction debris will be disposed at designated places as per local permission. |
| 4.8 | Redundant machinery or equipment | No | There will not be any redundant machinery. |
| 4.9 | Contaminated soils or other materials | No | No |
| 4.10 | Agricultural wastes | No | No |
| 4.11 | Other solid wastes | - | NA |

**5.0 Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 5.1 | Emissions from combustion of fossil fuels from stationary or mobile sources | Yes | • Emission will be generated from vehicular transport to the project.<br>• Standby DG set will emit air pollutants (PM, $SO_2$ and NOx). DG set shall be installed as per CPCB guidelines and manufacturer's instructions to keep the emissions within limits of CPCB. Stack height shall be provided as per CPCB guidelines for adequate dispersion of released pollutants and to have negligible GLCs in the surrounding area. |
| 5.2 | Emission from production processes | No | Not Applicable |
| 5.3 | Emissions from materials handling including storage or transport | Yes | • Emissions will be generated while handling and transportation of materials like cement, sand etc. to site and will be temporary in nature.<br>• RMC shall be used preferably to reduce fugitive emissions due to material handling.<br>• Regular water sprinkling shall be done to reduce dust generation<br>• Transportation shall be done in covered trucks. |
| 5.4 | Emissions from construction activities including plant and | Yes | The project may cause rise in dust level |

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| | equipment | | during construction phase. Precautions will be taken to reduce dust generation during construction phase.<br>• RMC use will eliminate the handling of cement, sand and concrete; thus dust emission will be minimized.<br>• Tarpaulins will be used to cover trucks carrying materials.<br>• Water sprinkling will be done at regular intervals to reduce dust generation.<br>• Net lawn will be used during construction. |
| 5.5 | Dust or odours from handling of materials including construction materials, sewage and waste | Yes | Dust generation will be controlled as described above proper ventilation will be provided around STP<br>**During operation phase**, municipal solid waste shall be treated in OWC to produce manure.<br>Sewage shall be treated in established technology like MBBR. |
| 5.6 | Emissions from incineration of waste | No | Not Applicable |
| 5.7 | Emissions from burning of waste in open air (e.g. slash materials, construction debris) | No | Not Applicable |
| 5.8 | Emissions from any other sources | No | Not Applicable |

**6.0 Generation of Noise and vibration, and emissions of Light and heat**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 6.1 | From operation of equipment e.g. engines, ventilation plant, crushers | Yes | Noise generation from construction equipment's used for drilling, cutting operations.<br>During Operation Phase, Noise will be generated due to operation of DG sets.<br>For control of noise following measures shall be adopted:<br>• Equipments shall be regularly maintained<br>• High noise generating construction activities would be carried out only during day time.<br>• Personal Protective Equipments (PPE) shall be provided to construction workers.<br>• Acoustic enclosure for DG Set with stack height as per norm will be provided. |
| 6.2 | From industrial or similar processes | No | Not Applicable |
| 6.3 | From construction or demolition | Yes | The construction activities will include the following noise generating activities;<br>1. Excavation activities etc.<br>2. Concreting and mixing.<br>3. Heavy vehicle movement.<br>Following precautions shall be taken to control noise pollution :<br>• High noise generating activities shall be carried out during day time only.<br>• Workers working near high noise machinery would be provided with ear muffs/ear plugs.<br>• Acoustic enclosure for DG Set will be provided. |
| 6.4 | From blasting or piling | Yes | Only during piling work. |

| | | | |
|---|---|---|---|
| 6.5 | From construction or operational traffic | Yes | **During Construction Phase:**<br>There will be transport of materials for construction work. Precautions will be taken to reduce the impacts of the vehicular movement such as vehicular trips will be at peak traffic hours.<br><br>**During Operation Phase:**<br>The vehicular parking will be restricted only in the adequate parking area provided, which would help in reducing noise pollution due to traffic congestion. Adequate tree plantation will also help to reduce the noise level and enhance air quality<br><br>The details of traffic management refer in EMP |
| 6.6 | From lighting or cooling systems | No | Not Applicable |
| 6.7 | From any other sources | Yes | During power failure to mitigate the noise of D.G. sets while in operation D.G. sets will be enclosed in acoustic enclosures. |

**7.0 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 7.1 | From handling, storage, use or spillage of hazardous materials | No | NA |
| 7.2 | From discharge of sewage or other effluents to water or the land (expected mode and place of discharge) | No | Necessary precautions like duel plumbing system, isolation of STP from domestic water tanks and natural water bodies shall be taken into consideration. |
| 7.3 | By deposition of pollutants emitted to air into the land or into water | Yes | The major emission form this construction activity will be Dust emissions. The impact of the same will be depressed by the methods like water sprinkling. |
| 7.4 | From any other sources | No | No |
| 7.5 | Is there a risk of long term build up of pollutants in the environment from these sources? | No | No |

**8.0 Risk of accidents during construction or operation of the project, which could affect human health or the environment**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 8.1 | From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances. | No | During construction all construction workers will be provided with suitable Personal Protective Equipment as required under the health & safety norms. Suitable firefighting measures will be provided to reduce damage due to fire-accidents. |
| 8.2 | From any other causes | Yes | There is a risk of accident during construction however proper safety measures will be taken. |
| 8.3 | Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, could burst etc)? | Yes | This area falls under seismic zone –III according to Indian Standard Seismic zoning map. |

**9.0 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality**

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 9.1 | Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: | Yes | |
| | Supporting infrastructure (roads, power supply, waste or waste water treatment, etc) | Yes | The project provides a well designed residential housing area for the occupants.<br>Internal Roads, STP etc will be provided |
| | Housing development | Yes | |
| | Extractive industries | NA | |
| | Supply industries | NA | |
| | Other | | |

| Sr. No. | Information/Checklist Confirmation | Yes/No | Details thereof (with approximate quantities/ rates, wherever possible) with source of information data |
|---|---|---|---|
| 9.2 | Lead to after use of the site, which could have an impact on the environment | No | Not Applicable |
| 9.3 | Set a precedent for later developments | Yes | This will create job opportunity for support staff like security, maintenance, household workers etc. |
| 9.4 | Have cumulative effects due to proximity to other existing or planned projects with similar effects | Yes | Impacts on water availability, storm water drainage, availability of electricity, traffic congestion etc. |

**(iii) Environmental Sensitivity**

| Sr. No. | Areas | Name/ Identity | Aerial distance (with 15-km) Proposed project location boundary |
|---|---|---|---|
| 1 | Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value | No | |
| 2 | Areas which are important or sensitive of ecological reasons – wetlands, water courses or other water bodies, coastal zone, biospheres, mountains, forests | Yes | Sanjay Gandhi National Park 3.7 Km |
| 3 | Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration | Yes | Sanjay Gandhi National Park 3.7 Km |
| 4 | Inland, coastal, marine or underground waters | No | No |
| 5 | State, national boundaries | No | No |
| 6 | Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas | No | |
| 7 | Defense installations | No | No defense installation in the neighborhood. |
| 8 | Densely populated or built-up area | Yes | Residential area all around the site. |
| 9 | Areas occupied by sensitive man made land uses *(hospitals, schools, places of worship, community facilities)* | Yes | There are School , hospitals around the project within 2 Km boundary |
| 10 | Areas containing important, high quality or scarce resources *(ground water resource, surface resources, forestry, agriculture, fisheries, tourism, minerals)* | No | -- |

| Sr. No. | Areas | Name/ Identity | Aerial distance (with 15-km) Proposed project location boundary |
|---|---|---|---|
| 11 | Areas already subjected to pollution or environmental damage. *(those where existing legal environmental standards are exceeded)* | No | Not in immediate vicinity of the area. |
| 12 | Areas susceptible to natural hazard which could cause the project to present environmental problems *(earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)* | No | -- |

(b) The following shall be inserted at the end, namely:-

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost."

Date: 27/10/2016
Place: Mumbai

For Atmosphere Realty Pvt. Ltd.

Authorized Signatory

**FORM-1A**
**(Only for Construction Projects listed under Item 8 of Schedule)**
**Checklist of Environmental Impacts**

## 1. Land Environment

| Requirement | Compliance |
|---|---|
| 1.1. Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan/Development Plan of the area. Change of land use if any and the statutory approval form the competent authority are submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. | . <br>• The proposed land use is in conformation with the approved Municipal Master Plan/Development Plan. <br>• The site is under the jurisdiction of which local authority MCGM |
| 1.2. List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc. | The major project requirements are:- <br>(i) Total Plot Area: **56,509.50** sq.m. <br><br>(ii) Water consumption: <br>Construction Phase :40 KLD <br>Operation phase: 917 KLD <br>(iii) Power requirement: <br>Operation Phase : <br>Source of Power MSETCL <br>Connected Load- 19.59 MW <br>Maximum demand -6.5 MW <br><br>4 Wheelers required : 2,154 Nos. <br>4 Wheelers proposed : 2,167 Nos. |
| 1.3. What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing landuse, disturbance to the local ecology) | The proposed activity will improve the basic infrastructure facilities of the area. <br>Open spaces, community facilities are simultaneously being augmented in the surroundings. |
| 1.4. Will there is any significant land distribution resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given) | The project has taken care of land disturbance while implementing the previously approved project. |
| 1.5. Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site) | Natural Drainage System is towards the existing nalla.. |
| 1.6. What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from | Minimum earthwork will be involved in the project and the excess quantity will be disposed as per Debris management plan. |

<table>
<tr><td>outside the site etc.)</td><td>EXCAVATION HAS STARTED.
<table>
<tr><td>WASTE</td><td>MANAGEMENT</td></tr>
<tr><td>Cement Bags</td><td>Returned back to vendor or sold to recycler.</td></tr>
<tr><td>Paint container & other Barrels</td><td>Will be sold for reuse.</td></tr>
<tr><td>Solid block debris</td><td>Reused on the site to construct safety walls and backfilling below roads.</td></tr>
<tr><td>Scrap metal generated</td><td>100 % will be sold for recycling</td></tr>
<tr><td>Concrete waste</td><td>The balance /waste concrete of higher grade will be diverted to the lower grade PCC of podium areas.</td></tr>
<tr><td>Sand</td><td>Wastage of sand will be used for bedding for flooring purpose. Also will be used as filler material for toilets water proofing.</td></tr>
<tr><td>Tiles waste</td><td>Waste tiles will be cut & will be used for skirting. Broken pieces will be used for china mosaic waterproofing of terraces.</td></tr>
<tr><td>Glass</td><td>Will be sold for recycling.</td></tr>
<tr><td>Electrical wires and cables</td><td>Will be sold for recycling.</td></tr>
<tr><td>Pipes</td><td>Will be sold for recycling.</td></tr>
</table></td></tr>
<tr><td>1.7. Give details regarding water supply, waste handling etc. during the construction period.</td><td>It is expected to house about 100 labours at site during construction phase. The total requirement of water will be around 40 KLD.(20 KLD –Labor Camp,20KLD Construction)</td></tr>
<tr><td>1.8. Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)</td><td>No low lying areas and wetlands are getting modified from the proposed activity</td></tr>
<tr><td>1.9. Whether construction debris & waste during</td><td>The construction debris will include sand,</td></tr>
</table>

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| construction cause health hazards? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal) | soil bricks and tiles. All this material will be utilized on the same site, Unusable and excess construction debris will be disposed at designated places as per local permission. .No hazardous waste is involved. During the construction phase Labor camps will be provided with sanitary facilities.<br>Temporary toilets & Temporary toilets with mobile STP will be provided. Adequate house-keeping facilities and practices will be maintained. |

**2. Water Environment**

| Requirement | Compliance |
|---|---|
| 2.1. Give the total quantity of water requirement for the proposed project with the break-up of requirements for various uses. How will the water requirements met? State the sources & quantities and furnish a water balance statement. | Source: MCGM<br>• Fresh water: 550 KLD & source: MCGM<br>• Flushing water : 275 KLD<br>• Landscape : 92 KLD<br>• Total Water Requirement : 917 KLD |
| 2.2. What is the capacity (dependable flow or yield) of the proposed source of water? | For water supply the project will be dependent on MCGM & Treated waste water from STP. Recycled water will be used for gardening, flushing. |
| 2.3. What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality) | NA |
| 2.4. How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage) | Total Recycled water will be used at maximum extent for flushing, gardening<br>Flushing: 275 KLD<br>Greening: 92 KLD |
| 2.5. Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption) | The sewage generation from the proposed project will be 715 KLD. STP of total capacity 730 KLD will be provided for treating the waste water.<br>Expected Characteristics<br>**Raw Sewage Characteristics**<br>PH - 7 – 8<br>BOD - 250 - 350 mg/l<br>COD - 500 - 600 mg/l<br>O & G - ~ 60 mg/l<br>TSS - 300 mg/l |

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| | **Treated Sewage Characteristics (For Re-Use)**<br>PH 7 – 8<br>BOD < 5 mg/l<br>COD < 30 mg/l<br>O & G < 1 mg/l<br>TSS < 5 mg/l |
| 2.6. What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity) | Rainwater from the roofs will be lead to storage tanks. |
| 2.7. Give details of the water requirements met from water harvesting? Furnish details of the facilities created. | The run-offs will be channelized properly through storm water drain .<br>Management plan for Flood is as follows :<br>• Storm water drain shall be cleaned at regular interval.<br>• Dewatering pumps shall be installed at vulnerable locations. |
| 2.8. What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (Quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way? | There will be no ground water extraction. The rain water collected from RWH tanks as well as the recycled water used for flushing and gardening will help meet the needs |
| 2.9. What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any) | The run-off during construction phase is expected to carry heavy amount of silt and the other material from the site this will be managed through :<br>• Construction material will be stored and covered with a temporary shed ensuring that no leachates occur.<br>• The rain water entering into the pit will be screened for the removal of heavy silt and other materials.<br>• Not mixing mortar in locations that will drain into storm water system. |

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| | • Stabilizing a single entry/exit point to ensure sediment is not tracked off site |
| 2.10. What precautions/measures are taken to prevent the run-off from construction activities polluting land and aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts) | The storm water from roof top will be properly channelized to the rain water harvesting sumps through storm water network. Proper rainwater harvesting structure will be design for maximum capture of surface run off. |
| 2.11. How is the storm water from within the site managed? (State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels) | During construction phase the sewage generated will be around 18 KLD and will be treated in mobile STP..Temporary /Mobile toilets will be provided . Adequate housekeeping practices will be maintained. |
| 2.12. Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation) | No. Proper living conditions will be provided for labours. |
| 2.13. What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal) | The quantity of wastewater generated from the project will be treated in STP and recycled and used for gardening and flushing purpose.<br>Sewage generated in KLD -715 KLD<br>Treated water in KLD-644 KLD |
| 2.14. Give details of dual plumbing system if treated wastewater is used for flushing of toilets or any other use. | There will be separate pipelines for the supply of treated water from STP and the fresh water. Treated water will be used for the flushing and landscaping purposes, while the fresh water will be used for domestic consumption. |

**3. Vegetation**

| Requirement | Compliance |
|---|---|
| 3.1. Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with its unique features, if any) | The project site is located in very densely populated area. The local ecosystem and biodiversity will not be hampered because of this development. |
| 3.2. Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project) | There will be no extensive vegetation clearance or modification. |
| 3.3. What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc. along with a layout plan to an appropriate scale) | Due care will be taken to protect the important site features:<br>• Tree plantation will be done to protect the site from topsoil erosion |

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| | Piling will be done so as to minimize the impacts on the existing structures in the nearby areas. |

**4. Fauna**

| Requirement | Compliance |
|---|---|
| 4.1. Is there likely to be any displacement of fauna – both terrestrial and aquatic or creation of barriers for their movement? Provide the details. | There will be no displacement of fauna - both terrestrial and aquatic and there will be no barrier in their movement. There is no endangered species found except the local species. |
| 4.2. Any direct or indirect impacts on the avifauna of the area? Provide details. | There will be no impact on the avifauna (birds) of the area. The trees planted may attract birds in the future creating a positive impact on the avifauna. |
| 4.3. Prescribe measures such as corridors, fish ladders etc. to mitigate adverse impacts on fauna. | The project is located on landmass and there is no need to provide corridors and fish ladders etc. |

**5. Air Environment**

| Requirement | Compliance |
|---|---|
| 5.1. Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions) | Air emissions will increase due to vehicular movements which will be minimised by using local vendors and labourers to reduce the traffic. |
| 5.2. What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters. | **Dust emission during construction:**<br>• RMC use will eliminate the handling of cement, sand and concrete thus dust emission will be minimized.<br>• Tarpaulins will be used to cover trucks carrying debris.<br>• Water sprinkling will be done at regular intervals to reduce dust generation. |
| 5.3. Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry and exit to the project site. | • The proposed project will provide sufficient parking to its occupants and visitors.<br>• Necessary arrangements will be made for smooth entry and exit of vehicles.<br>• Parking Area:<br>Total no of parking :<br>Four wheeler required: 2154<br>Four wheeler proposed: 2167 |
| 5.4. Provide details of the movement patterns | Adequate provisions have been made in the |

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| with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category. | internal roads, for smooth vehicles entry and exit and as well as pedestrian movements. |
| 5.5. Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above. | • During construction activity vehicular movement will be the major source. The mitigation is proposed through a detailed EMP<br>• Necessary arrangements will be made for smooth entry and exit of vehicles |
| 5.6. What will be the impact of D.G. sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details. | D.G. set will create no noise due to vibration as sound proof canopy will be provided. Acoustic enclosure will be provided with proper stack height as per the norms |

**6. Aesthetics**

| Requirement | Compliance |
|---|---|
| 6.1. Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents? | The proposed construction activity will not result in the obstructions of a view, scenic amenity or landscapes. Better designed structure and well planned landscape will add up aesthetics of that zone. |
| 6.2. Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account? | There will be negligible adverse impact due to new constructions on the existing structures. Control measures taken to minimize the impacts on surroundings:<br>• Drilling machines used for piling activities will be of rig type which will help to avoid hammering clutter and knocking noises.<br>• The construction site will be covered from all 4 sides with tin sheets<br>• The setbacks are sufficient to take care of the depth to which the structure goes without the fear of soil collapse in addition to piling. |
| 6.3. Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt | The proposed construction activity will not result in the obstructions of a view, scenic amenity or |

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| out. | landscapes. Better designed structure and well planned landscape will add up aesthetics of that zone. |
| 6.4. Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the vicinity of the proposed site have been considered. | There are no anthropological or archaeological sites or artefacts nearby proposed site. |

**7. Socio-Economic Aspects**

| Requirement | Compliance |
|---|---|
| 7.1. Will the proposal result in any changes to the demographic structure of local population? Provide the details. | The project site will attract labours from distant places but that will be negligible. Proposed development will hire local people around the project site on daily basis. |
| 7.2. Give details of the existing social infrastructure around the proposed project. | There are schools, colleges hospitals etc. And other basic amenities within 2 Km distance from the project site |
| 7.3. Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed? | The proposed project will not cause any adverse effects on local communities, disturbance to sacred sites or other cultural values |

**8. Building Materials**

| Requirement | Compliance |
|---|---|
| 8.1. May involve the use of building materials with high-embodies energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency) | The basic engineering materials like aggregate, cement, sand and bricks/blocks will be purchased locally. However, finishing materials will be purchased keeping in mind the energy conservation aspect. |
| 8.2. Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts? | Adequate measures will be taken to keep noise and dust problems at site under control by adopting good practices and good maintenance. |
| 8.3. Are recycled materials used in roads and structures? State the extent of savings achieved? | Construction material will be recycled in the same or other development site. |
| 8.4. Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project. | Total waste generated: 2977 kg/day<br>Biodegradable waste = 1786 kg/day<br>Non Biodegradable waste = 1191 kg/day<br><br>The solid waste management facility will be proposed as per MSW rules. Garbage will be collected manually from each of the building in the garbage collection room. The garbage collected from area will be segregated into wet and dry garbage. The wet garbage (biodegradable waste) will sent to OWC to use as manure for gardening/landscaping which required and rest |

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| | will be handed over to vendors. The dry garbage (non biodegradable waste) will handed over to authorised recyclers. |

**9. Energy Conservation**

| Requirement | Compliance |
|---|---|
| 9.1. Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of build-up area? How have you tried to minimize energy consumption? | Power requirement:<br>Construction Phase = 100 kVA<br><br>Operation Phase :<br>Source of Power – MSETCL<br>Connected Load- 19.59 MW<br>Maximum demand -6.5 MW<br>Backup power: DG set will be provided for backup power to emergency facilities. |
| 9.2. What type of, and capacity of, power back-up to you plan to provide? | DG set will be provided for backup power to emergency facilities |
| 9.3. What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation? | Glass used for buildings and residences will be plain clear glass. |
| 9.4. What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project. | Building orientation, wall to window ratio and thermal properties of envelop are being looked into reduce solar heat gain and provide natural light and adequate ventilation to reduce humidity. |
| 9.5. Does the layout of streets and buildings maximize the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? | Yes. Solar lights will be provided for common amenities. |
| 9.6. Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and West and the Roof? How much energy saving has been effected? | Depending upon the site condition/location, efforts will be made by the Architects to maximize the shading of Walls on the East and West and the Roof. |
| 9.7. Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications. | All the electrical installations and structures will confirm to energy efficiency norms as available in the market. |
| 9.8. What are the likely effects of the building activity in altering the microclimates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat | There will not be any effect of the building activity in altering the microclimates particularly |

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| islands & inversion effects? | creation of heat islands & inversion effects. |
| 9.9. What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) Fenestration? Give details of the material used and the U-values or the R-values of the individual components. | Roof will be of high quality concrete as per the NBC rules 2005. |
| 9.10. What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans. | Standard fire safety norms will be followed as per the government norms. Refuge area will be provided as per norms. |
| 9.11. If you are using glass as wall material, provide details and specifications including emissivity and thermal characteristics. | No glass will be used for walls. |
| 9.12. What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration. | Proper ventilation will be providing in rooms. Air changes/hour is as per Bureau of Indian Standards (National Building Code, 2005). |
| 9.13. To what extent the non-conventional energy technologies are utilised in the overall energy consumption? Provide details of the renewable energy technologies used. | Every effort will be made to generate and use non-conventional energy and renewable energy, depending upon the circumstances and chances of generating energy. Solar energy utilisation is the major part of that. |

**ENVIRONMENT MANAGEMENT PLAN**

(The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimise adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.)