

ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

For the period, of

(Dec, 2017 to May, 2018)

for

Residential Project

**Xrbia North Hinjewadi Developers Pvt. Ltd.
Bebadohal, Taluka-Maval, District-Pune**

**(Environmental Clearance letter No. SEAC-III-2013/CR-244/TC-3
Dated 31st March 2015)**



Proposed by

Xrbia North Hinjewadi Developers Pvt. Ltd.

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Environmental Clearance

Government of Maharashtra

SEAC-2013/CR-244/TC-3
Environmental department
Room No, 217, 2nd floor,
Mantralaya Annex,
Mumbai - 400 032.
Dated: 31stMarch, 2015

To,
Mr. Veer Bharati Kouls
Xrbia North Hinjewadi Developers Pvt. Ltd
(Lilly floriculture Pvt Ltd)
929, Mantri House, 1st Floor F.C. Road,
Pune-411004

Subject: Environment clearance for proposed residential project "Megacity" on the plot bearing S.No. 01 at Village Bebadohal, Tal. Maval, Dist.: Pune by M/s Lily Floriculture Pvt Ltd.

Sir,

This has reference to your communication on the above-mentioned subject. The proposal was considered as per the EIA Notification- 2006, by the State Level Expert Appraisal Committee- III, Maharashtra in its 8th& 11thmeeting & recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 79th& 82nd meeting.

- It is noted that the proposal is considered by SEAC-III under screening category 8(a) B2 as per EIA Notification 2006.

Brief Information of the project submitted by project proponent is as-

Details	Information
Name of the project	"Proposed Residential Development" Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune, State-Maharashtra
Project Proponent	Xrbia North Hinjewadi Developers Pvt. Ltd. (Lily floriculture Pvt. Ltd)
Consultant	M/s. Ultra-Tech Environmental Consultancy & Laboratory
Type of project: Housing project/ Industrial/ Estate/ SRA scheme/ MHADA/ Township or others	Proposed Residential Development
Location of the project	Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune, State-Maharashtra
Whether in Corporation/ Municipal / other area	Town Planning Department, Pune
Applicability of DCR	Regional Planning DCR
IOD/IOA/Concession	Part sanction received, remaining applied

Compliance Report for residential project at Bebadohal, Pune

Details	Information			
document or any other form of document as applicable (Clarifying its conformity with local planning rules & provision)				
Note on initiated work (if applicable)	No work has been initiated.			
LOI/NOC from MHADA/ Other approvals (If applicable)	N.A.			
Total Plot Area (sq.m.) Deduction & Net plot area	Plot area: 26,100.00 m² Deduction: Amenity Area: 3,915m² Total Deduction: 3,915.00m² Net plot area: 22,185.00m²			
Permissible FSI (including TDR etc.)	Permissible FSI: 31,059.00m²			
Proposed Built-up Area (FSI & Non-FSI)	FSI area	31,059.00 m²		
	Non FSI area	11,611.82 m²		
	Total	42,670.82 m²		
Ground-coverage percentage	Total Ground coverage is 3,730.85m²(14.29%) of net plot area.			
Estimated cost of the project	Rs.55 Cr/-			
No. of building & its configuration	Sr. No.	Building type	Number of floors	Number of Flats/Building
	1	A2	G+9	115
	2	B1	P+7	56
	3	B2	P+7	56
	4	B3	O+7	56
	5	B4	P+7	56
	6	B5	P+7	56
	7	B6	P+8	64
	8	B7	P+12	96
	9	C1	P+9	72
	10	C2	P+9	72
	Total		699	
Number of tenants And shops	No. of Tenements: 699 nos.			
Number of expected residents / users	Residential Users: 3,495 nos.			
Tenant density per hector	300 tenants per hector			
Heights of the building	37.7 m			
Right of way (Width of the road from the nearest fire station to the proposed building)	Nigadi fire station approx. 16 km & Width of the road from the fire station to the proposed building 30m wide road abutting to side.			
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.			
Existing structure (s)	No existing structure			
Details of the demolition with disposal	No demolition work			

Details	Information
(If applicable)	
Total Water Requirement	<p>Residential</p> <p>Dry season:</p> <p>Source: Irrigation Department, Pune</p> <p>Fresh water (CMD): 316 m³/day</p> <p>Recycled water (Residential CMD): 156 m³/day</p> <p>Recycled water (Garden CMD): 30 m³/day</p> <p>HAVC makeup: Not Applicable</p> <p>Total fresh water requirement: 316 m³/day</p> <p>Excess treated water(CMD): 152 m³/day</p> <p>swimming pool: Not applicable</p> <p>Firefighting(CMD): UGT: 150 KLD- 2 Nos</p> <p>Wet reason:</p> <p>Source: Irrigation Department, Pune</p> <p>Fresh water (CMD): 316 m³/day</p> <p>Recycled water (Residential CMD): 156 m³/day</p> <p>Recycled water (Garden CMD): 15 m³/day</p> <p>HAVC makeup: Not applicable</p> <p>Total water requirement : 316 m³/day</p> <p>Excess treated water(CMD): 182 m³/day</p> <p>Swimming pool: Not applicable</p> <p>Firefighting(CMD): UGT: 150 KLD- 2 Nos</p>
Details about Swimming Pool:	<p>Dimension of Swimming Pool: Not applicable</p> <p>Total water requirement in KLD: Not applicable</p> <p>Water requirement for make up in KLD: Not applicable</p> <p>Details of Plant & Machinery used for treatment of Swimming pool water: Not applicable</p>
Rain Water Harvesting (RWH)	<p>Level of the ground water table: 6-10 m</p> <p>Size and no of RWH tank (s) and Quantity : 35 m³</p> <p>Location of the RWH tank (s): NW Side of the project site</p> <ul style="list-style-type: none"> • Size, no. of recharge bore well and Quantity: 1 m x 1 m x 1 m - 15 Nos. <p>Budgetary allocation (Capital cost And O & M cost):</p> <p>Capital cost is Rs.15 Lakh</p> <p>O & M cost is Rs.0.4 Lakh/annum</p>
UGT tanks	<p>Residential:</p> <p>Domestic UG tank capacity: 316 KLD</p> <p>Flushing UG tank capacity: 187KLD</p> <p>Fire UG tank capacity: 150 KLD-2 Nos.</p> <p>Commercial</p> <p>Domestic UG tank capacity: Not applicable</p> <p>Flushing UG tank capacity: Not applicable</p> <p>Fire UG tank capacity: Not applicable</p>
Storm water drainage	<ul style="list-style-type: none"> • Natural water drainage pattern: Dendrite pattern The property slopes very gently towards NW (North west side) • Quantity of storm water: 436 m³/day • Size of SWD: Internal storm water drain 900 mm wide drain
Sewage and waste water	<ul style="list-style-type: none"> • Sewage generation : 377 m³/day • Capacity of STP(CMD):- 380 m³ <p>STP Technology:- Fluidized Aerobic Bio-Reactor(FAB)</p> <ul style="list-style-type: none"> • Location of the STP: SW side of the project site • DG sets (during emergency): Load considered in the

Details	Information															
	<p align="center">Common DG set Budgetary allocation (capital cost and O & M cost) Capital cost is Rs.76 lakh O & M cost is Rs.12 lakh/annum</p>															
<p>Solid Waste Management</p>	<p>Waste generation in the Pre-construction and construction phase</p> <ul style="list-style-type: none"> • Waste generation is 25 kg/day • Quantity of the top soil to be preserved: 1,500 m³ • Quantity of the debris: 10,528 m³ <p>Disposal of the construction way debris: This material shall be used for back filling and levelling of the plot and remaining will be disposed to authorized sites.</p> <p>Waste generation in the Operation Phase</p> <ul style="list-style-type: none"> • Residential :Biodegradable: 943 kg/day Non-biodegradable: 629 kg/day • Commercial : Biodegradable: Not applicable • Non-Biodegradable: Not applicable • Total biodegradable: 943 kg/day • E- waste(kg/month): Negligible • STP sludge (Dry Sludge) (kg/month): 16 approx. <p>Mode of Disposal of waste:</p> <ul style="list-style-type: none"> • Dry waste: handed over to authorized agency for disposal • Wet waste: Vessel composting. • E-Waste: handed over to authorized recyclers • Hazardous waste: authorized hazardous waste management agencies • STP Sludge (Dry sludge): used as manure <p>Area requirement</p> <ol style="list-style-type: none"> 1. Location of OWC: SW side of the project site 2. Area for the storage and treatment of the solid waste:- 74 m² <p>Budgetary allocation (Capital cost and O & M cost) Capital cost is Rs.15 Lakh O & M cost is Rs.5 lakh/annum</p>															
<p>Green Belt Development</p>	<p>Total R.G area: 6,000 m²</p> <ol style="list-style-type: none"> 1. RG area other than green belt: (Please specify for playground, etc.) Landscape area:500m² 2. RG area under green belt: Green covers Area: 5,500m² 3. Plantation: Number and list of trees species to be planted in the ground RG: 357 Nos. trees to be planted. List of Trees:- <table border="1" data-bbox="695 1696 1459 1892"> <thead> <tr> <th>No.</th> <th>Botanical Name</th> <th>Common Name</th> <th>Quantity</th> <th>Characteristics & Ecological Importance</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Albizia lebbek</td> <td>Shirish</td> <td>23</td> <td>Its uses include environmental management, forage, medicinal and wood</td> </tr> <tr> <td>2</td> <td>Milingtonia</td> <td>Cork Tree</td> <td>28</td> <td>Tall deciduous,</td> </tr> </tbody> </table>	No.	Botanical Name	Common Name	Quantity	Characteristics & Ecological Importance	1	Albizia lebbek	Shirish	23	Its uses include environmental management, forage, medicinal and wood	2	Milingtonia	Cork Tree	28	Tall deciduous,
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Details	Information			
		Hortensis		fragrant, fruit is capsule, medicinal plant. Dried flower is good for lung tonic & cough diseases
	3	Cassia fistula	Golden shower Tree	25 It is planted as road side plantation. It acts as dust and noise barrier.
	4	Pongamia Pimata	Karanj	34 Medium sized deciduous tree. Beautiful orange flowers, Butterfly host plant
	5	Minisops elengii	Bakul	48 Shady tree, small white fragrant flowers
	6	Ficus retusa	Nandruk	32 Medium sized evergreen tree, shady tree
	7	Lagerstroemia flos reginea	Tamhan	36 State flower tree of Maharashtra Medium sized tree, beautiful purple flowers
	8	Bahmia racemose	Apta	22 Small tree with white lowers, Butterfly host plant
	9	Ficus religiosa	Pimpal	25 Medium sized evergreen tree, shady tree
	10	Amthocephalus cadamba	Kadamb	20 Shady, large deciduous tree, fast growing graceful tree ball shaped flowers.
	11	Azadirachta indica	Neem	26 Neem is extremely beneficial to save the environment from pollution, Since its florescence is purifying with its feathery crest tossing fifty feet into the sky. Neem is veritable "Kalpataru" for giving healthy environment. It also brings other environmental benefits such as flood control, reduced soil erosion and salination.
	12	Erythrina indica	Pangara	16 Medium sized deciduous tree. Bight scarlet flowers.
	13	Chukrasia tabulars	Indian Mahagony	26 Fast growing evergreen tree with broad symmetrical crown, medicinal plant. Bark is used to cure Malaria, diarrhea.
		Total		357
	1. Budgetary allocation (Capital cost and O & M cost) Capital cost is Rs.23 Lakh O & M cost is Rs.4.5 lakh/annum			
Energy	Power supply: • Residential :connected load: 2,104 kW			

Details	Information																								
	<ul style="list-style-type: none"> • Commercial: Connected Load: Not applicable • Source: MSEDCL <p>Energy saving by non- conventional methods:</p> <ul style="list-style-type: none"> • LED fittings are used for Parking, landscape & Solar street lighting (20%) instead of conventional light fitting. • Exterior lighting to be controlled by time switch. • Energy efficient motors. • Maximum allowable power loss from transformer to be within specified limits Details • Calculation & % of saving- 27.42% • Compliance of the ECBC guideline(YES/NO) - Yes <table border="1" data-bbox="695 663 1463 1402"> <tr> <td>Clause No. 7.2</td> <td>Mandatory requirement for lighting</td> <td>Lighting controls, Exit signs, lighting for exterior building grounds shall be provided as specified in ECBC, as applicable.</td> </tr> <tr> <td>Clause No. 7.2,1.4</td> <td>Exterior lighting control</td> <td>Exterior lighting is controlled by time switch (Timer with contactor) as applicable</td> </tr> <tr> <td>Clause No. 7.3</td> <td>Interior lighting power</td> <td>Interior lighting power (LPD) is within the limits as per above mentioned clause in ECBC.</td> </tr> <tr> <td>Clause No. 7.4</td> <td>Exterior lighting power</td> <td>Exterior lighting power(LPD) is within the limits as per above mentioned clause in ECBC.</td> </tr> <tr> <td>Clause No. 8.2</td> <td>Mandatory requirements for electrical power</td> <td>Transformers, Energy efficient Motors, power factor correction, check metering and monitoring, power distribution systems shall be as specified in ECBC.</td> </tr> <tr> <td>Clause No. 8.2.1</td> <td>Maximum allowable transformer losses</td> <td>Maximum allowable transformer losses are to be within specified limits as per above clause in ECBC.</td> </tr> <tr> <td>Clause No. 8.2.3</td> <td>Power factor correction</td> <td>Power factor correction as applicable to above mentioned clause for commercial building only.</td> </tr> <tr> <td>Clause No. 8.2.5.1</td> <td>Distribution losses</td> <td>Distribution losses are maintained in such a way that not exceeding 1% of total power usage.</td> </tr> </table> <ul style="list-style-type: none"> • Budgetary allocation(Capital cost & O&M cost) Capital cost - Rs.20 Lakh O&M cost - Rs.0.50Lakh/annum • DG Set: • DG set- 570 kVA(250+320kVA) 	Clause No. 7.2	Mandatory requirement for lighting	Lighting controls, Exit signs, lighting for exterior building grounds shall be provided as specified in ECBC, as applicable.	Clause No. 7.2,1.4	Exterior lighting control	Exterior lighting is controlled by time switch (Timer with contactor) as applicable	Clause No. 7.3	Interior lighting power	Interior lighting power (LPD) is within the limits as per above mentioned clause in ECBC.	Clause No. 7.4	Exterior lighting power	Exterior lighting power(LPD) is within the limits as per above mentioned clause in ECBC.	Clause No. 8.2	Mandatory requirements for electrical power	Transformers, Energy efficient Motors, power factor correction, check metering and monitoring, power distribution systems shall be as specified in ECBC.	Clause No. 8.2.1	Maximum allowable transformer losses	Maximum allowable transformer losses are to be within specified limits as per above clause in ECBC.	Clause No. 8.2.3	Power factor correction	Power factor correction as applicable to above mentioned clause for commercial building only.	Clause No. 8.2.5.1	Distribution losses	Distribution losses are maintained in such a way that not exceeding 1% of total power usage.
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Traffic management	<p>Traffic generated from this project will confluent on proposed 30 m wide road.</p> <p>Parking details:</p> <table border="1"> <thead> <tr> <th rowspan="2">Sr. No.</th> <th rowspan="2">Type of building</th> <th rowspan="2">Floors</th> <th colspan="2">Parking provided</th> </tr> <tr> <th>Cars</th> <th>Scoters</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>A2</td> <td>G+9</td> <td align="right">5</td> <td align="right">24</td> </tr> <tr> <td>2</td> <td>B1</td> <td>P+7</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>3</td> <td>B2</td> <td>P+7</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>4</td> <td>B3</td> <td>P+7</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>5</td> <td>B4</td> <td>P+7</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>6</td> <td>B5</td> <td>P+7</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>7</td> <td>B6</td> <td>P+8</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>8</td> <td>B7</td> <td>P+12</td> <td align="right">13</td> <td align="right">50</td> </tr> <tr> <td>9</td> <td>C1</td> <td>P+9</td> <td align="right">15</td> <td align="right">50</td> </tr> <tr> <td>10</td> <td>C2</td> <td>P+9</td> <td align="right">15</td> <td align="right">500</td> </tr> <tr> <td>11</td> <td>In Layout</td> <td></td> <td align="right">126</td> <td align="right">449</td> </tr> <tr> <td>12</td> <td>Cycles</td> <td></td> <td></td> <td align="right">923</td> </tr> </tbody> </table> <p>Width of all Internal roads (m): Width of driveways is 12 m wide.</p>	Sr. No.	Type of building	Floors	Parking provided		Cars	Scoters	1	A2	G+9	5	24	2	B1	P+7	13	50	3	B2	P+7	13	50	4	B3	P+7	13	50	5	B4	P+7	13	50	6	B5	P+7	13	50	7	B6	P+8	13	50	8	B7	P+12	13	50	9	C1	P+9	15	50	10	C2	P+9	15	500	11	In Layout		126	449	12	Cycles			923
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5	B4	P+7	13	50																																																																
6	B5	P+7	13	50																																																																
7	B6	P+8	13	50																																																																
8	B7	P+12	13	50																																																																
9	C1	P+9	15	50																																																																
10	C2	P+9	15	500																																																																
11	In Layout		126	449																																																																
12	Cycles			923																																																																

3. The proposal has been considered by SEIAA in its 79th & 82nd meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

**Conditions of Environmental Clearance
Letter No. SEAC-2013/CR244/TC-3 Dated 31st March 2015**

Sr.	Conditions	Compliance	Annex	Photo
i.	This environmental clearance is issued subject to utilization of excess treated water.	PP agrees with the given condition. 152 m ³ of excess water will be treated in dry season & 182 m ³ of excess water will be treated in wet season.		
ii.	This environmental clearance is issued subject to land use verification. Local authority/ planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any. Judgments/orders issued by Hon'ble High Court, Hon'ble NGT, Hon'ble Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified. PP Should submit exactly the same plans appraised or details provided in the above para may be reported to environment department. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.	The project area falls Under residential zone. The Plans are approved by Town Planning Department. Pune. We have received N.A. Permission from District Collector, Pune.		
iii.	Occupation Certificate shall be issued to the project proponent only after ensuring availability of drinking water and connectivity of the sewer line to the project site.	PP agrees with the condition. Drinking water facility and sewer line connection is available on the project site.		
iv.	STP capacity shall be increased appropriately considering waste water generation.	PP will be providing 380 m ³ /day capacity of sewage treatment plant.		✓

Sr.	Conditions	Compliance	Annex	Photo
v.	The environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for wild life as if applicable & this environmental Clearance does not necessarily implies that forestry & Wild life Clearance granted to the project which will be considered separately on merit.	The project area falls under residential zone of Pune Municipal corporation area and does not require any forestry and wild life clearance.		
vi.	PP has to abide by the conditions stipulated by SEAC and SEIAA.	Agreed. PP will comply with conditions stipulated by SEAC and SEIAA.		
vii.	The height, construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of area.	The plans are approved by Town Planning Dept. Pune as per their existing FSI/FAR.		
viii.	Consent for Establishment shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	"Consent for Establishment" is accorded for the establishment of the Residential Development by Maharashtra State Pollution Control Board vide their official letter 1.0/BO/ROHQ/CE/PN-20203-13/CC-5709 Dated 14 th June 2014	✓	

Sr.	Conditions	Compliance	Annex	Photo
ix.	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	PP are ensuring all required sanitation and hygienic measures within the entire project area (construction sites and in labour camp). We will maintain the sanitation and hygienic measures within the project area throughout the construction phase.		✓
	General conditions for construction phase			
i.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and First Aid Room etc.	First aid facility, with all basic medical facilities is provided at construction site within the project area. Labour camp with mobile toilets, Safe drinking water, Cooking Facilities is provided by the contractor to construction workers at the site.		✓
ii.	Adequate drinking water and sanitary should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid waste generated during the construction phase should be ensured.	PP has provided drinking water and sanitary facilities for construction workers at site. All necessary provisions are made for safe disposal of wastewater and solid waste generated during construction work.		✓
iii.	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings, No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.	PP is complying with the condition. All the facilities such as Working of STP, MSW disposal facility, green belt development has been completed prior to occupation of the building.		

Sr.	Conditions	Compliance	Annex	Photo
iv.	The solid waste generated should be properly collected and segregated dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable waste.	PP has made provisions for segregation of dry and wet waste at source. Dry waste will be handed over to authorized agency for disposal. Wet waste will be provided to vessel composting. The recyclable waste is sold to recycler.		
v.	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority	PP will comply with the same. Construction debris shall be used for backfilling and leveling of the plot and remaining will be disposed to authorized sites.		
vi.	Arrangement shall be made that waste water and storm water do not get mixed.	PP will comply with the same. Separate Arrangement shall be made so that waste water and storm water will not get mixed.		
vii.	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	The excavated top soil from project site has been used in landscape work. 1500 m ³ of top soil will be preserved for landscape development.		
viii.	Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO /Agriculture Dept.	PP is complying with the same.		
ix.	Soil and groundwater samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	The soil and groundwater sample from project area has been analyzed through MoEF approved lab. Monitoring reports for the period of Dec. 2017 to May 2018 are attached.	✓	

Sr.	Conditions	Compliance	Annex	Photo
x.	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourse and the dumpsites for such material must be secured so that they should not leach into the ground water.	Adequate measures have been taken to prevent the leaching into ground water.		
xi.	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	As it is residential project, there will be no Hazardous waste generation at the site. Waste oil from DG sets will be stored in go down and will be disposed off as per applicable rules and norms.		
xii.	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environment (Protection) Rules prescribed for air and noise emission standards.	PP is complying with the same. The diesel generator sets are of low sulphur diesel type and confirm to Environmental (Protection) Rules. Monitoring reports for the period of Dec. 2017 to May. 2018 are attached.		
xiii.	The diesel required for operating DG sets shall be stored in underground tanks and if required clearance from concern authority shall be taken.	PP will comply with the same. Diesel will not be stored at site. It will be purchased as and when required		
xiv.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	The vehicle hired for bringing construction material to the site is checked for PUC. Vehicles without PUC are not allowed on site. All suppliers and vendors are communicated for the same and same put in practice.	✓	✓

Sr.	Conditions	Compliance	Annex	Photo
xv.	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.	The Day and Night ambient noise levels within project area are monitored through MoEF approved lab. Monitoring reports for the period of Dec. 2017 to May. 2018 are attached.	✓	
xvi.	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27 th August 2003. (The above condition is applicable only if the project site is located within the 100 km of Thermal Power Stations).	PP is using Concrete having fly ash content for structural work. We are using Siporex blocks for brickwork.		
xvii.	Ready mixed concrete must be used in building construction.	PP is outsourcing ready mix concrete for building construction.		
xviii.	The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquake, adequacy of firefighting equipment etc. as per National Building Code including measures for lighting.	We have appointed authorized structural engineer for the same. Structural Certificate is enclosed.	✓	
xix.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Not applicable		
xx.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	PP are using Ready Mix concrete and curing agent for structural work. This will help in reduction in water demand for construction work.		
xxi.	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Ground water is not extract on site.		

Sr.	Conditions	Compliance	Annex	Photo
xxii.	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB AND Environment Department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% grey water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.	PP will comply with the same. Installation of Sewage Treatment Plant (STP) is in progress.		✓
xxiii.	Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.	PP will comply with the same.		
xxiv.	Separation of gray and black water should be done by the use of dual plumbing line for separation of grey and black water.	PP will comply with the same. Dual plumbing line is provided for separation of grey and black water.		
xxv.	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor-based control.	We will be using low flow type fixtures for showers, toilet flushing and drinking water.		
xxvi.	Use of glass may be reduced up to 40% reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.	We are providing WWR (Window Wall Ratio) of less than 40% to reduce the electricity consumption. We are not providing double glass or special reflective glass.		

Sr.	Conditions	Compliance	Annex	Photo
xxvii.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	PP will comply with the same. Appropriate thermal insulation is provided to roof as per Energy Conservation Building Code.		
xxviii.	Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposal off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.	<p>PP will comply with the same.</p> <p>LED fittings are used for parking, landscape and solar street lighting (20%) instead of conventional light fittings.</p> <p>Exterior lighting to be controlled by time switch.</p> <p>Energy efficient motors.</p> <p>Maximum allowable power loss from transformer to be within specified limits.</p> <p>Calculation & % of savings- 27.42%</p> <p>All the energy conservation measures is in compliance of the ECBC guideline.</p>		
xxix.	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height of needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG Sets may be decided with in consultation with Maharashtra Pollution Control Board.	PP will comply with the same. Diesel generating sets proposed during operation phase are of enclosed type and conform to rules made under the Environment (Protection) Act, 1986.		

Sr.	Conditions	Compliance	Annex	Photo
xxx.	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	The Day and Night ambient noise levels within project area are monitored through MoEF approved lab. Monitoring reports for the period of Dec. 2017 to May 2018 are attached.	✓	
xxxi.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and so public space should be utilized.	PP have provided entry and exit gate for traffic control at project site. Parking area provided within project area. Traffic generated from this project will confluent on proposed 30 m wide road. Width of all internal driveways is 12 m wide.		
xxxii.	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement	We are providing AAC blockwork which is compliance with ECBC requirement		
xxxiii.	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation	PP has complied with the same. Proper space is provided within buildings for proper passage of natural light, air and ventilation.		
xxxiv.	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surrounding.	Supervisors are trained in Environmental Management measures and they are responsible for onsite Environmental Management Plan.		
xxxv.	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	Construction at site started only after obtaining environmental clearance. Copy of Environment clearance is attached.	✓	

Sr.	Conditions	Compliance	Annex	Photo
xxxvi.	Six monthly monitoring reports should be submitted to the Regional Office, MoEF, Bhopal with copy to this department and MPCB.	PP is submitting herewith six-monthly monitoring reports to the Regional Office, MoEF with copy to Environment Dept. GoM and MPCB.	✓	
	General conditions for Post construction /operation phase			
i.	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings, No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.	PP will comply with the same. All the facilities such as Working of STP, MSW disposal facility, green belt development shall be completed prior to occupation of the building.		
ii.	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.	PP will comply with the same. Total 943 kg/day of Biodegradable waste will be generated on site and further will be treated by OWC.		
iii.	Local body should ensure that no occupation certification is issued prior to operation of STP /MSW site etc. with due permission of MPCB.	PP noted the condition		
iv.	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.	PP has submitted required documents to Pune Municipal Corporation and MPCB.		
v.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department	No change in approved proposal.		

Sr.	Conditions	Compliance	Annex	Photo
vi.	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguard.	PP has established Environment, Health and Safety Cell with qualified and experience staff.		
vii.	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall included as part of the project cost. The funds earmarked for the environment protection measures shall not diverted for other purposes and year-wise expenditure should reported to MPCB and this department.	PP will comply with the same. Separate fund shall be allocated for implementation of environmental protection measures/EMP		
viii.	The project management shall advertise at least in two local newspaper widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in .	Yes, work publicity given through advertising in two local newspapers,		
ix.	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard and soft copies to the MPCB and this department on 1 st June and 1 st December of each calendar year.	PP is regularly submitting the half yearly compliance reports to MoEF regional office, MPCB & Environment Department.	✓	

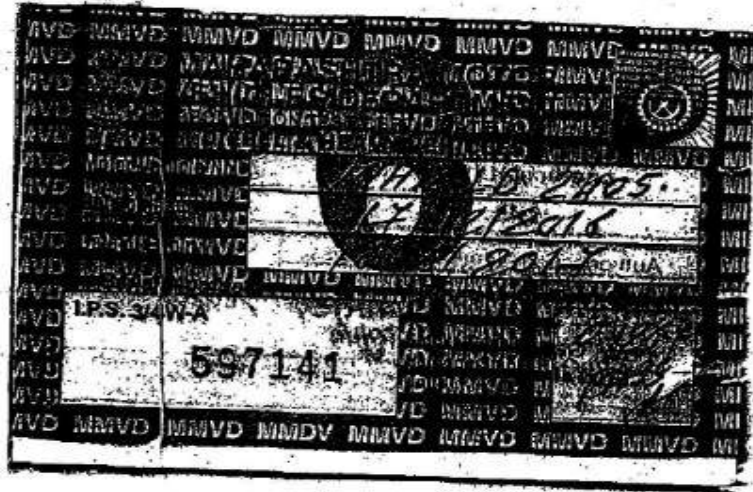
Sr.	Conditions	Compliance	Annex	Photo
x.	A copy of clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also put on the website of the Company by the proponent.	PP has submitted copy of clearance to District Collector, Pune, Town Planning Dept. Pune and MPCB.		
xi.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of mentioned data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal office of CPCB and SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _X (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	PP will comply with the same.		
xii.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard and soft copies as well as by email) to the respective Regional Office of MoEF, the respective Zonal office of CPCB and the SPCB.	PP is submitting herewith six-monthly monitoring reports to the Regional Office, MoEF with copy to Environment Dept. GoM and MPCB.		

Sr.	Conditions	Compliance	Annex	Photo
xiii.	The environmental statement for each year financial year ending 31 st March in Form -V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	PP will comply with the same.		
4.	The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.	PP noted the condition		
5.	In case of submission of false document and non-compliance of stipulated conditions, Authority/Environment Department will revoke or suspend the Environmental clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.	PP noted the condition		

Sr.	Conditions	Compliance	Annex	Photo
6.	The Environment Department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.	PP agree with the condition.		
7.	Validity of Environment Clearance: The environmental clearance accorded shall be valid for a period of 5 years.	PP agree with the condition.		
8.	In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to access the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.	PP agree with the given condition.		
9.	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.	PP will comply with the same.		

Sr.	Conditions	Compliance	Annex	Photo
10.	Any appeal against this environmental clearance shall lie with National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1 st Floor D-Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Yes, PP agree with the given condition.		

Annexure II
PUC copy
(As per EC condition: xiv)



**Annexure III
Site photographs**

Completed site 1



Completed site 2



Construction site 3



Green area



Club House



Sanitary Facilities



First aid box



DG set



Sewage Treatment Plant



Annexure IV
Monitoring Report
(As per EC condition:xxx)



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Stack Emission Monitoring Report

Report No.: ME-PN3119-171224-SA-XRF-PUNE		Date: 24.12.2017	
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,	Order Reference	
		Verbal discussion	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	D.G. Set 62.5 KVA	Sample Quantity/Packing	Thimble:1 X 1 No. SO ₂ :30 mL X 1 No. PVC Bottle NO _x :25 mL X 1 No. PVC Bottle
Date of Sampling	18.12.2017	Date of Receipt of Sample	19.12.2017
Sampling Procedure	As per method reference		
Date of Start of Analysis	19.12.2017	Date of Completion of Analysis	24.12.2017

Stack Identity		D.G. Set 62.5 KVA	
Stack attached to		DG	
Material of construction		M.S	
Stack height above ground level (Meter)		6	
Stack Diameter (Meter)		0.07	
Stack shape at top		Round	
Type of fuel		Diesel	
Fuel Consumption (L/h)		9	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	^o C	90	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.88	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	67	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	22	IS 11255 (Part 1):1985 RA 2003
Sulphur Dioxide (SO ₂)	kg/day	0.16	IS 11255 (Part 2):1985 RA 2003
Oxides of Nitrogen (NO _x)	mg/Nm ³	40	IS 11255 (Part 7): 2005
Remarks :			

-----END-----
FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
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Soil Sample Analysis Report

Report No. : ME3283-172012-SA-XRF-PUNE		Date: 20.12.2017	
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,		Order Reference
			Verbal discussion
Sample Description/Type	Soil	Sample Collected by	Laboratory
Sampling Location	Near Electricity Substation	Sample Quantity/Packing	1 kg X 1 No. Polyethene Bag
Date of Sampling	18.12.2017	Date of Receipt of Sample	19.12.2017
Sampling Procedure	Manual on Soil, Plant & Water Analysis		
Date of Start of Analysis	19.12.2017	Date of Completion of Analysis	23.12.2017

Sr. No.	Parameter	Unit	Result	Method Reference
1	pH (1:5 Suspension)	-	7.8	IS 2720 (Part 26) :1987, RA 2002
2	Moisture Content	%	1.8	IS 2720 (Part II): 1973, RA 2002, Ed. 3.1
3	Organic Carbon	%	0.62	WLII Sec. B7, Page No. 10
4	Available Nitrogen (as N)	mg/kg	116	WLII Page No. 13
5	Total Phosphate (as P)	mg/kg	222	WLII Sec. B10, Page No. 16
6	Cadmium (as Cd)	mg/kg	<2	USEPA method No. 200, 200.2
7	Chromium (as Cr)	mg/kg	14.6	USEPA method No. 200, 200.2
8	Copper (as Cu)	mg/kg	42.6	USEPA method No. 200, 200.2
9	Lead (as Pb)	mg/kg	12.8	USEPA method No. 200, 200.2
10	Chloride (as Cl)	mg/kg	126	IBM Manual 6.19 D, Page No. 236
11	Zinc (as Zn)	mg/kg	40.6	USEPA method No. 200, 200.2
12	Sulphate (as SO ₄)	mg/kg	156	IS 2720 (Part XXVII):1977, RA 2001.
13	Oil & Grease	mg/kg	N.D.	CPCB (HW) manual, Page No. 156

Remarks:**Note-** All results are on air dry basis.**WLII-** Wildlife Institute of India.**FAO-** Food & Agriculture Organization, United Nations.**N.D.-**Not Detected

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER**Note:**

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Page 1 of 1

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Noise Level Monitoring Report

Report No.: ME-PN3118-171223-SA-XRF-PUNE		Date: 23.12.2017
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,	Order Reference
		Verbal discussion
Date of Sampling	18.12.2017	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Sr. No.	Location	Time	Sound Level dB(A) Fast Response	Sound Level dB(A) Slow Response
1	Main Gate			
	Day	11:10	53.8	50.6
	Night	22:00	42.6	39.8
2	Near B- 6 Building			
	Day	11:20	54.4	49.1
	Night	22:10	43.6	41.1
3	Near B -1 Building			
	Day	11:30	52.5	48.8
	Night	22:20	43.6	41.0
4	Near B- 5 Building			
	Day	11:40	53.8	52.5
	Night	22:30	42.6	40.8
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
C	Residential	55	45	

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER



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Water Sample Analysis Report

Report No.: ME-PN3117-171223-SA-XRF-PUNE			Date: 23.12.2017
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,		Order Reference
			Verbal discussion
Sample Description/Type	Water (Ground Well)	Sample Collected by	Laboratory
Sampling Location	Surrounding Area	Sample Quantity/Packing	5 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500 mL X No. Sterilised Glass Bottle
Date of Sampling	18.12.2017	Date of Receipt of Sample	19.12.2017
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 22 nd Ed. 2012, 1060-B, 1-39; 9060 A, 9-35		
Date of Start of Analysis	19.12.2017	Date of Completion of Analysis	23.12.2017

Sr. No.	Parameter	Unit	Result	Method Reference
1	Colour	Hazen	<1	APHA 22 nd Ed. 2012, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1983, Reaffirmed 2006
3	Taste	-	Agreeable	IS 3025 (Part 7):1984, Reaffirmed 2006
4	Turbidity	NTU	0.3	APHA 22 nd Ed. 2012, 2130-B, 2-13
5	pH	-	7.4	APHA 22 nd Ed. 2012, 4500-H ⁺ -B, 4-92
6	Total Dissolved Solids	mg/L	396	IS 3025 (Part 16):1984 Reaffirmed 2006
7	Alkalinity Total (as CaCO ₃)	mg/L	212	IS 3025 (Part 23):1986 Reaffirmed 2009
8	Total Hardness (as CaCO ₃)	mg/L	250	APHA 22 nd Ed. 2012, 2340-C, 2-44,45
9	Chloride (as Cl)	mg/L	53.0	APHA 22 nd Ed. 2012, 4500-Cl-B, 4-72
10	Sulphate (as SO ₄)	mg/L	38.0	APHA 22 nd Ed. 2012, 4500- SO ₄ -E, 4-190
11	Nitrate (as NO ₃)	mg/L	8.56	APHA 22 nd Ed. 2012, 4500-NO ₃ .E, 4-125
12	Calcium(as Ca)	mg/L	53.7	APHA 22 nd Ed. 2012, 3500-Ca-B, 3-67
13	Fluoride (as F)	mg/L	0.684	APHA 22 nd Ed. 2012, 4500-F- B & D, 4-84, 4-87
14	Iron (as Fe)	mg/L	0.256	APHA 22 nd Ed. 2012, 3111-B, 3-18
15	Manganese (as Mn)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
16	Cadmium (as Cd)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18

Report No.3118 cont...

Sr. No.	Parameter	Unit	Result	Method Reference
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	<0.02	APHA 22 nd Ed. 2012, 3500- Cr-B, 3-69
18	Copper (as Cu)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
19	Lead (as Pb)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18
20	Zinc (as Zn)	mg/L	<0.01	APHA 22 nd Ed. 2012, 3111-B, 3-18
21	Arsenic (as As)	mg/L	<0.01	APHA 22 nd Ed. 2012, 3114-C, 3-38
22	Mercury (as Hg)	mg/L	<0.0005	APHA 22 nd Ed. 2012, 3112-B, 3-23
23	Cyanide (as CN)	mg/L	<0.001	APHA 22 nd Ed. 2012, 4500-CN, C & E, 4-39 & 4-44
24	Anionic detergents as MBAS	mg/L	<0.1	APHA 22 nd Ed. 2012, 5540-C, 5-53
25	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	<0.001	APHA 22 nd Ed. 2012, 5530- B & C, 5-47
Microbiological Analysis				
26	Total Colliforms	MPN/ 100 mL	3.6	APHA 22 nd Ed. 2012, 9221-D, 9-73
27	E-Coli	MPN/ 100 mL	<1.1	APHA 22 nd Ed. 2012, 9221-G, 9-76
Remark: N.D. : Not Detected				

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER



Note:

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Water Sample Analysis Report

Report No.: ME-PN3116-171223-SA-XRF-PUNE			Date: 23.12.2017
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,		Order Reference
			Verbal discussion
Sample Description/Type	Water (Well Water)	Sample Collected by	Laboratory
Sampling Location	Open Well	Sample Quantity/Packing	5 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500 mL X No. Sterilised Glass Bottle
Date of Sampling	18.12.2017	Date of Receipt of Sample	19.12.2017
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 22 nd Ed. 2012, 1060-B, 1-39; 9060 A, 9-35		
Date of Start of Analysis	19.12.2017	Date of Completion of Analysis	23.12.2017

Sr. No.	Parameter	Unit	Result	Method Reference
1	Colour	Hazen	1	APHA 22 nd Ed. 2012, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1983, Reaffirmed 2006
3	Taste	-	Agreeable	IS 3025 (Part 7):1984, Reaffirmed 2006
4	Turbidity	NTU	0.9	APHA 22 nd Ed. 2012, 2130-B, 2-13
5	pH	-	7.6	APHA 22 nd Ed. 2012, 4500-H ⁺ -B, 4-92
6	Total Dissolved Solids	mg/L	242	IS 3025 (Part 16):1984 Reaffirmed 2006
7	Alkalinity Total (as CaCO ₃)	mg/L	156	IS 3025 (Part 23):1986 Reaffirmed 2009
8	Total Hardness (as CaCO ₃)	mg/L	172	APHA 22 nd Ed. 2012, 2340-C, 2-44,45
9	Chloride (as Cl)	mg/L	33.0	APHA 22 nd Ed. 2012, 4500-Cl-B, 4-72
10	Sulphate (as SO ₄)	mg/L	22.8	APHA 22 nd Ed. 2012, 4500- SO ₄ -E, 4-190
11	Nitrate (as NO ₃)	mg/L	3.5	APHA 22 nd Ed. 2012, 4500-NO ₃ .E, 4-125
12	Calcium(as Ca)	mg/L	48.1	APHA 22 nd Ed. 2012, 3500-Ca-B, 3-67
13	Fluoride (as F)	mg/L	0.516	APHA 22 nd Ed. 2012, 4500-F- B & D, 4-84, 4-87
14	Iron (as Fe)	mg/L	0.092	APHA 22 nd Ed. 2012, 3111-B, 3-18
15	Manganese (as Mn)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
16	Cadmium (as Cd)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18

Report No.3116 cont...

Sr. No.	Parameter	Unit	Result	Method Reference
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3500- Cr-B, 3-69
18	Copper (as Cu)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
19	Lead (as Pb)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18
20	Zinc (as Zn)	mg/L	0.016	APHA 22 nd Ed. 2012, 3111-B, 3-18
21	Arsenic (as As)	mg/L	<0.01	APHA 22 nd Ed. 2012, 3114-C, 3-38
22	Mercury (as Hg)	mg/L	<0.0005	APHA 22 nd Ed. 2012, 3112-B, 3-23
23	Cyanide (as CN)	mg/L	<0.001	APHA 22 nd Ed. 2012, 4500-CN, C & E, 4-39 & 4-44
24	Anionic detergents as MBAS	mg/L	<0.1	APHA 22 nd Ed. 2012, 5540-C, 5-53
25	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	<0.001	APHA 22 nd Ed. 2012, 5530- B & C, 5-47
Microbiological Analysis				
26	Total Colliforms	MPN/ 100 mL	<1.1	APHA 22 nd Ed. 2012, 9221-D, 9-73
27	E-Coli	MPN/ 100 mL	Absent	APHA 22 nd Ed. 2012, 9221-G, 9-76
Remark: N.D. : Not Detected				

-----END-----

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Ambient Air Quality Monitoring Report

Report No.: ME-PN3115-171223-SA-XRF-PUNE		Date: 23.12.2017	
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,		Order Reference
			Verbal discussion
Sample Description/Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Main Gate	Sample Quantity/Packing	PM ₁₀ : Filter paper: 1 X 1 No. PM _{2.5} : Filter paper: 1 X 1 No. SO ₂ : 30 mL X 2 No. PVC Bottle NO ₂ : 30 mL X 2 No. PVC Bottle CO: 2L X 1No. Gas Bladder
Date of Sampling	18.12.2017	Date of Receipt of Sample	19.12.2017
Sampling Procedure	As per method reference		
Date of Start of Analysis	19.12.2017	Date of Completion of Analysis	23.12.2017

Meteorological Data/ Environmental Conditions

Avg. Wind Velocity	Prominent Wind Direction	Relative Humidity (%)		Temperature (°C)	
		Max.	Min.	Max.	Min.
2.3 km/h	SE	73.5	65.2	28	13
Location	Main Gate			Duration of Survey : 08 hours	
Parameter	Unit	Result	#NAAQM Standard	Method Reference	
Sulphur Dioxide (SO ₂)	µg/m ³	9.3	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6	
Nitrogen Dioxide (NO ₂)	µg/m ³	14.9	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10	
Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	59	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	21	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30	
Carbon Monoxide (CO)	mg/m ³	0.86	4	IS 5182 (Part 10): 1999 RA2003	
Remarks: #- Standard for 24 h. monitoring except CO; 1 h. Standard in case of CO					

-----END-----

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Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (600 m from Hotel Rukhmini Palace Turn Opp Toyota Show Room. Next to Ashida Electrical - near J B Sawant Bus Stop)
Phone: 2582 0658/ 3139/ 1663/ 3154 Fax: 91-22-25823543 thane@mahabal.com



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Stack Emission Monitoring Report

Report No.: ME-PN4419-180310-SA-XRF-PUNE		Date: 10.03.2018	
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,	Order Reference	
		Verbal discussion	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	D.G. Set 62.5 KVA	Sample Quantity/Packing	Thimble:1 X 1 No. SO ₂ :30 mL X 1 No. PVC Bottle NO _x :25 mL X 1 No. PVC Bottle
Date of Sampling	05.03.2018	Date of Receipt of Sample	06.03.2018
Sampling Procedure	As per method reference		
Date of Start of Analysis	06.03.2018	Date of Completion of Analysis	10.03.2018

Stack Identity		D.G. Set 62.5 KVA	
Stack attached to		DG	
Material of construction		M.S	
Stack height above ground level (Meter)		6	
Stack Diameter (Meter)		0.07	
Stack shape at top		Round	
Type of fuel		Diesel	
Fuel Consumption (L/h)		9	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	^o C	99	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	6.54	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	73	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	24	IS 11255 (Part 1):1985 RA 2003
Sulphur Dioxide (SO ₂)	kg/day	0.13	IS 11255 (Part 2):1985 RA 2003
Oxides of Nitrogen (NO _x)	mg/Nm ³	41	IS 11255 (Part 7): 2005
Remarks :			

-----END-----
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Noise Level Monitoring Report

Report No.: ME-PN4418-180310-SA-XRF-PUNE		Date: 10.03.2018
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,	Order Reference
		Verbal discussion
Date of Sampling	05.03.2018	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Sr. No.	Location	Time	Sound Level dB(A) Fast Response	Sound Level dB(A) Slow Response
1	Main Gate			
	Day	11:10	52.5	50.1
	Night	22:00	43.3	40.2
2	Near B- 6 Building			
	Day	11:20	53.3	51.1
	Night	22:10	42.2	40.9
3	Near B -1 Building			
	Day	11:30	53.3	42.2
	Night	22:20	43.6	40.0
4	Near B- 5 Building			
	Day	11:40	52.8	50.0
	Night	22:30	43.3	40.1
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
C	Residential	55	45	

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Water Sample Analysis Report

Report No.: ME-PN4417-180310-SA-XRF-PUNE			Date: 10.03.2018
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,		Order Reference
			Verbal discussion
Sample Description/Type	Water (Ground Well)	Sample Collected by	Laboratory
Sampling Location	Surrounding Area	Sample Quantity/Packing	5 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500 mL X No. Sterilised Glass Bottle
Date of Sampling	05.03.2018	Date of Receipt of Sample	06.03.2018
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 22 nd Ed. 2012, 1060-B, 1-39; 9060 A, 9-35		
Date of Start of Analysis	06.03.2018	Date of Completion of Analysis	10.03.2018

Sr. No.	Parameter	Unit	Result	Method Reference
1	Colour	Hazen	3	APHA 22 nd Ed. 2012, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1983, Reaffirmed 2006
3	Taste	-	Agreeable	IS 3025 (Part 7):1984, Reaffirmed 2006
4	Turbidity	NTU	1.6	APHA 22 nd Ed. 2012, 2130-B, 2-13
5	pH	-	7.3	APHA 22 nd Ed. 2012, 4500-H ⁺ -B, 4-92
6	Total Dissolved Solids	mg/L	414	IS 3025 (Part 16):1984 Reaffirmed 2006
7	Alkalinity Total (as CaCO ₃)	mg/L	228	IS 3025 (Part 23):1986 Reaffirmed 2009
8	Total Hardness (as CaCO ₃)	mg/L	254	APHA 22 nd Ed. 2012, 2340-C, 2-44,45
9	Chloride (as Cl)	mg/L	56.0	APHA 22 nd Ed. 2012, 4500-Cl-B, 4-72
10	Sulphate (as SO ₄)	mg/L	39.0	APHA 22 nd Ed. 2012, 4500- SO ₄ -E, 4-190
11	Nitrate (as NO ₃)	mg/L	7.5	APHA 22 nd Ed. 2012, 4500-NO ₃ .E, 4-125
12	Calcium(as Ca)	mg/L	61.0	APHA 22 nd Ed. 2012, 3500-Ca-B, 3-67
13	Fluoride (as F)	mg/L	0.706	APHA 22 nd Ed. 2012, 4500-F- B & D, 4-84, 4-87
14	Iron (as Fe)	mg/L	0.208	APHA 22 nd Ed. 2012, 3111-B, 3-18
15	Manganese (as Mn)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
16	Cadmium (as Cd)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18

Report No.4417 cont...

Sr. No.	Parameter	Unit	Result	Method Reference
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	<0.02	APHA 22 nd Ed. 2012, 3500- Cr-B, 3-69
18	Copper (as Cu)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
19	Lead (as Pb)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18
20	Zinc (as Zn)	mg/L	0.014	APHA 22 nd Ed. 2012, 3111-B, 3-18
21	Arsenic (as As)	mg/L	<0.01	APHA 22 nd Ed. 2012, 3114-C, 3-38
22	Mercury (as Hg)	mg/L	<0.0005	APHA 22 nd Ed. 2012, 3112-B, 3-23
23	Cyanide (as CN)	mg/L	<0.001	APHA 22 nd Ed. 2012, 4500-CN, C & E, 4-39 & 4-44
24	Anionic detergents as MBAS	mg/L	<0.1	APHA 22 nd Ed. 2012, 5540-C, 5-53
25	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	<0.001	APHA 22 nd Ed. 2012, 5530- B & C, 5-47
Microbiological Analysis				
26	Total Colliforms	MPN/ 100 mL	3.7	APHA 22 nd Ed. 2012, 9221-D, 9-73
27	E-Coli	MPN/ 100 mL	<1.8	APHA 22 nd Ed. 2012, 9221-G, 9-76
Remark: N.D. : Not Detected				

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
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Water Sample Analysis Report

Report No.: ME-PN4416-180310-SA-XRF-PUNE		Date: 10.03.2018	
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,	Order Reference	
		Verbal discussion	
Sample Description/Type	Water (Well Water)	Sample Collected by	Laboratory
Sampling Location	Open Well	Sample Quantity/Packing	5 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500 mL X No. Sterilised Glass Bottle
Date of Sampling	05.03.2018	Date of Receipt of Sample	06.03.2018
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 22 nd Ed. 2012, 1060-B, 1-39; 9060 A, 9-35		
Date of Start of Analysis	06.03.2018	Date of Completion of Analysis	10.03.2018

Sr. No.	Parameter	Unit	Result	Method Reference
1	Colour	Hazen	1	APHA 22 nd Ed. 2012, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1983, Reaffirmed 2006
3	Taste	-	Agreeable	IS 3025 (Part 7):1984, Reaffirmed 2006
4	Turbidity	NTU	0.8	APHA 22 nd Ed. 2012, 2130-B, 2-13
5	pH	-	7.5	APHA 22 nd Ed. 2012, 4500-H ⁺ -B, 4-92
6	Total Dissolved Solids	mg/L	254	IS 3025 (Part 16):1984 Reaffirmed 2006
7	Alkalinity Total (as CaCO ₃)	mg/L	160	IS 3025 (Part 23):1986 Reaffirmed 2009
8	Total Hardness (as CaCO ₃)	mg/L	174	APHA 22 nd Ed. 2012, 2340-C, 2-44,45
9	Chloride (as Cl)	mg/L	33.0	APHA 22 nd Ed. 2012, 4500-Cl-B, 4-72
10	Sulphate (as SO ₄)	mg/L	21.0	APHA 22 nd Ed. 2012, 4500- SO ₄ -E, 4-190
11	Nitrate (as NO ₃)	mg/L	3.12	APHA 22 nd Ed. 2012, 4500-NO ₃ .E, 4-125
12	Calcium(as Ca)	mg/L	50.5	APHA 22 nd Ed. 2012, 3500-Ca-B, 3-67
13	Fluoride (as F)	mg/L	0.576	APHA 22 nd Ed. 2012, 4500-F- B & D, 4-84, 4-87
14	Iron (as Fe)	mg/L	0.096	APHA 22 nd Ed. 2012, 3111-B, 3-18
15	Manganese (as Mn)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
16	Cadmium (as Cd)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18

Report No.4416 cont...

Sr. No.	Parameter	Unit	Result	Method Reference
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3500- Cr-B, 3-69
18	Copper (as Cu)	mg/L	<0.04	APHA 22 nd Ed. 2012, 3111-B, 3-18
19	Lead (as Pb)	mg/L	N.D.	APHA 22 nd Ed. 2012, 3111-B, 3-18
20	Zinc (as Zn)	mg/L	0.022	APHA 22 nd Ed. 2012, 3111-B, 3-18
21	Arsenic (as As)	mg/L	<0.01	APHA 22 nd Ed. 2012, 3114-C, 3-38
22	Mercury (as Hg)	mg/L	<0.0005	APHA 22 nd Ed. 2012, 3112-B, 3-23
23	Cyanide (as CN)	mg/L	<0.001	APHA 22 nd Ed. 2012, 4500-CN, C & E, 4-39 & 4-44
24	Anionic detergents as MBAS	mg/L	<0.1	APHA 22 nd Ed. 2012, 5540-C, 5-53
25	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	<0.001	APHA 22 nd Ed. 2012, 5530- B & C, 5-47
Microbiological Analysis				
26	Total Colliforms	MPN/ 100 mL	<1.1	APHA 22 nd Ed. 2012, 9221-D, 9-73
27	E-Coli	MPN/ 100 mL	Absent	APHA 22 nd Ed. 2012, 9221-G, 9-76
Remark: N.D. : Not Detected				

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162 T/Fax: 91-712-2612212 Email: nagpur@mahabal.com

Ambient Air Quality Monitoring Report

Report No.: ME-PN4415-180310-SA-XRF-PUNE		Date: 10.03.2018	
Name and Address of Customer	Proposed Residential Development Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune,		Order Reference
			Verbal discussion
Sample Description/Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Main Gate	Sample Quantity/Packing	PM ₁₀ : Filter paper: 1 X 1 No. PM _{2.5} : Filter paper: 1 X 1 No. SO ₂ : 30 mL X 2 No. PVC Bottle NO ₂ : 30 mL X 2 No. PVC Bottle CO: 2L X 1No. Gas Bladder
Date of Sampling	05.03.2018	Date of Receipt of Sample	06.03.2018
Sampling Procedure	As per method reference		
Date of Start of Analysis	06.03.2018	Date of Completion of Analysis	10.03.2018

Meteorological Data/ Environmental Conditions

Avg. Wind Velocity	Prominent Wind Direction	Relative Humidity (%)		Temperature (°C)	
		Max.	Min.	Max.	Min.
2.0 km/h	S	68.9	58.8	32	17
Location	Main Gate			Duration of Survey : 08 hours	
Parameter	Unit	Result	#NAAQM Standard	Method Reference	
Sulphur Dioxide (SO ₂)	µg/m ³	10.4	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6	
Nitrogen Dioxide (NO ₂)	µg/m ³	20.5	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10	
Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	65	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14	
Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	27	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30	
Carbon Monoxide (CO)	mg/m ³	0.76	4	IS 5182 (Part 10): 1999 RA2003	
Remarks: #- Standard for 24 h. monitoring except CO; 1 h. Standard in case of CO					

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Page 1 of 1

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (600 m from Hotel Rukhmini Palace Turn Opp Toyota Show Room. Next to Ashida Electrical - near J B Sawant Bus Stop)
Phone: 2582 0658/ 3139/ 1663/ 3154 Fax: 91-22-25823543 thane@mahabal.com

Environmental Status Report (ESR)

As per EC condition (xiii)

Dec 2017 to May 2018

**“Proposed Residential Development.”
Xrbia North Hinjewadi Developers Pvt. Ltd.
At Village Babadohal, Dist. Pune**



Proposed by

Xrbia North Hinjewadi Developers Pvt. Ltd.

Environmental Status Report

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Environmental Status Report

Introduction

Xrbia North Hinjewadi Developers Pvt. Ltd. is grant of environment clearance for proposed Residential Project at Gat No. 01 Village Bebadohal, Taluka: Maval, District: Pune, State-Maharashtra. SEAC-III considered the project under screening category 8(a) B2 as per EIA Notification 2006.

Environmental Clearance is obtained vide letter no. SEAC-2013/CR-244/TC-3 dated 31.03.2015 plot area of 26,100 m² and total built up area of 42,670.82 m²

Project proponent information

Name	Mr. Veer Bharati Kouls Vice President-Corporate Services
Address	M/s.Xrbia North Hinjewadi Developers Pvt.Ltd 1 st Floor, Mantri House, 929, F.C. Road, Pune-411004
Telephone	+91 -20 66858888
Fax	+91 -2066858889
Email ID	-

Plot area details

Details	Total	Unit
Plot area	26,100	m ²
Deduction		m ²
Amenity Area	3,915	m ²
Total Deduction	3,915	m ²
Net plot area	22,185	m²

Construction area details

Details	Total	Unit
FSI area in m ²	31,059	m ²
Non FSI area in m ²	11,611.82	m ²
Total construction area in m²	42,670.82	m²

Building Configuration details

Sr. No	Type of building	No. of Floors	No of flats/ buildings
1	A2	G+9	115
2	B1	P+ 7	56
3	B2	P+ 7	56
4	B3	P+ 7	56
5	B4	P+ 7	56
6	B5	P+ 7	56
7	B6	P+ 8	64

Environmental Status Report

8	B7	P+ 12	96
9	C1	P+ 9	72
10	C2	P+ 9	72
	Total		699

Construction activity

Construction completed area 42670.82 m²

Table 1: Environmental Services progress status

Sr.	Details	Status
1.	DG set	1 no. of 62.5kVA DG set provided onsite for construction phase
2.	Landscape area	6,000 m ²
3.	Tree plantation	357
4.	STP work	STP work completed
5.	Solid waste management : OWC details	90 % work completed
6.	Parking	completed
7.	Labour camp	Is provided
8.	Excavation details	10,528m ³
9.	Debris details and its management	This material shall be used for back filling and leveling of the plot and remaining will be disposed to authorized sites.
10.	Ground water recharge : Rain water harvesting	completed
11.	Storm water harvesting	completed
12.	RMC plant and brick details	-
13.	Contact person on site	Mr. Channdankumar Sandanshire

Construction facility on site

PP has provided following facilities at site:

- Material storage area
- DG set during construction phase
- Personal Protective equipment's for workers
- Safety Nets for buildings
- Steel yard
- Waste material storage area

Environmental Status Report

Facility provided on site for Labour

Labour camp has been provided for the labours with the all necessities like sanitary facilities, drinking water facility, and health check-up for workers. First aid room with well-equipped first aid box is provided to the workers. Crèche facility for workers children is provided with all necessary facility.

Land Excavation details

To minimize disruption of soil and for conservation of topsoil, the contractor will take out the topsoil separately and stockpile it. After the construction activity is over, topsoil will be utilized for land levelling activity.

Water details

Construction phase

For drinking, there is Tanker water supply for the labour. We are doing regular water monitoring. Reports submitted along with Compliance Report.

Operational phase

Water supply source is Irrigation department, Pune. Silt fences to reduce the run-off secondary containment and dykes in material storage area

Sewage Treatment Plant details

Construction phase

We have provided 4 Gents & 1 Ladies toilet. We have provided mobile toilets to the construction workers. Sewage generates during construction phase is being discharge into the sewage line.

Operational phase

We will provide the STP for proposed project of capacity 360 m³/day, technology is Fluidized Aerobic Bio-Reactor (FAB). Operational phase. Existing municipal drainage line is also available on project site. Excess treated water will be drain pond.

Storm Water Drain

We have provided the proper storm water drainage layout along the periphery. And it is connected to the municipal drainage line which already existed. We have the received the permission.

Solid Waste Disposal

Construction phase

Excavated quantity 10,528 m³ is used in landscape area. Solid waste generation from Labour, municipal waste is handled in 25kg/day

Operational phase

We have provided the 1 no. of organic waste converter for management of the municipal solid waste. Location of OWC is South west of the project. Area for the storage and treatment of the solid waste is 74 m²

Environmental Status Report

For Non-Biodegradable waste is handover authorised dealer.

Power Supply and consumption

Construction phase

We have received the power supply from MSEDCL, Pune.

Operational phase

Connected load is 2,104 kW.

We have provided the DG set details are below.

DG set- 570 kVA (250kVA+320kVA)

Roads, Traffic and Transport details

Construction phase

The site is abutting to 30 meter wide road DP road. PP have provided entry and exit gate with security for traffic control at project site. Parking area provided within project area. Internal road having width is 12 m and proper Entry & Exit points.

All incoming and outgoing vehicles during construction phase will be having direct access from the main road to project site, so there will not be any disturbance to existing traffic movement.

Well maintained the existing traffic by providing the internal road as per norm. (9 m internal driveway). We have maintained the proper entry record register of each vehicle was entered.

Operational phase

We will provide proper 9 m & 12 m internal road and its having proper connectivity to main road.

Housing and Slums provision

It is a residential and commercial project.

Slum provision is not applicable for this project.

Air Environment

We are monitoring the air quality every month and six-monthly report have been sent to MoEF, Nagpur and RO & HQ of MPCB offices with the EC compliance condition.

Dust

Use of water sprinkles during construction phase. Proposed road side plantation along the boundary of the proposed construction site and within the project site.

Environmental Status Report

Periodic maintenance of construction equipment. And use the good quality of fuels and use of personal protective equipments.

Noise Environment

We are monitoring the Noise level monitoring every month and six-monthly report have sent to MoEF, Nagpur and RO & HQ of MPCB offices with the EC compliance condition.

No construction work is carried out during night time.

Construction equipment are well maintained to reduce the noise pollution as per the standard limits.

We have provided the earplugs, muffs to the construction staff.

Tree plantation along the periphery of road will act as noise barrier.Noise attenuating species will be used in a landscape especially surrounding noise generating sources.

Acoustic enclosures will be provided on DG sets which will reduce the noise during operation phase.

Industries, Wastes and Hazards

It is a residential & commercial project. This issue is not applicable.

Health facility

PP has provided first aid room for workers within project area. Workers are provided with facility health check-up through annual camps.

During operation phase we are providing Club house facility with Gymnasium and indoor games. The project site is having all necessary facility such as market, banks, hospitals within 1 km radius.

Other Facility

The project site is having all necessary facility such as market, banks, and hospitals within 1 km radius.

Biological Environment

Plantation & Landscaping

Selection of the plant species has been done based on their adaptability to the existing geographical conditions and the vegetation composition of the region. During the development of the green belt within the project area, emphasis has been given to selection of plant species like nitrogen fixing species, species of ornamental values, species of very fast growth with good canopy cover etc.

Landscape development plan

In the proposed project, the area allotted for landscaping is **6,000 m²**. Various types of trees are proposed for plantation. Total **357 no.** of trees will be planted in the proposed project. The trees will be planted along the compound wall and along the road with adequate space between them so that

Environmental Status Report

their growth is not hampered. Plantation has to be taken up randomly and landscaping aspects could be taken into consideration.

Environment Monitoring Cell

Environmental management cell will be formed headed by an Environment Manager supported by adequate number of personnel having sufficient educational and professional qualification and experience to discharge number of personnel having sufficient educational and professional qualification and experience to discharge responsibilities related to environmental management including statutory compliance, pollution prevention, environmental monitoring, preventive maintenance of pollution control equipment and green belt development & maintenance of pollution control equipment and green belt development & maintenance. The head of the cell will directly report to the top management. This cell will be the nodal agency to co-ordinate and provide necessary services on environmental issues during construction and operation of the project. This department will interact with MPCB, MoEF, CPCB and Other environment regulatory agencies. The cell will be effective till handing over of the project to society.

Environmental Management Audits:

The management audits are to determine whether the activities are conforming to the environmental management systems and effective in implanting the environmental policy. They may be internal or external, but carried out impartially and effectively by a person properly trained for it. Broad knowledge of the environmental process and expertise in relevant disciplines is also required. Appropriate audit programs and protocols will be established.

Environmental Status Report

Table 2: Organization & Environment Management Cell

Sr.	Level	Designation	Purpose
1	Honorary	Director / Managing Committee	Policy
2	Manager	Environmental Scientist /Chemist	Job (*)
3	Executive	Supervisor, contractor, Engineers	Implement
4	Third Party	Environmental sampling, analysis will be done through external agency approved by MoEFCC / MPCB	Monitoring, testing

Budgetary provisions for Environmental Management Plan

Adequate budgetary provisions we have been made for construction & operational phase. For the initial five years, the management shall keep regular budget provision for in-plant measures to reduce pollution and construction of additional treatment units to facilitate wastewater recycling/reuse and reduction in air pollution. A budgetary provision will be made for up gradation of air pollution control equipments to control the gaseous pollutants and dust emission.

Table 3: Budgetary provisions for construction phase

Sr	Description	Estimated Amount in Lakh
1	Water for dust suppression	1.8
2	Air & Noise monitoring	0.24
3	Top soil management & soil erosion control	15.5
4	Water monitoring	0.26
5	Site sanitation	2.50
6	Gardening Set up	14.96
7	Disinfection- Pest control	0.36
8	First aid facility	1.2
9	Health check up	1.0
10	Training & awareness	1.0
11	Personal protective equipment	9.0
12	CFL lamps for labour hutments	0.075
13	Modular STP	10.0
	Total	59.29

Table 4: Budgetary provisions during operation phase

Sr	Component	Description	Total Set up cost (In Lakh)	O & M cost (In Lakh / year)
1	Water Environment			
a	Sewage	1 STPs of	76	12

Environmental Status Report

	Treatment plant	Capacity (380) m ³ /day		
b	Rain water Harvesting	15 Recharge Pits	15	0.40
c	WTP		15	5.0
d	Pond for treated sewage		20	0.5
2	Land Environment (Solid Waste Management)	Biodegradable garbage in OWC and nonbiodegradable garbage	10	1.80
3	Gardening		8.4	4.5
4	Environmental Monitoring	Monitoring and analysis of Air and Noise, water, soil etc.	MoEF approved laboratory	12.96
5	Energy Conservation	• LED & CFL & Solar street lighting	15	0.25
6	BMS		-	5
	Total Cost		164.4	40.41