

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC-2212/C.R.112/TC-II
Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Dated: 5th November, 2015.

To,
M/s. Aditya Developers
108, Khokani Bhavan, Station Road,
Vasai (W), Dist-Thane.

Subject: Environment clearance proposed Residential & Commercial Project at S.No.85 & 86 of village Barampur, Tal. Vasai, Dist, Thane by M/s Aditya Developers

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-II, Maharashtra in its 27th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 73rd & 87th meetings.

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

Brief Information of the project submitted by you is as-

Name of Project	Proposed Residential project
Project Proponent	Arvind S. Chheda Aditya Developers
Consultant	Name: Dr. D. A. Patil Mahabal Enviro Engg. Pvt. Ltd
Accreditation on Consultant (NABET Accreditation)	Accredited by NABET by it's vide letter No. NABET/EIA/11/11/0033 dated 11/11/2011
Type of project	Residential Project
Location of the project	Land bearing S. No. 8,9,10,11,12 to 14, 28 to 30 of village Manikpur and S. No. 6,8 to 17, 85,86 of village Barampur, Tal – Vasai, Dist – Thane
Whether in corporation / Municipal / Other area	Vasai Virar Municipal Corporation
Applicability of the DCR	DCR 2001 & 2013

Note on the initiated work (if applicable)	Total constructed work (FSI + Non FSI): Date and area details in the necessary approvals issued by the competent authority (attach scan copy)		NA
LOI / NOC from MHADA / Other approvals (if applicable)	-		
Total Plot Area	1,80,862 m ²		
Deductions	38,360.573 m ²		
Net plot area	1,42,501.427 m ²		
Permissible FSI (Including TDR etc.)	2,11,970.87		
Proposed Built-up Area (FSI & Non-FSI)	FSI Area	2,11,969.21 m ²	
	Non FSI Area	48,643.22m ²	
	Total Built up Area	2,60,612.43 m ²	
Ground coverage percentage (Note: Percentage of plot not open to sky)	16.29 %		
Estimated cost of the project	Rs. 492.3 Crore		
No. of Buildings & its configuration	Bldg Type	No. of Bldgs	Floors
	Type A	46	ST + 7
	Type B	07	ST + 7
	Type C	36	G + 7
	Type D	20	G + 7
	Type E	5	G + 12
	Type F	2	G + 12
	Type G	3	ST + 12
	Type H	3	ST + 12
	Total	122	
Number of tenants and shops	Flats: 4174 nos. Commercial Units: 7376.91 m ² (Shops)		
Number of expected residents / users	21,608 Nos.		
Tenant density per hector	232 Nos/ha		
Height of the building(s)	39.65 m		

Right of way (width of the road from the nearest fire station to the proposed building)	The project site is accessed by 20m & 30m wide DP Roads
Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	Min 9 m
Existing Structure	-
Details of the demolition with disposal (if applicable)	-

Total Water requirement	Dry Season	
	Fresh water (CMD)	1889
	Source	VVMC
	Recycled Water (CMD)	1178
	Total water requirement (CMD)	2851
	Swimming pool make up (cum)	-
	Fire fighting (cum)	As per NBC
	Wet Season	
	Fresh water (CMD)	1416
	Source	VVMC
	Recycled Water (CMD)	961
	Total water requirement (CMD)	2851
	Swimming pool make up (cum)	-
	Fire fighting (cum)	As per NBC

Rain Water Harvesting (RWH)	Level of ground water table	2 m
	Size and No. of RWH tanks and quantity	35 RWH Tanks of total capacity 950 KLD
	Location of RWH tank	Under Ground
	Size and no. of recharge pits and quantity	
	Budgetary allocation	Capital Cost: 57 Lakhs O & M Cost : 5 Lakhs

UG Tanks	Location of UG tank	
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Storm Water Drainage	Natural water drainage pattern	Towards South side
	Quantity of storm water	10,098 m ³ /hr
	Size of SWD	1) 350 X 500 mm 2) 450 X 600 mm 3) 600 X 900 mm wide channel

Sewage and waste water	Sewage generation (CMD)	2281
	STP Technology	MBBR Technology
	Capacity of STP (CMD)	2300
	Location of the STP	On Ground
DG sets (during emergency)	DG sets will be provided as alternate supply for essential services such as STP, Fire Fighting, Lift etc. Total capacity 2800 kVA	
	Budgetary allocation	Capital Cost: 207 Lakhs O & M Cost : 40 Lakhs

Solid waste management	Waste generation in the pre construction and construction phase	
	Waste generation	Construction debris: 7568 m ³
	Quantity of the top soil to be preserved	
	Disposal of the construction way debris	Construction debris will be disposed at designated disposal site.
	Waste generation in the Operation phase	
	Dry Waste (kg/d)	6350
	Wet Waste (kg/d)	4233
	E – Waste (kg/month)	NA
	Hazardous Waste (kg/month)	NA
	Biomedical Waste (kg/month)	NA
	STP Sludge (dry sludge) (kg/d)	23 m ³
	Mode of Disposal of Waste	
Dry Waste Dry garbage will be segregated & disposed off to recyclers		
Wet Waste		

Wet garbage will be composted using Mechanical Composting Technology and used as organic manure for landscaping.

	E-waste	NA
	Hazardous Waste	NA
	Biomedical Waste	As per the norms
	STP sludge (dry sludge)	Sludge use as manure for gardening
	Area requirement	
	Location and total area provided for the storage and treatment of the solid waste	On ground
	Budgetary allocation	Capital Cost: 80 Lakhs O & M Cost : 25 Lakhs

Green Belt Development	Total RG Area	43331.92 m ²
	RG area other than green belt (please specify for playground, etc.)	
	RG area under green belt	
	RG on ground	43331.92 m ²
	RG on Podium	
	Plantation	
	Number and list of trees species to be planted in the ground RG	Total 2472 Nos. of trees will be planted
	Number and list of shrubs and bushes species to be planted in the podium RG	
	Number and list of trees species to be planted around the border of nallah / stream / pond (if any)	
	Number, size, age and species of trees to be cut, trees to be transplanted	
	NOC for the tree cutting / transplantation/ compensatory plantation, if any	
	Budgetary allocation	Capital Cost: 216 Lakhs O & M Cost : 20 Lakhs

Energy	Power supply	
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	Maximum demand	22 MW
	Connect load	
	Source	MSEDCL
	Energy saving by non-conventional method	
	Energy saving measures	
	- Natural shading through elevation features to minimize heat gain and reduce air-conditioning requirement - Use of AC and façade system to reduce heat gain and power consumption - Use of low-e glass to reduce power requirement - Large central atriums for natural cross-ventilation - Solar lighting in common areas, garden and road - Solar hot water for residential buildings - Solar street lights will be proposed - Energy efficient lighting fixtures (LED lights) to all buildings	
	Detail calculations & % of saving	10.5 %
	Budgetary allocation	Capital Cost: 210 Lakhs O & M Cost : 20 Lakhs
	DG set	
	Number and capacity of the DG sets to be used	Capacity of DG Set provided will be 2800 kVA
	Type of fuel used	Diesel

Environment Management Plan Budgetary Allocation	Construction phase (with break-up)		
Component	Capital Cost (Rs. In Lakhs)	O & M Cost (Rs. In Lakhs/year)	Frequency
STP (Tertiary)	207	40	Continuous O & M Environment Monitoring: Monthly, STP outlet water quality for pH, BOD, COD, SS and O&G
Solar Lighting & Hot water	210	2	Weekly
Rainwater harvesting	57	5	During rainy season (cleaning of UG tanks and filtration units before rainy season)
Solid Waste Composting plant	80	25	Continuous O & M Environment Monitoring: Monthly to assess the compost quality

Landscape	216	20	Twice a Week
Total Cost	770	92	

Quantum and generation of corpus fund and commitment
Not Applicable as facility is operated by us

Responsibility for further O & M
All facilities will be leased & entire complex will be maintained by us

Traffic Management	Nos. of the junction to the main road & design of confluence	
	Parking details	
	Number & area of basement	-
	Number & area of podia	-
	Total Parking Area	Open parking
	Area per car	24.6 m ²
	2-Wheeler	2043 Nos.
	4-Wheeler	312 Nos.
	Bicycle	4,869 nos.

3. The proposal has been considered by SEIAA in its 73rd & 87th meetings & 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 :

General Conditions for Pre- construction phase:-

- (i) This environmental clearance is issued subject to utilization of excess treated water.
- (ii) This environmental clearance is issued subject to restricting the total built up area to 54, 686.42 sq. m as approved by Local Planning Authority.
- (iii) 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 by concern SEAC and SEIAA. If any discrepancy found in the plans submitted 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.
- (iv) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2011.

- (v) Occupation certificate shall be issued to the project only after ensuring availability of drinking water and connectivity of the sewer line to the project site.
- (vi) STP capacity shall be increased appropriately considering waste water generation.
- (vii) This 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 environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
- (viii) PP has to abide by the conditions stipulated by SEAC & SEIAA.
- (ix) The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & 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 the area.
- (x) "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.
- (xi) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained 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.
- (ii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- (iii) 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 material.
- (iv) 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.
- (v) Arrangement shall be made that waste water and storm water do not get mixed.
- (vi) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

- (vii) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (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.
- (ix) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (x) Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the 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.
- (xii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- (xiii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- (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.
- (xv) Ambient noise levels should conform 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.
- (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 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
- (xvii) Ready mixed concrete must be used in building construction.
- (xviii) The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquake, adequacy of fire fighting equipments etc. as per National Building Code including measures from lighting.
- (xix) Storm water control and its re-use as per CGWB and BIS standards for various applications.

- (xx) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxi) The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (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/refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
- (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.
- (xxiv) Separation of gray and black water should be done by the use of dual plumbing line for separation of gray 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.
- (xxvi) Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- (xxvii) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- (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 disposed 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 heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non conventional energy source as source of energy.
- (xxix) Diesel power generating sets proposed as source of back up 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 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.
- (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.

- (xxxix) 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 no public space should be utilized.
- (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 aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xxxiii) The building should have adequate distance between them to allow movement of fresh air and 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 surroundings.
- (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.
- (xxxvi) Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.

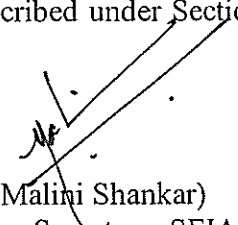
General Conditions for Post- construction/operation phase-

- (i) Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line. 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.
- (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.
- (iii) Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
- (iv) A complete set of all the documents submitted to Department should be forwarded to the Local authority 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.
- (vi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

- (vii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
 - (viii) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://ec.maharashtra.gov.in>.
 - (ix) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
 - (x) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
 - (xi) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, 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.
 - (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 copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
 - (xiii) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
5. In case of submission of false document and non compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environmental Clearance

without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
7. **Validity of Environment Clearance:** The environmental clearance accorded shall be valid for a period of 7 years as per MoEF&CC Notification dated 29th April, 2015.
8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
10. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.


(Malini Shankar)
Member Secretary, SEIAA

Copy to:

1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.
2. Shri. Jagdish Joshi, Chairman, IAS (Retd.). SEAC-III, Flat no. 3, Tahiti chs. Juhu Vers Ova Link Road, Andheri (W), Mumbai- 400 053.
3. Additional Secretary, MOEF, 'MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
4. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
5. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
6. Managing Director, MSEDCL, MG Road, Fort, Mumbai
7. Collector, Thane.
8. Commissioner, Vasai Virar Municipal Corporation..

9. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.

10. Regional Office, MPCB, Thane.

11. Select file (TC-3)

(EC uploaded on 17/11/2015)