Government of Maharashtra

SEAC -2011/CR951/TC2 Environment department, Room No. 217, 2nd floor, Mantralaya Annexe, Mumbai 400 032 Date: 30th June. 2012

To, M/s. Shakti Property Developers Pvt. Ltd. Charkop, Village Malvani, Kandivali (W) Mumbai

Subject: SRA project at Village Malvani, Kandivali (W), Mumbai by M/s. Shakti Property Developers Pvt. Ltd. - Environmental clearance regarding.

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, Maharashtra in its 53rd & 55th meetings and decided to 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 48th Meeting held on 26th/27th June, 2012.

 It is noted that the proposal is for grant of Environmental Clearance for SRA project at Charkop, Malvani Village Kandivali(W), Mumbai by Ms. Shakti Property Developers Pvt. Ltd. SEAC considered the project under screening category 8(a) B2 as per EIA Notification 2006.

Brief Information of the project is summarized during SEAC & SEIAA Meetings as:

Name of the Project	Construction project Project under SRA Scheme	
Project Proponent	M/s Shakti Property Developers Pvt. Ltd	
Location of the Project	S. NO. 263(PT), CTS. No. 6A(PA), 6A/12/5/(PT), 6A/12/6(PT) Charkop, Malvani Village, Kandivali (W), Mumbai, Maharasht), 6A(PT)
Note on the initiated work (If applicable)	Total constructed work (FSI+ Non FSI): 28,850.00 sq. m As per LOI 18-05-2001 & IOA dated 28-01-03	ia
Total Plot area	Total Plot area: 23,122.00 sq. m Deductions: 6870.40 sq. m Net Plot area: 18,310.38 sq. m	
Permissible FSI (including TDR etc.)	2.5	
Total BUA	FSI area (sq. m.): 45,680.41 sq .m Non FSI area (sq. m.): 31,627.70 sq. m Total BUA area (sq. m.):77,308.11 sq.m	-
Ground-coverage Percentage (%)	47.50 %	

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Estimated cost of the Project	98.98 Cr	
No. of building & its configuration(s)	Rehab. buildings: Bldg 1 to 4, 6, 7: G+ 7 Floors (Completed) Bldg 5: G+8 Floors Sale buildings: Bldg No 1(Wing O & P): G + 7 (Completed) Bldg No 1(Wing Q): G + 22 Bldg 2: B + ST + P + 8	
Number of tenants and Shops	Rehab Tenements: 951 No Shops: 05 Sale Tenements: 308 No Shops: 20 No	
Number of expected residents / users	6325 Nos	
Height of the building(s)	69.0 m	
Right of way (Width of the road from the nearest fire station to the proposed building(s))	18.30 m	
Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	9.0 m	
Existing structure(s)	Rehab. buildings: Bldg 1 to 4, 6, 7 : G+ 7 Floors (Completed) Sale buildings: Bldg No 1(Wing O & P): G + 7 (Completed)	
Details of the demolition with disposal (If applicable)	NA. Since, Slum shelters had already demolished before 2001.	
Total Water Requirement	• Fresh water (CMD): 576 & Source: MCGM • Recycled water (CMD): 312 • Total Water Requirement (CMD): 888 • Swimming pool make up (Cum): 5 • Fire fighting (Cum):05 • Wet Season: • Fresh water (CMD): 576 & Source: MCGM • Recycled water (CMD): 297 • Total Water Requirement (CMD): 873 • Swimming pool make up (CMD):	



	Fire fighting (CMD):05		
Rain Water	•Level of the Ground water table : 05-06 m		
Harvesting	 Size and no of RWH tank(s) and Quantity: 2 No 50 cum each 		
(RWH)	Location of the RWH tank(s): Basement		
		d Quantity: 04No; Size (3 x 3 x 3) m	
	 Budgetary allocation (Capit 	tal cost and O&M cost):	
	Capital cost : 25 Lacs		
	(O & M) cost : 2.5 lacs		
UGT tanks	Rehab :Ground		
	Sale : Basement		
Storm water drainage	Natural water drainage pattern		
	• quantity of storm water : 26		
	• Size of SWD: 600 x 800 m		
Sewage and Waste	 Sewage generation (CMD) : 	698	
Water	 STP technology : FMBR/M 	BBR	
	· Capacity of STP (CMD) 75		
	· Location of the STP : Grou		
1			
	DG sets (during emergency): Yes Budgetary allocation (Capital cost and O&M cost)		
		at cost and Okelvi cost)	
	Capital cost : 110 Lacs		
Sell I	(O & M) cost : 9.0 lacs		
Solid waste	Construction phase:		
Management		construction phase: 1-2 MT/day	
***	Operation Phase:	# 15 mm	
	• Dry waste (Kg/day): 1310		
1	Wet waste (Kg/day): 1300		
	Hazardous waste (Kg/month): 6.0		
	STP Sludge (Dry sludge) (Kg/day): 40		
	and grade (or y stades) (regrady). 40		
	Mode of Disposal of waste:		
1	Dry waste: Segregated/Sale/Collected by local authority		
1	· Wet waste: Composting through OWC & used at site/ Handed over to		
	local as manure		
	Hazardous waste: MPCB authorized vendor		
	STP Sludge (Dry sludge): Manure		
	Area requirement:		
	Location(s) and total area provided for the storage and treatment of the		
1	solid waste: Ground & basement (95.83 sq. m)		
	Budgetery allocation (Conital cost and O. 2.25		
1	Budgetary allocation (Capital cost and O&M cost)		
	Capital cost: 25 Lacs		
	(O & M) cost : 7.0 lacs		
Green Belt Development	Total RG area: 3664.10 sq.	m	
10 00 2 00 00 16 10 00 00 00 00 00 00 00 00 00 00 00 00	RG area under green belt:		
24.0			
1	• RG on the ground (sq. m.):2614.00		
	• RG on the podium (sq. m.): 1050.10		
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	Plantation:		
	 Number and list of trees species to be planted in the ground RG: 		
	Tree	Scientific name	
	Common Name		



Bahava	Cassia fistula	
Bakul	Mimusops elengi	
Parijatak	Nyctanthes arbor-tristis	
Tamhan	Lagerstroemia flos-regineae	
Kunti	Murraya paniculata	
Sita Ashok	Saraca asoka	
Shivan	Gmelina arborea	
Apta	Bauhinia racemosa	
Neem	Azadirachta indica	
Kate sawar	Bombax ceiba	
Pangara	Erythrina indica	
Palas / Flame of the forest	Butea monosperma	
Fish tail palm	Caryota urens	

 Number and list of shrubs and bushes species to be planted in the podium RG:

Shrub / climber Common Name	Scientific name	
Nirgudi	Vitex negundo	
Adulasa	Adhatoda vasica	
White plumbago	Plumbago zeylanica	
Ber	Ziziphus mauritiana	
Stachytarpheta	Stachytarpheta sp	
Takala	Cassia tora	
Tarwad	Cassia auriculata	
Krushna kamal	Passiflora edulis	

Budgetary allocation (Capital cost and O&M cost)

Capital cost: 12 Lacs (O & M) cost: 3.0 Lacs

Energy

Power supply:

Maximum demand: 3400 KVA
 Connected load: 550 KVA
 Source: Reliance Energy Ltd

Energy saving by non-conventional method:

- Light fixtures will be used with energy saving CFL & T5 fluorescent tube with electronic chocks.
- Use of Solar energy for street & landscape lightings.
- Small capacity transformers having low no load and load losses.
- Selection of Energy efficient equipments (BEE STAR RATED)
- Detail calculations & % of saving : 12 %

Budgetary allocation (Capital cost and O&M cost)

Capital cost: 18 Lacs (O & M) cost: 2.5 Lacs

DG Set

Traffic Management

• Number and capacity of the DG sets to be used : 3 (250 KVA)

Nos. of the junction to the main road & design of confluence : two Parking details:

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	2 1 2 1 21
	 Number and area of basement: 01 Number and area of podia: 01 Total Parking area Area per car. 27.50 sq. m 2-Wheelar: 200 4-Wheeler: 255 Public Transport: NA Width of all Internal roads (m): 6.0 & 9.0 m
Environmental Management plan Budgetary Allocation	Construction Phase: Capital Cost: 5 Lakhs O & M Cost: 1.10 Lakhs
Construction	Operation Phase: • Capital cost :190 lacs • O&M cost: 24 Lacs

Checklist for necessary approvals

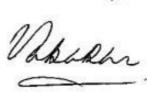
Particular	Status of approval	Name of Competent authority	Date of the issued letter
CFO NOC for the above said building structure(s)	Obtained	CFO, Mumbai Fire Brigade	13-07-2009
HRC NOC for the above said building structure(s) (If applicable)	NA	NA	NA
NOC for the above said building structure(s) from the Aviation authority (If applicable)	NA	NA	NA
Consent for the water for the above said detail(s)	Obtained	HE, MCGM	28-01-2003
Consent for the drainage for the above said detail(s)	Sewerage Remarks	MCGM	28-12-2011
Consent for the electric supply for the proposed demand	Obtained	Reliance Energy	
Precertification for Green Building from Indian Green Building Council and other recognized institutes (If applicable)	NA	NA	NA
Court Order (If applicable)	NA	NA	NA
Other approvals (If any)	NA	NA	NA



- 3. The proposal has been considered by SEIAA in its 48th 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:-
 - (i) Project Proponent should restrict the height of the building as per the guidelines issued by MoEF OM dated 7th Feb, 2012. Local authority should ensure this while approving the plans.
 - (ii) Project Proponent should relocate the refuse area for easy movement of fire tender on ground.
 - (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. 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) 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.
 - (v) "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.
 - (vi) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
 - (vii) 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.
 - (viii) 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.
 - (ix) 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.
 - (x) 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
 - (xi) 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.
 - (xii) Arrangement shall be made that waste water and storm water do not get mixed.
 - (xiii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
 - (xiv) 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.
 - (xv) Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.

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- (xvi) 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.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.
- (xx) 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.
- (xxi) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- (xxii) 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 nonpeak hours.
- (xxiii) 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.
- (xxiv) 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).
- (xxv) Ready mixed concrete must be used in building construction.
- (xxvi) 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.
- (xxvii) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xxviii)Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxix) The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (xxx) 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 Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
- (xxxi) Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
- (xxxii) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxxiii)Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.



(xxxiv)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.

(xxxv) 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.

(xxxvi)Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement

(xxxvii) 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.

(xxxviii) 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.

(xxxix)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.

(xl) 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.

- (xli) 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 non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement
- (xlii) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation
- (xliii) 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.
- (xliv) 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.
- (xlv) Six monthly monitoring reports should be submitted to the Department and MPCB.
- (xlvi) A complete set of all the documents submitted to Department should be forwarded to the MPCB
- (xlvii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (xIviii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xlix) 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.



- (I) 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.
- (li) 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.
- (lii) 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.
- (liii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO₂, NOx (ambient levels as well as stack emissions) or critical 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.
- (liv) 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.
- (Iv) 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.
- 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.
- 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.
- Validity of Environment Clearance: The environmental clearance accorded shall be valid for a period of 5 years.

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- 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, Van Vigyan Bhawan, Sec- 5, R.K. Puram, New Dehli – 110 022, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Valsa R Nair Singh) Secretary, Environment department & MS, SEIAA

Copy to:

- Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEIAA, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
- Shri. Dr. S. Devotta, Chairman, SEAC, T2/302 Sky City, Vanagaram Ambattur Road, Chennai – 600 095
- Additional Secretary, MOEF, 'Paryavaran Bhawan' CGO Complex, Lodhi Road, New Delhi – 110510
- Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- 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).
- Regional Office, MPCB, Mumbai.
- Collector, Mumbai (Sub- urban).
- 8. Commissioner, Brihan Mumbai Municipal Corporation, Mumbai.
- CEO, Slum Rehabilitation Authority, Bandra.
- IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
- 11. Director (TC-1), Dy. Secretary (TC-2), Scientist-1, Environment Department.
- 12. Select file (TC-3).