

Government of Maharashtra

SEAC-2010/CR-776/TC-2
Environment department,
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai 400 032
Date: 25th July, 2013

To,
M/s. Kumar Kering Properties Pvt. Ltd.
Kumar Capital 1st Floor 2413,
East Street, Camp, Pune - 411 001

Subject: Environmental clearance for proposed Residential Group Housing Scheme at village Undri, Tal Haveli, Dist. Pune by M/s. Kumar Kering Properties 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 60th 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 52nd & 62nd Meetings.

2. It is noted that the proposal is for grant of Environmental Clearance for proposed Residential Group Housing Scheme at village Undri, Tal Haveli, Dist. Pune. SEAC considered the project under screening category 8(a) B2 as per EIA Notification 2006.

Brief Information of the project submitted by Project Proponent is as:

Name of Project	"Residential Group Housing Project"	
Project Proponent	M/s. Kumar Kering Properties Pvt. Ltd.	
Consultant	M/s. Saitech Research & Development Organization	
Type of Project	Group Housing Project	
Location of the Project	At Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra	
Total Plot Area	78600.00 m ²	
Deductions	25405.25 m ²	
Net Plot area	53194.75 m ²	
Net Permissible FSI	71124.51 m ²	
Proposed Built up area (FSI & Non FSI)	• FSI area (m ²)	68452.50m ²
	• Non FSI area (m ²)	22715.66 m ²
	• Total BUA area (m ²)	91168.16 m ²
Ground-coverage Percentage (%)	42 %	

Estimated cost of the project	Rs. 113.79 Crores (Approx)
No. of buildings & its configurations	Total Number of Buildings 9 & 44 Bungalows <ul style="list-style-type: none"> • Nos. of Tenements: 440 • Buildings A1 to A8: P + 12 Floors • Bungalows B1 (6 Nos.), B2 (6 Nos.), B3 (6 Nos.), B4 (6 Nos.), C1 (5 Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2 Nos.) & D2 (3 Nos.): G + 1 • Building E: P + 10
Number of tenants and shops	Total tenants: 440 nos.
Number of expected residents / users	2200 persons
Tenant density per hectore	58/Tenants/Hectore
Height of the building	36 m
Right of way	24 m Wide RP road adjacent to the site
Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	12 m
Total Water Requirement	<p>Dry season:</p> <ul style="list-style-type: none"> • Source: Gram Panchayat • Fresh water : 205 m³/day • Recycled water (Flushing) : 103 m³/day • Recycled water (Gardening) : 94 m³/day • Total Water Requirement : 402 m³/day • Fire fighting (Underground water tank) : 300 m³ • Fire fighting (Overhead water tank) : 10 m³ • Excess treated water : 66 m³/day <p>Wet Season:</p> <ul style="list-style-type: none"> • Source : Gram Panchayat • Fresh water : 205 m³/day • Recycled water (Flushing) : 103 m³/day • Total Water Requirement : 308 m³/day • Fire fighting (Underground water tank) : 300 m³ • Fire fighting (Overhead water tank) : 10 m³ • Excess treated water : 161 m³/day

Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table : 3 m • Size, no of recharge pits and Quantity : • Size of the recharge pit = 3.0 m x 3.0 m x 3.0 m • No of recharge pit proposed = 10 Nos. • Budgetary allocation (Capital cost and O&M cost) • Capital Cost: 22 Lakhs • O & M Cost per Annum: 0.25 Lakhs
Storm water drainage	<ul style="list-style-type: none"> • Quantity of storm water : • Size of SWD: Storm water drain of 0.45m width & 0.2m depth @ slope 1:200 will be provided along the road in project area.
Sewage and Waste water	<ul style="list-style-type: none"> • Sewage generation : 277 m³/day • STP technology : -Sequential Batch Reactor • Capacity of STP : 300 m³/day • Location of the STP : Ground • DG sets (during emergency) : 1 X 125 KVA 2 X 250 KVA 2 X 500 KVA • Budgetary allocation (Capital cost and O&M cost) : • Capital Cost: Rs. 100 Lakhs • O & M Cost per Annum: Rs. 10 Lakhs
Solid waste Management	<p>Waste generation in the Pre Construction & Construction phase:</p> <ul style="list-style-type: none"> • Waste generation : 38 kg /day • Quantity of the top soil to be preserved : • Disposal of the construction way debris: Construction debris. Waste concrete and broken bricks will be utilized in low-land leveling, secondary concrete, below roads. Some quantity of Excavation soil will be use for backfilling and remaining will be hand over to authorized vendor. <p>Waste generation in the operation Phase:</p> <ul style="list-style-type: none"> • Dry waste : 410 kg/day • Wet waste : 616 kg/day • E - waste : very less amount • Hazardous waste: spent oil or oil grease for DG sets paints etc. <p>STP Sludge (Dry sludge) : 33 kg/day</p> <p>Mode of Disposal of waste:</p> <ul style="list-style-type: none"> • Dry waste : Handed over to authorized recycler for further handling and disposal. • Wet waste: Will be converted to compost using Organic Waste Processor [OWP] model no. EPL 1000 • E - waste : Handed over to authorized Vendor • Hazardous waste : Handed over to authorized Vendor • STP Sludge (Dry sludge) : Will be used as manure for gardening <p>Area requirement:</p> <p>1. Location(s) : On Ground</p>

	<p>2. Total area provided for the storage & Treatment of the solid waste : For EPL 1000 - 100 m²</p> <p>3. Budgetary allocation (Capital cost and O&M cost) Capital Cost : 10 Lakhs O & M Cost : 2 Lakhs/Annum</p>
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Green Belt Development
 RG on the ground : 8690.57 m²
 RG on the podium: 7023.94 m²

Plantation:

Trees to be planted on the Ground 738 Nos. & Shrubs 21 Nos.

Trees to be planted on podium: 25 Nos.

Shrubs to be planted on podium: 21 Nos.

Budgetary allocation (Capital cost and O&M cost) :

Capital Cost : 85 Lakhs

O & M Cost : 6 Lakh/annum

Energy

Power supply:

Sr. No.	Power Requirement	
1	Source of power supply :MSEB	
2	During Construction Phase	63 KVA
3	During Operation Phase,	
	Demand Load	6500 KVA
	Connected Load	11500.KVA
4	DG set as Power Back-up during operation phase	1 no. x 125 KVA 2 nos. x 250 KVA 2 nos. x 500 KVA
5	Fuel used	Diesel

Energy saving by non-conventional method:

Energy saving measures

- All Fluorescent lights/ LED with Electronic ballast in place of Copper chokes & Tube - T5 type, in place of T8 type, to reduce the power consumption by 12 watts per lamp & increase in lumens by 14%. Further reduction by use of sensors (Power saving 1,63,146 KWH /year).
 $r/l = 7760 \times 0.8 \times 6hr/day \times 365d/yr \times 12watts$
- Hot water requirement for low rise, will be met by Solar water heating system (Power saving 12,56,661 KWH /year).
- All Buildings/ Areas will be equipped with Capacitor Banks, with heavy duty compact gas

filled capacitors with harmonic filters to maintain THD's less than 10% with auto power factor correction panels to be connected with LT panels at load end. This is to reduce the power losses caused by low power factor & Harmonic distortions of power wave form.

- Electrical distribution system will be monitored regularly and energy consumption will have check meter, so that any energy loss will be detected and will be rectified immediately.
- Insulated Roof to reduce heat gain.
- Common light load requirement in high rise buildings/ street lighting will be met by use of solar if feasible. Energy will be saved 50,000 KWH /year.
- Detail calculations & % of saving:

Sr. No.	Energy Conservation Measures	Saving %
1.	Lighting Fixtures with CFL & T5 with Electronic Ballast +Power.	20% on entire lighting load
2.	Lighting Control System on BMS & Sensors	10% street and common lights
3.	Solar water heating system/ lighting	20%
4.	Solar	Common lighting & small power.

- Budgetary allocation (Capital cost and O&M cost)

Capital Cost: Rs. 83.63 Lakhs

O & M Cost: Rs.1.5 Lakhs/Annum

DG Set:

- Number and capacity of the DG sets to be used :

During Construction Phase: 1 nos. X 80 KVA

During Operational phase: Residential: - 1 no. X 125 KVA

2 nos. X 250 KVA

2 nos. X 500 KVA

- Type of fuel used : Diesel

Traffic Management

Buildings	Wing	Number of tenements	Parking required 20+3+1.4=24.4 m ² per tenement	Parking provided m ²
P+12	A1	47	1147	Stilt parking 4940 m ² + Podium Parking 10760m ² = 15700
P+12	A2	47	1147	
P+12	A3	47	1147	
P+12	A4	47	1147	
P+12	A5	47	1147	
P+12	A6	47	1147	
P+12	A7	47	1147	
P+12	A8	47	1147	
G+1	B1	6	146	146
G+1	B2	5	122	122
G+1	B3	5	122	122
G+1	B4	6	146	146
G+1	C1	5	122	122
G+1	C2	6	146	146
G+1	C3	6	146	146
G+1	D1	2	49	49
G+1	D2	3	73	73
P+10	E	20	488	488
TOTAL		440	10736	17262

Width of all Internal roads (m): 7.5 m, 9 m & 12 m Wide

Environmental Management plan Budgetary Allocation :

During Construction Phase:

Sr. No.	Parameter	Total cost in Lacs
1	Water for Dust Suppression	0.7
2	Site Sanitation & Safety	1.5
3	Environmental Monitoring	2.4
4	Disinfection	1.4
5	Health Check up	1.5
6	Total Cost	7.5

During Operation Phase:

Sr. No.	Pollution Control Measures	Recurring Cost Per Annum (Rs. Lakhs)	Capital Cost (Rs. Lakhs)
1.	Pollution Control – STP & Noise Control Measures	10 (Includes cost of power, operation & maintenance)	100 (Construction of STP)
2.	Environment Monitoring	5 (Monitoring charges for air, water, waste water, soil, DG stack, noise etc.)	Nil
3.	Solid Waste Management	2 (includes cost of waste collection, storage and disposal)	10 (Includes cost of waste collection, storage and disposal.)
4.	Solar water heater	1.5	83.63

	system		
5.	Occupational Health	2.5 (includes cost of medical checkup, PPE & first aid kit)	4 (includes cost of PPE, first aid facility)
6.	Green Belt development	6 (includes cost of landscaping of plot area)	85 (includes landscaping of plot area)
7.	Rain water harvesting	0.25	22
8.	Others (EHS orientation & training)	3 (Environment & safety training)	10 (other equipments)
	Total	30.25	314.63

3. The proposal has been considered by SEIAA in its 52nd & 62nd meetings and 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) Occupancy certificate should not be issued to the project unless adequate water supply is available to the project and sewerage line is ready in all respects to receive treated sewerage from the project.
 - (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. 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.
 - (iii) 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.
 - (iv) "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.
 - (v) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
 - (vi) 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.

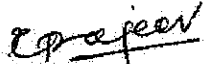
- (vii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and First Aid Room etc.
- (viii) Adequate drinking water and sanitary 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.
- (ix) 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.
- (x) 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.
- (xi) Arrangement shall be made that waste water and storm water do not get mixed.
- (xii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (xiii) 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.
- (xiv) Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.
- (xx) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- (xxi) 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.
- (xxii) 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.
- (xxiii) 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).
- (xxiv) Ready mixed concrete must be used in building construction.

- (xxv) 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.
- (xxvi) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xxvii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxviii) The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (xxix) 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. Discharge of this unused treated affluent, 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 affluent, 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.
- (xxx) Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
- (xxxi) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxxii) Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
- (xxxiii) 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.
- (xxxiv) 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.
- (xxxv) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement
- (xxxvi) 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.
- (xxxvii) 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.
- (xxxviii) 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.
- (xl) 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

- (xli) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- (xlii) 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.
- (xliii) 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.
- (xliv) Six monthly monitoring reports should be submitted to the Department and MPCB.
- (xlv) A complete set of all the documents submitted to Department should be forwarded to the MPCB
- (xlvi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (xlvii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xlviii) 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.
- (xlix) 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://www.maharashtra.gov.in>.
- (l) 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.
- (li) 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.
- (lii) 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.
- (liii) 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.
 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 5 years.
 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.


(R.A. Rajeev)
Principal Secretary,
Environment department &
MS, SEIAA

Copy to:

1. Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEIAA, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerala.

2. Dr. S. Devotta, Chairman, SEAC, T2/302 Sky City, Vanagaram –Ambattur Road, Chennai – 600 095
3. Additional Secretary, MOEF, 'Paryavaran Bhawan' CGO Complex, Lodhi Road, New Delhi – 110510
4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
5. 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).
6. Regional Office, MPCB, Pune.
7. Collector, Pune.
8. Commissioner, Pune Municipal Corporation, Pune.
9. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
10. Director (TC-1), Dy. Secretary (TC-2), Scientist-1, Environment Department.
11. Select file (TC-3).