BKC/C-62/(2)

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC-2014/CR-152/C-1
Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Dated: 28 January, 2016..

To,
M/s. BKC Properties Pvt. Ltd,
Raheja Tower, Block G, Plot No. C-30,
Kurla Complex, Bandra (E),
Mumbai - 400 051

Subject: Environment clearance for proposed vertical expansion of existing Commercial office building "Vibgyor" at plot C-62, G Block, Bandra Kurla Complex, Bandra (E), Mumbai by M/s. BKC Properties 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-II, Maharashtra in its 37th 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 91st meeting.

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-

1	Name of the Project	Grant of Environment Clearance for proposed vertical expansion of the existing commercial office building on Plot no. C-62, 'G' Block of Bandra Kurla Complex, Bandra (E), Mumbai.
2	Project Proponent	BKC PROPERTIES PVT. LTD
3	Consultant	Aditya Environmental Services Pvt. Ltd.
4	Accreditation of the consultant(NABET Accreditation)	NABET No. 03 Building and Construction Category : 38 Township & Area Development Projects Category : 39
5	Type of Project: Housing Project/Industrial Estate/SRA Scheme/MHADA/ Township or others	Commercial Office Building
6	Location of the project	Plot No. C-62, 'G' Block Of Bandra Kurla Complex, Bandra (E), Mumbai

7	Whether in Corporation/municipal/ other area	MMRDA
8	Applicability of the DCR	Development Control Rule (DCR), MMRDA
9	Note on the initiated work (if applicable)	The existing Commercial Office Building is comprising of 2 Basements + Ground (part Stilt) + 8 Upper floors + 9th Floor (part). The Occupation Certificate to the said building was granted by MMRDA in year 2009. The building since then is occupied.
10	LOI/NOC from MHADA/ other approvals (If Applicable)	NA
11	Total plot area (Sq.M.) Deductions Net Plot Area	Plot Area : 4,289.49 sq.mts
12	Permissible FSI (including TDR etc.)	Existing Development : 10,000.00 Sq.Mts Additional Development : 3,505.76 Sq. Mts Total Permissible BUA: 13,505.76 Sq.Mts
13	Proposed Built Up Area(FSI & Non FSI)	**Existing Development :** FSI : 9,124.39 Sq.Mts Non-FSI : 9,784.15 Sq.Mts Total existing Construction area: 18,908.54 Sq. Mts **Proposed Development:** FSI Area: 3,130.33 Sq. Mts Non-FSI Area: 532.14Sq. Mts Proposed Additional Construction Area: 3,662.47 Sq. Mts **Total Development:** FSI : 12,254.72 Sq. Mts Non-FSI : 10316.29 Sq.Mts Total Construction area : 22,571.01 Sq. Mts
14	Ground Coverage Area (percentage of plot not open to sky)	The proposal is for the vertical extension of existing building
15	Estimated Cost of the project	Approximate cost of construction for expansion is Rs. 5.0 Cr.
16	Number of Buildings &configuration(s)	The existing Commercial Office Building is comprising of 2 Basements + Ground (part Stilt) + 8 Upper floors + 9th Floor (part). Vertical extension of this existing building whereby balance part of 9th floor along with 3 additional floors are proposed utilising additional built up area granted by MMRDA there by making entire building as 2 Basement + Ground (part Stilt) + 12 Upper Floors.
17	No of Tenants & Shops	The entire building is Commercial (Office) Building.
18	Number of expected residents/users	It is an Office Building and 1230 Nos. of users are expected. Existing user = 915 Nos.

		Proposed users= 315 Nos.
19	Tenant density per hectare	Occupancy @ rate of 10.0 Sq. Mts / person /day
20	Height of Building(s)	After addition of 3 Upper Floors on the existing building the height will be 51.10 Mts
21	Right of way (Width of the road from the nearest fire station to the proposed building(s)	45.0 Mts and 18.0 Mts wide roads abutting the project.
22	Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	More than 6.00 m radius
23	Existing Structure(s)	The existing Commercial Office Building is comprising of 2 Basements + Ground (part Stilt) + 8 Upper floors + 9th Floor (part).
24	Details of the demolition with disposal (If applicable)	There is no demolition work
25	Total Water Requirement	**Dry Season (Existing) :** • Fresh water (CMD) & source: 18.50KLD / MCGM • Recycled water (CMD): 36.0 KLD (From STP) • Total Water Requirement (CMD): 54.5 KLD **Dry Season (Existing + Proposed) :** • Fresh water (CMD) & source: 25.0 KLD / MCGM • Recycled water (CMD): 47.0 KLD (From STP) • Total Water Requirement (CMD): 72.0 KLD **Rainy Season:** Water quantity of 28.0 M^3/ day will be used for flushing from RWH Tanks
26	Rain Water Harvesting (RWH)	Rain Water Harvesting of 28.0 M^3/ day has been proposed.
27	UGT tanks	**Location(s) of the UGT tank(s)-** Lower Basement
28	Strom water drainage	Proposed on site.
29	Sewage & Waste Water	<u>Proposed Scenario:</u> • Sewage generation: 53 m^3/day • **STP Technology:** • Capacity of STP: Total Capacity 75.0 KLD(existing) • Location of the STP- Lower Basement

		DG Sets (during emergency): Existing D.G sets provided: 2 X 1010 KVA : 2020 KVA (common with all DG sets provided)
30	Solid Waste Management	**Waste generation in the Pre-Construction and Construction phase** Waste generation- 100 Kg/Day during construction phase • Quantity of the top soil is been preserved • Bricks, concrete debris, floor tiles, wood, steel material, plastic sheets, tins, etc. will be segregated and recyclable materials will be handed over to authorized vendors. **Waste generation in the operation phase: 400 Kg/day** • Dry waste (Kg/day): 280.0 kg/Day • Wet waste (Kg/day): 120.0 Kg/Day • Garden waste: 8 kg/day • E-waste (Kg/month): 4,262 No./yr • Hazardous waste (Kg/month):NA • Biomedical waste (Kg/month) (if applicable): NA • STP sludge: 1 .0 kg/day **Mode of Disposal of Waste:** • Dry waste:Will be handed over to MCGM for recycling • Wet Waste:Are handed over to agencies for disposal. • E-Waste: Will be disposed off through MPCB/ CPCB authorized recyclers. • Hazardous Waste: NA • Biomedical Waste: NA • STP Sludge (Dry Sludge): Use as manure.
31	Green Belt Development	47 Nos. Trees are provided.
32	Energy	**POWER REQUIREMENT:** **Quantity:** Power will be provided as per the quantity required during construct ion phase. **Operation phase:** Existing Connected Load: 2000 KVA Additional Connected Load: 400 KVA **Total Connected Load: 2400 KVA** Existing Contract Demand: 1200.0 KVA Additional Power Contract Demand required: 240.0 KVA **Total Contract Demand (1200+240 KVA) : 1440 KVA** **Existing Transformer Rating : 2 X 1500 KVA : 3000 KVA** **D.G Sets Details:** Existing D.G sets provided: 2 X 1010 KVA : 2020 KVA **Exiting Transformer and existing D.G sets will cater to the additional load requirement.** ENERGY CONSERVATION MEASURES:

<table>
<tr><td></td><td></td><td>High-Performance Glazing:
Most of the glazing area is on the north façade of the building – the shading coefficient and light transmittance for this glass were developed very carefully in order to enhance available daylight in the space and maintain visual comfort for the occupants without comprising on energy-efficiency.
Efficient Lighting:
Efficient fluorescent lamps (T5s) and luminaries with high coefficient of utilization have been used in most of the zones to achieve efficient lighting.
Heat Island Effect:
The project has been designed to provide underground parking. The covered car parking helps in reducing the "heat island effect".</td></tr>
<tr><td>33</td><td>Environmental Management plan Budgetary Allocation</td><td>
<table>
<tr><th>Sr. No.</th><th>Pollution Control Measures</th><th>Approx. Capital Cost (Rs. Lakhs)</th><th>Approx. Recurring Cost Per Annum (Rs. Lakhs)</th></tr>
<tr><td>1.</td><td>STP</td><td>26.00 (Constructi on of STP)</td><td>16.0 (Includes cost of power, operation & maintenance)</td></tr>
<tr><td>2.</td><td>Environme nt Monitorin g</td><td>Nil</td><td>5.0 (Monitoring charges for air, water, waste water, soil, DG stack, noise etc.)</td></tr>
<tr><td>3.</td><td>Solid Waste Manageme nt</td><td>10.0 (Includes cost of waste collection, storage and disposal.)</td><td>1.5 (Includes cost of waste collection, storage and disposal)</td></tr>
<tr><td>4.</td><td>Energy Conservati on Measures</td><td>83.63</td><td>1.5</td></tr>
<tr><td>6.</td><td>Green Belt developme nt</td><td>36.06 (Includes landscaping of plot area)</td><td>2.14 (Includes cost of landscaping of plot area)</td></tr>
<tr><td></td><td>Total</td><td>167.69</td><td>26.64</td></tr>
</table>
</td></tr>
<tr><td>34</td><td>Traffic Management</td><td>Nos. of the junction to the main road & design of confluence:
Entries & Exits : One Entry and Exit
Roads : 45.0 mts of Right of Way and 18.0 mts.</td></tr>
</table>

		Parking Details: Number and area of Basement:2 Nos. Required car parks as per Norms: 101 Nos. Required space for transport vehicle: 6 Nos. Provided Car parks : 138 Nos. Provided space for transport vehicle: 6 Nos. Total Parking Provided = 144 Nos. Two level Basements + Stilt (part) will be used for parking vehicles.
35	CRZ/RRZ Clearance obtain, if any	NA
36	Distance from Protected Area/Critically Polluted area/Eco-sensitive areas /inter-State boundaries	NA.

3. The proposal has been considered by SEIAA in its 91st 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 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.

(ii) The Transformer which is presently located in basement be relocated from Fire-Safety consideration.

(iii) Fire Staircase and fire lift not to go to the basement & shall terminate on the ground floor only.

(iv) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2011.

(v) This environmental clearance is issued subject to utilization of excess treated water.

(vi) 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.

(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 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.

(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.

(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 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. SO_2, 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.

(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. Johny Joseph, Chairman, IAS (Retd.). SEAC-II, office of the Lokayukta and New Up- Lokayukta, New Administrative Building, 1st floor, Madam Cama Road, Mumbai.

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, Mumbai.

8. Commissioner, Municipal Corporation Greater Mumbai (MCGM).

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

10. Regional Office, MPCB, Mumbai

11. Select file (TC-3)

(EC uploaded on 28|01|2016)