STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC-III2013/CR-393/TC-2.
Environment department,
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Dated: 28th June, 2016

To,
M/s. Duville Estates Pvt Ltd.
(Formerly known as Calypso Premises Pvt. Ltd.)
At Village-Kharadi Nagar Road Pune

Subject: Environment clearance for proposed residential project at S.no S No -16/1, 16/2A, 16/2B, 16/3, 17/1, 17/3, 17/5 of Kharadi Nagar Road Pune by M/s. Duville Estates Pvt Ltd. (formerly known as Calypso Premises Pvt. Ltd.).

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-III, Maharashtra in its 40th 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 99th meeting.

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

Brief Information of the project submitted by you is as-

1	Name of Project	'Riverdale' a Residential project at S No -16/1, 16/2A, 16/2B, 16/3, 17/1, 17/3, 17/5 of Kharadi, Nagar Road, Pune
	Name, contact number & address of Proponent	• Name : Mr. Tushad B. Dubash • Address: Duville Estates Private Limited (formerly known as Calypso Premises Pvt. Ltd.), 81, Sopan Baug, Ghorpadi, Pune – 411001. • Tel no. : 22610021-23 • Fax no : 22620181
2	Name, contact number & address of Consultant	• Name : Mr. Ulhas Joglekar, Director • Address: Aditya Environmental Services Pvt. Ltd. 107, Hiren Light Industrial Estate, Moghul Lane, Mahim Mumbai - 400016

		• Tel no. : 022-42127500 & 42127505 • Mobile No : 9821513440 • Email : ulhasj@gmail.com
3	Accreditation of consultant (NABET Accreditation)	QC1 NABET Accreditation No. 3 -List A
4	Type of project: Housing project / Industrial Estate /SRA scheme / MHADA /Township or others	Township project
5	Location of the project	Kharadi, Nagar Road, Pune
6	Whether in Corporation / Municipal / other area	Pune Municipal Corporation
7	Applicability of DCR	As per PMC DC rules
8	IOD/IOA/Concession document or any other form of document as applicable(Clarifying its conformity with local planning rules & provision)	As per PMC
9	Note on the initiated Work (if applicable)	Not Applicable **• Total constructed work (FSI+ Non FSI):** **• Date and area details in the necessary approvals issued by the competent authority (attach scan copies).**
10	LOI/NOC from MHADA/ Other approvals if	Not Applicable

	applicable	
11	Total Plot Area Deductions Net Plot Area	Total Plot Area: 1,24,000 sq.m Deductions: 51,531.56 sq.m Net Plot Area: 72,468.44 sq.m
12	Permissible FSI (including TDR etc.)	1,22,353.00 sq.m
13	Proposed Built-up Area (FSI & Non-FSI)	**FSI area:** 1,21,594.00 Sq m **Non FSI area:** 1,77,040.00 Sq m **Total Built Up Area**: 2,98,634.00 sq m **For Phase I:** **FSI area:** 36,627.33 Sq m **Non FSI area:** 8,874.00 Sq m **Total Built Up Area:** 45,501.33 Sq m
14	Ground coverage Percentage (%) (Note : percentage of plot not open to sky)	Covered Area:-26,115.00 Sq. m Ground Coverage (%): 21 %(on gross plot area) :36% (on Net plot area)
15	Estimated cost of the project	Rs. 840 Cr. /-
16	No. of buildings & its configuration	1. Residential: 17 2. Club House: 3 3.Commercial Building: No separate building **For entire project:**

Building	Configuration
A	3 Stilt parking + 16 floors
B1 - B6	6 Stilt parking + 18 floors
B7	2 Stilt parking + 15 floors
C1 - C4	5 Stilt parking + 20 floors
C 5	5 Stilt parking + 19 floors
D	Stilt + 8 floors
E 1	4 Stilt parking + 19 floors
E 2 & E3+shops	4 Stilt parking + 18 floors

		Retail: Ground + 2 floors

For Phase I: As per Building permission and Commencement certificates dt.09.11.2015

Building	Configuration
A	3 Stilt parings + 16 floors
B1 – B3, B5, B6	6 Stilt parking + 1 floor
C1	4 Stilt Parking + 18 floors
C2	4 Stilt Parking + 8 floors
C5	4 Stilt Parking + 14 floors
D	Stilt + 6 floors
E 1, E2	3 Stilt Parking + 1 floor
E3	3 Stilt Parking + 12 floors
Sale Office	Ground floor

17	No. of tenements & shops	Tenaments:1,357 Shops: 32
18	No. of expected residents /users	Residential users: 6,785 Commercial users: 48
19	Tenament density hectare	109
20	Height of the building (s)	55.35 m to 78.80 m
21	Right of the way (width of the road from the nearest Fire station to the proposed building (s)	24 m
22	Turning radius for easy access of Fire Tender movement from all around the building excluding the width for the plantation	9m

23	Existing structure(s)	NA
24	Details of demolish with waste Disposal (if applicable)	NA
25	Total Water Requirement	Residential and Commercial: Water requirement is for residential purpose. Dry season : Source: PMC • Fresh water: 625 cmd • Recycled water(Flushing): 322 cmd • Recycled water (Car washing): 11 cmd • Recycled water (Gardening): 68 cmd • HVAC Makeup: NA • Total water Requirement : 1026 cmd • Excess treated water: 399 cmd • Swimming Pool :NA • Fire fighting (Cum):1000 KL Wet Season: • Fresh water: 625 cmd • Recycled water(Flushing): 322 cmd • Recycled water (Car washing): 11 cmd • Recycled water (Gardening): NA • HVAC Makeup: NA • Total water Requirement : 958 cmd • Excess treated water: 467 cmd • Swimming Pool :NA • Fire fighting (Cum):1000 KL
26	Details about Swimming Pool	Swimming pools are proposed in plots B, C and E. Dimension of Swimming Pool: 1,226.34 KLD Total water Requirement in KLD:1,226.34 KLD (Adult pool: 1172.1 KLD + Kids pool: 54.24 KLD) Plot B: Adults pool - 247.35Cu.m ; Kids pool - 15.79 Cu.m Plot C: Adults pool - 191.61 Cu.m; Kids pool - 11.53 Cu.m Plot E: Adults pool - 426.94 Cu.m ; Adults pool2 - 306.20 Cu.m; Kids pool - 26.92 Cu.m Water requirement for make up in KLD: 10.85 Cu.m Details of Plant & Machinery used for treatment of Swimming pool water: Circulating pumps and filtration units

<table>
<tr><td></td><td></td><td>Details of quality to be achieved for swimming pool water and parameters to be monitored:
The five keys to maintaining water quality in your swimming pool include:
• Filtration
• Ozonization
• pH level
• Total alkalinity (TA)
• Calcium hardness.</td></tr>
<tr><td>27</td><td>Rain Water Harvesting (RWH)</td><td>Residential:
• Level of Ground Water Table : 3m to 4m
• Size and no of RWH tank (s) and Quantity: 3 RWH Tanks
• Capacity of RWH tanks: 200, 100 & 20 KLD
• Location of RWH Tanks: - Ground
• No of recharge pits : 120 shallow pits of 5 KLD capacity per pit, 6 injection bore wells of 41cum for recharging about 239 cum of rainwater
Commercial: Not applicable
• No. of RWH Tanks:
• Capacity of RWH tanks:
• Location of the RWH tank (s):
• No of recharge pits:

Budgetary allocation (Capital cost and O&M cost):
<table><tr><td></td><td>Capital cost (Rs in lakh)</td><td>O&M cost (Rs in lakh)</td></tr><tr><td>Rainwater storage tank</td><td>20</td><td>1</td></tr></table></td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>28</td><td>UGT Tanks</td><td>Residential:
Domestic UG tank Capacity: Plot A - 106 KL, Plot B - 316KL, Plot C - 215KL, Plot F - 42KL

Flushing UG tank Capacity: Plot A - 54 KL, Plot B - 166 KL, Plot C -113 KL, Plot F - 22KL

Fire UG tank Capacity: Plot A - 200KL, Plot B - 400KL, Plot C -200KL, Plot F - 200KL</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>29</td><td>Storm Water Drainage</td><td>Natural water drainage pattern: Natural flow of storm water will be maintained.
Quantity of the storm water: 42,942 cubic metres per annum
Size of SWD: 1m deep x 0.8m wide (at multiple locations as appropriate)</td></tr>
<tr><td></td><td></td><td></td></tr>
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<tr>
<td>30</td>
<td>Sewage and Waste Water</td>
<td>Residential:
• Sewage generation (cmd) :- 789 cmd
• Capacity of STP:-6 STP of 910 CMD capacity
• STP technology:- MBBR
• Location : Ground

Commercial: Not Applicable
• Sewage generation (CMD):
• Capacity of STP (CMD
• STP technology:
• Location of STP:
DG sets (during emergency):- backup DG bank will cater to STP load requirement also
Budgetary allocation (Capital cost and O&M cost):-
<table>
<tr><td></td><td>Capital cost (Rs. in lakh)</td><td>O&M cost (Rs. in lakh)</td></tr>
<tr><td>Sewage treatment plant</td><td>150</td><td>21</td></tr>
</table>
</td>
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<tr><td></td><td></td><td></td></tr>
<tr>
<td>31</td>
<td>Solid waste Management</td>
<td>Waste generation in Pre Construction and Construction phase:
• Waste Generation :- 7-8 MT debris generation
• Quantity of Top soil to be preserved : -Top soil will be used for landscaping
• Disposal of construction waste debris: -used for filling of the plots and maintaining the natural slopes

Waste Generation in Operation Phase:
Residential & commercial:
• Biodegradable waste:- 2,199 kg/day
• Non Biodegradable waste:- 1466 kg/day
• E- waste (kg/month) : NA
• Hazardous waste (kg/month): 2-2.5 MT/year as used oil.
• Biomedical Waste (kg/month)(if applicable) : NA
• STP Sludge (Dry sludge) Kg/day : 75

Mode of Disposal of Waste :-
• Dry waste: segregation and sale of authorized recyclers
• Wet waste: - biodegradable waste to compost
• E- waste: Not applicable
• Hazardous waste: will be sold to MPCB authorized recyclers.
• Biomedical Waste: Not applicable
• STP Sludge (Dry sludge): mix with wet waste and converted into compost
Area Requirement :
1. Location (s):
2. Total area provided for the treatment and storage of solid waste: 150</td>
</tr>
</table>

sq.m.

Budgetary allocation (Capital cost and O&M cost)

	Capital cost (Rs in lakh)	O & M cost (Rs in lakh)
Solid waste management	50	7.20

32 Green Belt Development

Total RG area: 19,357 sq.m

1. RG area other than green belt (Please specify for playground, etc.): NA
2. RG area under green belt:
   - RG area on the ground (sq.m): 19,357 sq.m
   - RG on the podium (sq.m): 14,689 sq.m

Number of trees to be planted : 372			
Sr. No.	Scientific name	Common name	Ecological/ Medicinal/ Economic Significance
1	*Aegle marmelos*	Beal Tree	Native, Medicinal plant, fruits use to make marmalade/jam etc.
2	*Anona squamosa*	Custard apple, Sitafal	Native, Medicinal plant, fruits use to make marmalade/jam etc.
3	*Azadirachta indica*	Neem Tree	Native, Medicinal plant
4	*Cordia dichotoma*	Bhokar	Native, raw fruits use to make pickle
5	*Lagerstroemia speciosa*	Queen Crape Myrtle	Native, aesthetic value, shade
6	*Millingtonia hortensis*	Indian Cork	Native, aesthetic value, sweet scented flowers
7	*Mimusops elengi*	Bakuli	Native, Medicinal plant, fruits consumed at many places
8	*Syzygium cumini*	Jambhul	Native, Medicinal plant, fruits use to make fresh juice, syrup, jelly etc.
9	*Bauhinia purpurea*	Butterfly Tree	Native, aesthetic value
10	*Bauhinia racemosa*	Astha	Native, aesthetic value
11	*Bougainvillea spectabilis*	Bougainvillea	Aesthetic value
12	*Citrus limon*	Lemon, Limbu	Native, Medicinal plant, fruits use to make fresh juice, pickle etc.

13	*Emblica officinalis*	Awala	Native, Medicinal plant, fruits use to make fresh juice, syrup, pickle etc.
14	*Gardenia jasminoides*	Anant	Native, aesthetic value, sweet scented flowers
15	*Murraya paniculata*	Kunti	Native, aesthetic value
16	*Nerium indicum*	Pink Oleander	Native, aesthetic value
17	*Nyctanthus arbor-tristis*	Parijatak	Native, Medicinal plant, aesthetic value, sweet scented flowers
18	*Psidium guajava*	Peru	Native, fruits use to make fresh juice, syrup, etc.
19	*Saraca asoka*	True Ashok	Native, Medicinal plant, aesthetic value

- Number & list of trees species to be planted in the ground RG: 372 nos
- Number & list of shrubs & bushes species planted in the podium RG: Not Applicable
- Number & list trees species to be planted around the border of Nallah/ steam/pond(If any): Not Applicable
- No. of Existing Trees: 227 Nos
- Number, Size, Age and Species of trees to be cut, trees to be transplanted:
  - Trees to be transplanted: 45
  - Trees to be cut: -79 Nos
  - Trees to be retained: 103 Nos.
- NOC for the tree cutting/ transplantation/ Compensatory plantation, if any: Tree authority internal report of PMC showing the approval for cutting of 79 trees and transplantation of 45 trees is obtained.

Budgetary allocation (Capital cost and O&M cost)

	Capital cost (Rs in lakh)	O&M cost (Rs in lakh)
Green belt development	15	2.40

33	Energy	Power Supply: • Source: MSEDCL • Total power consumption for residential buildings

Particular	Connected Load (KW)	Maximum Demand Load (KW)
Construction phase	250 KW	112.5 KW
Operation phase	21984 KW	7438 KW

- Total DG power consumption for clubhouse and commercial buildings: Not Applicable
- Energy saving measures
  - BEE 4-star rated electrical equipments

- High efficiency motors & pumps
- CPCB certified DG sets
- Energy savings gearless elevators
- Improve Power Factor to reduce power losses through capacitor banks
- Guidelines for energy efficient fixtures for interior fit-out
- Energy efficient CFLs for common area and parking lighting
- 25% street lighting will be solar powered

The following Energy Conservation Methods are proposed in the project:

- Detail calculations & % of saving:

Savings due to lamps					
Area	Base case		Energy case		Saving
	TCL (KW)	MD (KW)	TCL (KW)	MD(KW)	(%)
Green area landscape	33	26	23	18	30
Street light	20	20	16	16	20
Corridor lighting	260	182	202	140	22
Parking	74	52	52	36	30
Building Façade Light & Building Periphery Lighting	11	9	10	8	9
Club House	71	57	55	38	23
Therefore average annual energy saving (%)					22

Compliance of the ECBC guidelines: (Yes/No)(If yes then submit compliance in tabular form): Yes

1	Section 4.2- Mandatory requirements for envelope – 1. Fenestration details as- U value and SHGS shall be in co-ordinance with *Appendix C, in ECBC* 2. Opaque construction- U value shall be determined as per *Appendix C, in ECBC* 3. Building envelope ceiling as specified in *ECBC*
2	Section 5.2- Mandatory requirements for HVAC -For naturally ventilated spaces the design shall comply with NBC of India 2005 Part 8 Section 1, 5.4.3 and 5.7.1 -Minimum equipment efficiencies, controls, piping and duct work shall be as mentioned by ECBC.
3	Section 6.2- Mandatory requirements for service hot water and

			pumping The project would be providing solar water heating system. Equipment efficiency- Service water heating equipment shall meet or exceed the performance and minimum efficiency requirements presented in available Indian Standards.
		4	Section 7.2- Mandatory requirements for lighting Lighting controls, Exit signs, lighting for exterior building grounds shall be provided as specified in ECBC, as applicable.
		5	Section 8.2- Mandatory requirements for electrical power Transformers, Energy efficient Motors, power factor correction, check metering and monitoring, power distribution systems shall be as specified in ECBC.

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

	Capital cost (Rs in lakh)	O&M cost (Rs in lakh)
Energy Saving Devices	75	5

- Number and capacity of the DG sets to be used: 2 X 380 KVA, 3 X 600 KVA and 2 X 500
- Stack height: 5 mt*
  (*) – Above height of building
- HT line passing through the plot if any: Yes.

34	Environmental Management plan Budgetary Allocation	Construction phase (with Break-up)-

Environment Protection Measure	Capital Cost (Rs. in lakh)	Recurring Cost per annum (Rs. in lakh)
Debris/Top soil Management	10.00	--
Toilets for labour + drinking water + first aid arrangement	--	24.00
Safety measures	0.35	--
Monitoring of Environmental Parameters	--	4.37
Environment Management Cell	--	0.50
TOTAL	10.35	28.87

Operation Phase (with Break-up) –

Environment Protection Measure	Capital	Recurring Cost

			Cost (Rs. in lakh)	per annum (Rs. in lakh)
		Sewage Treatment Plant	150.00	21.00
		Solid Waste Management	50.00	7.20
		Rain Water Harvesting	20.00	1.00
		Landscaping	732.00	73.20
		Energy saving features	75.00	5.00
		Water Tankers	--	160.00
		WTP	37.00	3.70
		Monitoring of Environmental Parameters	--	6.00
		Environmental monitoring cell	--	1.42
		TOTAL	1064.00	278.52
		• Quantum and generation of Corpus fund and Commitment: & Responsibility for further O & M: Will be handed over to the society		
35	Traffic Management Nos. of the junction to the main road & Design of confluence: 2 Plot Area: 1,24,200 sq.m Parking Details :			

Sr. No.	Type	Applicable no. of parking As per DCR	Provided parking
1	2 wheeler	81	81
2	4 wheeler	2281	2381
3	Cycles	162	162
4	Public transport	--	--

- Total area provided for parking: 77,200 sq.m
- No. of car parking provided: 2381
- Type of parking (Open/Stilt/Basement): Open and podium
- Area per car including driveway provided for car parking: 15 sq.m to 33 sq.m (as per PMC DC rules will be provided)
- Width of all internal roads (m): 6m- 9m

36	CRZ/RRZ clearance obtain ,if any	NA
37	Distance from Protected Areas / Critically Polluted	Mula Mutha river adjacent to the site

	areas / Eco-sensitive areas/ inter-State boundaries	

38. CHECKLIST FOR OTHER NECESSARY APPROVALS				
39.		Status of the Approval	Name of the competent authority	Date of issued letter
40.	CFO NOC for the above building structures	Partly received	CFO	16/01/2015
41.	HRC NOC for the above said building structure(s) if applicable	Yet to be applied	NA	NA
42.	NOC for the above said building structure (s) from the aviation authority if applicable	Initiated	NA	NA
43.	Consent for water for the above said details	Obtained	PMC	03/03/2015
44.	Consent for drainage for the above said details	Obtained	PMC	03/03/2015
45.	Consent for electric supply for the proposed demand	Yet to be applied	-	-
46.	Precertification for Green Building from Indian Green Building Council & other recognized institutes (if applicable)	Obtained	Indian Green Building Council	June 2015.
47.	Court Order (if applicable)	NA	NA	NA
48	Other approvals (if any)	NA	NA	NA

3. The proposal has been considered by SEIAA in its 99th 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 :

General Conditions for Pre- construction phase:-

(i) This environment clearance is issued subject to restricting total built up area of 45501.33 sq.m as approved by Local Planning Authority.

(ii) Parking should be planned to ensure easy maintenance of nallah by PMC. It to be covered by a strong wire mesh/ steel grating at suitable intervals and to ensure that no breeding of mosquitoes takes place.

(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) 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.

(vi) PP has to abide by the conditions stipulated by SEAC& SEIAA.

(vii) The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & 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.

(viii) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.

(ix) 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 firefightingequipment's 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 backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height 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.

(S. M. Gavai)
Member Secretary, SEIAA

Copy to:

1. Shri. Jagdish Joshi, Chairman, IAS (Retd.), SEAC-III, Flat no. 3, Tahiti chs, Juhu Vers Ova Link Road, Andheri (W), Mumbai- 400 053.
2. Additional Secretary, MOEF, 'MoEF& CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
3. 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).
4. IA- Division, Monitoring Cell, MoEF& CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
5. Managing Director, MSEDCL, MG Road, Fort, Mumbai
6. Collector, Pune.
7. Commissioner, Pune Municipal Corporation (PMC)
8. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
9. Regional Office, MPCB, Pune.

(EC Uploaded on 28/06/2016)