Government of Maharashtra

SEAC-2013/CR-58/TC-1
Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Dated: 26th December, 2014

To,
M/s Viva Swastik Developers,
Nilemore, Vasai, Dist:-Thane

Subject: Environment clearance for proposed Viva Swastik Township at Village Nilemore, Taluka Vasai, Thane by M/s Viva Swastik Developers

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-II, Maharashtra in its 29th 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 77th meetings.

2. It is noted that the proposal is for grant of Environment Clearance for proposed Viva Swastik Township at Village Nilemore, Taluka Vasai, Thane, Mumbai. SEAC-II 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 the Project	"Viva Swastik Township" (Residential Commercial Project)
Project Proponent	M/s Viva Swastik Developers,
Consultant	M/s. Enviro Analysts & Engineers Pvt. Ltd.
Type of Project:	Residential Commercial Project
Location of the project	Plot No. 238, 239, 240,242, 246, 247, 248, 249 & 256, Village:- Nilemore, Taluka Vasai, Thane, Maharashtra
Whether in Corporation/ municipal/other area	Vasai-Virar City Municipal Corporation
Applicability of the DCR	VVCMC
Note on the initiated work (if applicable)	• Total construction work proposed (FSI + Non FSI): 15813.70 sq.m. • Date and area details in the necessary approvals issued by the competent authority : ➢ CC copy dated 22-07-2011 for S. No. 238 (VVCMC/TP/CC/VP-0056/690,691 ➢ CC copy dated 22-07-2011 for S. No. 242 (VVCMC/TP/CC/VP-0056/698,699

<table>
<tr><td></td><td>➢ CC copy dated 22-07-2011 for S. No. 256 (VVCMC/TP/CC/VP-0056/692,693
➢ CC copy dated 22-07-2011 for S. No. 240 (VVCMC/TP/CC/VP-0321/695
➢ CC copy dated 06-07-2012 for S. No. 246/247 (VVCMC/TP/CC/VP 0567/1054/2012-13</td></tr>
<tr><td>LOI/NOC from MHADA/ other approvals (If Applicable)</td><td>Date and construction area details mentioned in the approved letter : NA</td></tr>
<tr><td>Total plot area (sq.m.)
Deductions
Net Plot Area</td><td>Area Statement
<table>
<tr><td>A</td><td>AREA STATEMENT</td><td></td></tr>
<tr><td>1</td><td>AREA OF PLOT AS PER 7/12</td><td>TOTAL
[illegible]</td></tr>
<tr><td>2.</td><td>DEDUCTION FOR</td><td></td></tr>
<tr><td></td><td>a ENCROACHMENT AREA</td><td>—</td></tr>
<tr><td></td><td>b 12.00M W D P ROAD</td><td>—</td></tr>
<tr><td></td><td>c 30.00M W D P ROAD</td><td>3060,35</td></tr>
<tr><td></td><td>d WATER CHANEL RESERVATIONS</td><td>4948,87</td></tr>
<tr><td></td><td>e RAILWAY CAR SHED</td><td>9126,78</td></tr>
<tr><td></td><td>f MARKET</td><td>1032,10</td></tr>
<tr><td></td><td>TOTAL (a+b+c+d+e+f)</td><td>18168,10</td></tr>
<tr><td>3</td><td>NET PLOT AREA (1 MINUS 2)</td><td>64771,00</td></tr>
<tr><td>4</td><td>DEDUCTIONS FOR</td><td></td></tr>
<tr><td></td><td>a RECREATION GROUND (NOT LEVIABLE) [illegible]</td><td>3715,73</td></tr>
<tr><td></td><td>[illegible] ONLY FOR PLOT AREA ABOVE 4000SQM [illegible] FOR PLOT BETWEEN 1000 TO 4000 SQM
b [illegible](ONLY FOR PLOT ABOVE 4000SQMT</td><td>9238,60</td></tr>
<tr><td></td><td>TOTAL (a+b)</td><td>12954,330</td></tr>
<tr><td>5</td><td>BUILDABLE PLOT AREA (3X 0.85)</td><td>55056,11</td></tr>
<tr><td>6.</td><td>ADDITIONS FOR FLOOR SPACE INDEX</td><td></td></tr>
<tr><td></td><td>2b 100%</td><td></td></tr>
<tr><td>7.</td><td>TOTAL AREA (5 PLUS 6)</td><td>55056,11</td></tr>
<tr><td>8</td><td>FLOOR SPACE INDEX PERMISSIBLE</td><td>1,00</td></tr>
<tr><td>9.</td><td>PERMISSIBLE BUILT UP AREA</td><td>55056,11</td></tr>
<tr><td>10</td><td>MAX PERMISSIBLE AREA WITH DR/TDR (5 X 1.75)</td><td>96348,19</td></tr>
<tr><td>11.</td><td>ADD. FOR LAND POOLING @5%</td><td>3028,09</td></tr>
<tr><td>12</td><td>EXISTING BUILDING AREA</td><td></td></tr>
<tr><td>13</td><td>PROPOSED AREA</td><td></td></tr>
<tr><td>14</td><td>EXCESS BALCONY AREA TAKEN IN FLOOR SPACE INDEX(AS PER B(c)BELOW)</td><td></td></tr>
<tr><td>15</td><td>TOTAL PERMISSIBLE BUA</td><td>99376,280</td></tr>
<tr><td>16</td><td>TOTAL BUILT UP AREA APPROVED (12+13+14)</td><td></td></tr>
<tr><td>17</td><td>TOTAL BUILT UP AREA PROPOSED</td><td>93724.42</td></tr>
</table></td></tr>
<tr><td>Permissible FSI (including TDR etc.)</td><td>Permissible FSI – 0.75
TDR – 1.75</td></tr>
<tr><td>Proposed Built Up Area (FSI & Non FSI)</td><td>
<table>
<tr><td>FSI Area (sqm)</td><td>Non FSI Area (sqm)</td><td>Other Area (sqm)</td><td>Total construction Area (sqm)</td></tr>
<tr><td>83,724.42</td><td>60,390.68</td><td>3,903.17</td><td>1,48,018.27</td></tr>
</table></td></tr>
<tr><td>Ground Coverage Area (percentage of plot not open to sky)</td><td>23% (14,858.41 Sq.m.)</td></tr>
<tr><td>Estimated Cost of the project</td><td>Rs.168 Crores</td></tr>
<tr><td>Number of Buildings & configuration(s)</td><td>
<table>
<tr><td rowspan="3">Number of Buildings</td><td>Residential</td><td>11 Nos.</td></tr>
<tr><td>Others</td><td>3 Nos.</td></tr>
<tr><td>Total</td><td>14 Nos.</td></tr>
<tr><td>Configuration of Buildings</td><td colspan="2">ST(PT) + 7, B+S(P)+7, S+7, S(P)+9, S+9, G(P)+9, S(P)+10, S(P)+12, S(P)+11, S(P)+8, S(P)+15, S+12</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>Number of tenants and shops</td><td>
<table>
<tr><td>No. of Tenements (in Nos.)</td><td>2,828</td></tr>
<tr><td>No. of Shops (in Nos.)</td><td>316</td></tr>
</table>
</td></tr>
<tr><td>Number of expected residents/users</td><td>
<table>
<tr><th>Particulars</th><th>No. of Units/Area</th><th>Occupancy</th></tr>
<tr><td>No. of Tenements (in Nos.)</td><td>2828</td><td>14140</td></tr>
<tr><td>No. of Shops (in Nos.)</td><td>316</td><td>951</td></tr>
<tr><td>CFC (Nos.)</td><td>-</td><td>509</td></tr>
<tr><td colspan="2">Total Occupancy (in Nos.)</td><td>15,600</td></tr>
</table>
</td></tr>
<tr><td>Tenant density per hector</td><td>441 Nos. per hectare</td></tr>
<tr><td>Height of Building(s)</td><td>23.60 m-46.40 m</td></tr>
<tr><td>Right of way (Width of the road from the nearest fire station to the proposed building(s)</td><td>Nearest Fire station : Vasai Virar Fire Station at 3.25km (aerial distance)
Width of the road from the nearest fire station to the proposed building :15.00 m Wide Road</td></tr>
<tr><td>Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation</td><td>15m wide proposed internal road
12 m wide proposed internal road
30 m wide proposed DP road</td></tr>
<tr><td>Total Water Requirement</td><td>Dry Season:
• Fresh water (KLD) & source:1300 KLD by VVCMC
• Recycled water (KLD): 689 KLD
• Total Water Requirement (KLD): 1989 KLD
• Swimming pool make up (Cum): NA
• Fire fighting (Cum): UG Tanks= NA, OH Tanks= 225 KLD
Wet Season:
• Fresh Water (KLD) & Source: 925KLD by VVCMC+ 375 KLD (RWH Tank)
• Recycled Water (KLD):- 674 KLD Total Water Requirement (KLD): 1974KLD
• Swimming pool make up (KLD):NA
• Fire fighting (KLD):UG Tanks= NA, OH Tanks= 225 KLD</td></tr>
<tr><td>Rain Water Harvesting (RWH)</td><td>• Level of the ground water table: 1.50 m Depth
• Size and no of RWH tank(s) and quantity:
<table>
<tr><th>Sr. No.</th><th>Buildings</th><th>RWH Tank Capacity in Cum</th></tr>
<tr><td>1</td><td>BUILDING-1</td><td>164</td></tr>
<tr><td>2</td><td>BUILDING-2</td><td>73</td></tr>
<tr><td>3</td><td>BUILDING-3</td><td>34</td></tr>
<tr><td>4</td><td>BUILDING-4</td><td>103</td></tr>
<tr><td>5</td><td>BUILDING-5</td><td>62</td></tr>
<tr><td>6</td><td>BUILDING-6</td><td>16</td></tr>
</table>
</td></tr>
</table>

7	BUILDING-7	33
8	BUILDING-8	36
9	BUILDING-9	96
10	BUILDING-10	43
11	BUILDING-11	37
12	CFC-1	26
13	CFC-2	14
14	CFC-3	14

- Location of the RWH tanks(s): GROUND LEVEL
- Size, no. of recharge pits and quantity:
  As ground water table is high, we are not providing recharge pits
- Budgetary allocation (capital cost and O&M cost)
  - Capital Cost: 125 Lakhs
  - O &M Cost : 25 Lakhs

UGT tanks

- Location(s) of the UGT tank(s) with capacity
  - Below Ground

Sr. No.	Building No.	UG water tank capacity			
		Domestic in KLD	Flushing in KLD	RWH in KLD	Fire Fighting in KLD
1	Building-1	246	134	134	-
2	Building-2	155	82	75	75
3	Building-3	45	29	56	-
4	Building-4	173	93	86	-
5	Building-5	122	72	52	-
6	Building-6	143	77	27	-
7	Building-7	58	34	56	-
8	Building-8	94	55	60	75
9	Building-9	127	73	160	-
10	Building-10	50	33	72	-
11	Building-11	76	58	62	-
12	CFC-1	1.1	1.4	24	-
13	CFC-2	9	11	43	-
14	CFC-3	0.6	2	24	-

<table>
<tr><td>Strom water drainage</td><td>
• Natural water drainage pattern
• Quantity of storm water:
<table>
<tr><th>Surface stormwater drain calc</th><th>BUILDING-1,CFC-3</th><th>BUILDING-2,5</th><th>BUILDING-4,5</th><th>BUILDING-6,8,CFC-2</th><th>BUILDING-7,9,10,11,CFC-1</th><th>Total for Plot</th></tr>
<tr><td>Unpaved area discharge (m3/sec)</td><td>0.022</td><td>0.032</td><td>0.017</td><td>0.019</td><td>0.030</td><td>0.120</td></tr>
<tr><td>Paved area discharge (m3/sec)</td><td>0.145</td><td>0.055</td><td>0.111</td><td>0.125</td><td>0.201</td><td>0.637</td></tr>
<tr><td>Landscape area discharge (m3/sec)</td><td>0.035</td><td>0.015</td><td>0.029</td><td>0.035</td><td>0.053</td><td>0.167</td></tr>
<tr><td>Total Volume (m3/min)</td><td>12</td><td>5</td><td>9</td><td>11</td><td>17</td><td>54</td></tr>
</table>
</td></tr>
<tr><td>Sewage & Waste Water</td><td>
• Sewage generation :1845 KLD
• STP Technology : MBBR
• Capacity of STP (KLD):
STP 1-770 KLD
STP 2 -630 KLD
STP 3- 445 KLD
• Location of the STP: Ground Level
DG Sets (during emergency):
<table>
<tr><td>D.G sets (for emergency services)</td><td>B-1=80 KVA
B-2,4,5,6,9= 75 KVA
B-8,11= 40 KVA
B-3,7,10= 25 KVA</td></tr>
</table>
Budgetary allocation (Capital cost and O&M cost):
Capital Cost: Rs.427 Lakhs
O&M Cost: Rs. 67 Lakhs
</td></tr>
<tr><td>Solid Waste Management</td><td>
Waste generation in the Pre Construction and Construction phase
• Waste generation
Debris
• Quantity of the top soil to be preserved:
Top Soil used for Landscape Construction material
• Disposal of the construction way debris
Debris will be used for land filling and surplus will be disposed off as per norms. Scrap material will be sold to recyclers.
Waste generation in the operation phase:
• Dry waste (Kg/day): 3083 Kg/Day
• Wet waste (Kg/day):4346 Kg/Day
• STP sludge (Dry sludge) (Kg/Day): 92 Kg/Day
Mode of Disposal of Waste:
• Dry waste: Will be handed over to Recyclers
• Wet Waste: Will be processed in the Organic Waste Converter.
Required amount of manure from OWC will be used for gardening/landscaping
• STP Sludge (Dry Sludge): Use as a manure
Area Requirement:
Total area required for solid waste management is 376 sq.m.
• Budgetary allocation (capital cost and O&M cost)
Capital Cost: Rs. 143 Lakhs
</td></tr>
</table>

	O & M Cost: 53 Lakhs
Green Belt Development	Total R.G. Area: 1. RG area other than green belt (please specify for playground, etc.) 2. RG area under green belt: • RG on the ground (sq.m.): 9,715.79 sq.m. 3. Plantation: • Number and list of trees species to be planted in the ground RG:

Sr. No.	Common Name	Scientific Name	No. of Trees
1	Kadamb	*Anthocephallus cadamba*	15
2	Satwin	*Alstonia scholaris*	20
3	Yellow Gulmohar	*Peltofourm*	10
4	Bakul	*Mimusops elengi*	15
5	Almond tree	*Terminalia cattapa*	15
6	Cassia Sps.	*Cassia renigera*	20
7	Kadam	*Adina cordifolia*	15
8	Shirish	*Albizia lebbeca*	20
9	Tagar	*Tabernaemontana divaricata*	20
10	Agasti	*Sesbania grordiflora*	30
11	African tulip	*Spathodea campanulata*	15
12	Sonchafa	*Michelia champaca*	20
13	Asu palav	*Polyalthia logifolia*	45
14	Australian Bottle Brush	*Callistemon sps*	30
15	Silver oak	*Grevillea robusta*	20
16	Neem	*Azadirachta indica*	30
17	Fig Tree	*Ficus benjamia*	30
18	Ficus tree	*Ficus panda*	30
19	Silk cotton tree	*Bombax ceiba*	50
20	Samundraphal	*Barreingtonia racemosa*	40
21	Fish Tail Palm	*Caryota urens*	40
22	Ravenella Fan Palm	*Ravenala madagascariensis*	50
23	Royal Palm	*Roystonea regia*	50
24	Purple Orchid Tree	*Bauhinia purpuria*	30
25	Indian Cork Tree	*Millingtonia hortensis*	40

	<table><tr><td>26</td><td>Buddha Coconut</td><td>*Sterculia allata*</td><td>30</td></tr><tr><td>27</td><td>Indian Tulip</td><td>*Thespesia populsea*</td><td>50</td></tr><tr><td>28</td><td>Crepe Myrtle</td><td>*Lagerstomia parviflora*</td><td>50</td></tr><tr><td></td><td colspan="2">TOTAL</td><td>630</td></tr></table> **4.** Budgetary allocation (Capital cost and O&M cost) Capital Cost –107 Lakhs O & M Cost – 3.5 Lakhs.
Energy	Power Supply: (table below)

Power Supply:

Sr. No.	Description	(KW)	Source
1	Connected Load	13,044.60 KW	MSDCL
2	Maximum Demand	8,065.80 KW	
3	Transformers	2 Nos. of 5000 KVA	

Energy saving by non-conventional method:

- Energy saving measures:
  - ➢ All lifts, Ventilation and pumps will be provided with VFD drives which results in 25% saving in consumption.
  - ➢ All internal common areas will be provided with high energy efficient CFL lamps.
  - ➢ 25% of the external lighting is proposed on solar. These are set of lighting which are placed at critical junctions and which would be lit round the night. Remaining 75% lighting will be on timer circuits to achieve the maximum saving.
  - ➢ Total lighting to be proposed on 25% stages operation with automatic switch on and timer based. Photo sensors are proposed at critical junctions.
  - ➢ Hot water Provision shall be made through Centralized Solar System & no Electrical Geysers shall be used within Flats.

Details calculations & % of saving:

Energy Savings Summary for Project					
Sr.No	Item	Total Elect. Demand-Conventional case (Kw)	Elect. demand after using Energy saving means (kw)	Units Saved (kw)	Energy saving
	Energy Saving Parameters				
1	Road/Landscape - 60% Solar Lighting	8.0	3.2	[illegible]	60%
2	Parking - T5 lights	6.9	6.0	[illegible]	13%
3	Lobby & staircase LED Lights - 60% Solar	44.3	17.7	[illegible]	60%
4	Lift Regenerative Types	288	230	[illegible]	20%
5	Solar Hot Water system	5645	4799	[illegible]	15%
	Conventional Loads				
6	Plumbing System Load	95	95		
7	OWC	5	5		
8	STP Load	50	50		
9	PP Elect Room Ventilation	7	7		
10	Substation Room Ventilation	7	7		
11	Flats	11472	11472		
12	[illegible]	624	734		
13	[illegible]	54	54		
14	Market	100	170		
15	Lift	20	20		
	Total	18,425	17,526	[illegible]	

[illegible]	5.3%
[illegible]	900
Total Units saved based on 12 working hours - (Kw/day)	2,255
Total Units saved annually - (Kwh/Yr)	822,927
Annual Savings in Rs with Electrical cost @ Rs.5/unit	4,114,636

- Compliance of the ECBC guidelines: (Yes/No) (If yes then

submit compliance in tabular form): Yes (Complied)

SR. NO.	SECTION NO.	REQUIREMENT	COMPLIANCE MET BY
1	6.2.1	Solar water heating for minimum 50% design capacity	Total 100% hotwater requirement met through centralised solar system
2	7.2	Lighting controls occupancy sensors	Provided in parking areas & lift lobby's. also lift lobby & staircase lifhts are proposed on Hign energy efficient lamps. (CFL)
3	7.2.1.4	Exterior lighting to be controlled by photo sensor or time switch	40% of external area lighting kept on solar system. Other lights provided on energy saving lumi8naries like CFL?LED instead of metal halide lamps. Provided with time switch for the same to operate at night hours.
4	7.3	Interior lighting power to be with in specified limits	For parking, the lighting power density shall be 2.2W/sq.m. the same shall be based on time switch & also provied on motion sensors.
5	8.2.2	Energy efficeint motors	All lifts shall run on VFD drives which results in energy savging by adjusting

				speed of motor & delivering only the reqd. amount of power.
				4.% lobby/staircase lighting kept on solar system
				Lifts of regenerative type used that would save around 30% energy consumption as per manufacturer specification & the same saved shall be again supplied to the main grid.

- Budgetary allocation (capital cost and O&M cost)
  - Capital Cost: Rs. 186 LAC
  - O &M Cost : Rs.2.5LAC

DG Set:

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

D.G sets (for emergency services)	B-1=80 KVA B-2,4,5,6,9= 75 KVA B-8,11= 40 KVA B-3,7,10= 25 KVA

- Type of fuel used: HSD

Environmental Management plan Budgetary Allocation

I. Construction phase(with Break – up) –

- Capital cost: Refer Table Below
- O & M cost (please ensure manpower and other details): Refer Table Below

II. Operation Phase (with Break-up)-

- Capital cost
- O & M cost (please ensure manpower and other details)

Sr. No.	Method Adopted	Setting-Up Cost (In Lakhs)	Annual Maintenance And Operational Cost (In Lakhs)
1	Rain Water Harvesting	125	25
2	MSW	143	53

	3	STP	427	67
	4	Solar Energy System	186	2.5
	5	Landscaping	107	3.5
		Total	988	151

❖ Quantum and generation of Corpus fund and commitment:
- ➢ After occupancy, Co-operative societies will form. The societies will form federation.
- ➢ The operation & maintenance of environmental management facilities (EMF) shall be taken care by the developers for first three years.
- ➢ Afterwards, EMF shall be handed over to society/federation.

❖ Responsibility for further O & M
- ➢ Funds for recurring cost on EMP shall be generated from the tenants of the society by specifically mentioning in the agreement.

Traffic Management	Nos. of the junction to the main road & design of confluence: ➢ Smooth Entry and Exit ➢ 12 m & 15 m wide internal road ➢ Stilt & open parking provided Parking Details: • Number and area of Basement: 1577.03 sq.m. (No. of Car Parking Stacked = 48 Nos. No. of Scooter Parking = 103 Nos.) • Total parking area: 45080.00 sq.m. • Area per Car: 28.00sq.m. • 2-wheelers: Required = 3120 Nos., Provided=3126 Nos. • 4-wheelers: Required= 853Nos. Provided=1610 Nos. III. Width of all Internal roads (m): 12 m & 15 m wide internal road.

3. The proposal has been considered by SEIAA in its 77th 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 environmental clearance is issued subject to restricting car parking to 853 as approved.

(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. 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.

(iii) 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.

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

(v) 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.

(vi) "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.

(vii) 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 Environmenent 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 aspirational 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. 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 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 (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.

11. This Environment Clearance is issued for proposed Viva Swastik Township at Village Nilemore, Taluka Vasai, Thane by M/s Viva Swastik Developers

(Medha Gadgil)
Additional Chief Secretary,
Environment department &
MS, 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. Ravi Bhushan Budhiraja, Chairman, SEAC-II, 5-South, Dilwara Apartment, Cooperage, M.K.Road, Mumbai 400021

3. Additional Secretary, MOEF, 'MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.

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, Thane.

7. Collector, Thane

8. Commissioner, Municipal Corporation Thane

9. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.

10. Select file (TC-3)

(EC uploaded on 29|12|2014)