	MONITORING THE IMPLEMENTATION C	DF EN	VIRONMENTAL SAFEGUARDS
		IMEN	IT & FORESTS
	Regional Office	<b>(W)</b> ,	Bhopal
	Monitoring	Repo	ort
	DATA SH	<u>IEET</u>	
No.	: 06		Period: December, 2015
1.	Project type: River -Valley/ Mining/ Industry/ Thermal/ Nuclear/ other (specify)	:	Construction Project
2.	Name of the project	:	"Palmspring" Residential Group Housing Project
3.	Clearance letter (s)/OM no. and date	:	SEAC-2010/CR.776/TC.2 Dated:25th Julyl,2013
4.	Location	:	Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra
	(a) District	:	Pune
	(b) State	:	Maharashtra
	(c) Latitude / Longitude	:	Latitude : 18º 28' 02.22" N
			Longitude : 73°52′51.63″ E
5.	(a) Address for correspondence		<b>Add.:</b> Kumar Capital, 1 <sup>st</sup> Floor, 2413, east Street Camp, Pune 411001. Maharashtra
	(b) Address of Executive Project Engineer/	:	Mr. Manish Jain
	Manager (with pin code / Fax)		Designation : Director
			M/s. Kumar Kering Properties Pvt.Ltd.
			Address: Kumar Capital 1st Floor 2413,
			East Street, Camp, Pune - 411 001
			Telephone No. : + 91- 20 - 30528888
			E-mail: manish@kumarworld.com
6.	Salient Features		
	(a) Of the project	:	Refer Annexure 1-Project Details
	(b) Of Environmental Management Plans	:	Refer Annexure 1-Project Details
7.	Breakup of the project area		
	(a) Submergence area: forest & non forest.	:	Nil

	(b) Others	:	The entire project area is non-agricultural land.
8.	Breakup of the project affected population with enumeration of those losing houses /dwelling units only, agricultural land only, both dwelling units & agricultural land & landless labourers /artisan.	:	The Proposed Project is located at the vacant land only clearing of small sized vegetation. Therefore, no population was dislocated or affected due to proposed Project.
	(a) SC, ST /Adivasis	:	Nil
	<ul> <li>(b) Others</li> <li>(Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details and years of survey)</li> </ul>	:	Nil
9.	Financial details		
	(a) Project cost as originally planned and sub- sequent revised estimates and the year of price reference.	:	Project cost (Planned): Rs. 113.79 Crores (Approx )
	(b) Allocation made for environmental management plans with item wise and year wise break-up.	:	Attached As Annexure – II
	(c) Benefit cost ratio/Internal rate of Return and the year of assessment	:	Yet to finalise.
	(d) Whether (c) include the cost of environmental management as shown in the above.	:	Not applicable since (c) is yet to finalise.
	(e) Actual expenditure incurred on the project so far	:	Yet to finalise.
	(f) Actual expenditure incurred on the environmental management plans so far	:	Yet to finalise.
10.	Forest land requirement.	:	There is no forest land involved.
	(a) The status of approval for diversion of forest land for non-forestry use	:	Not applicable.
	(b) The status of clearing felling	:	Not applicable
	(c) The status of compensatory afforestation, if any	:	Not applicable
	(d) Comments on the viability & sustainability of compensatory afforestation programme in the	:	Not applicable

	light of actual field experience so far		
11.	The status of clear felling in non-forest areas		Nil
	(such as submergence area of reservoir,	•	
	approach roads), if any with quantitative		
	information		
12.	Status of construction.		
12.	a) Date of commencement (Actual and/or	•	Excavation Started:
	planned)	•	
	b) Date of completion (Actual and/or planned)	:	December 2019
13.	Reason for the delay if the project is yet to start.	:	Not applicable
14.	Dates of site visits		
	(a) The dates on which the project was		No
	monitored by the Regional Office on previous		
	occasions, if any		
	(b) Date of site visit for this monitoring report	:	August'15 & November'15.
			(Env. Monitoring report done by Green
			Circle, Inc. is attached herewith)
15.	Details of correspondence with project	:	Letter issued by MoEF:
	authorities for obtaining action plans /		EC No. SEAC-2010/CR.776/TC.2
	information on status of compliance to		Dated:25 <sup>th</sup> July,2013
	safeguards other than the routine letters for		
	logistic support for site visits.		Consent to Establish: Consent order no.:
			Format 1.0/BO/ROHQ/PN-19850-
	(The first monitoring report may contain the		13CE/CC-2756 dated 21/03/2014
	details of all the letters issued so far, but the		
	later reports may cover only the letters issued		
	subsequently.		

### ANNEXURE – I

### 1. NAME AND ADDRESS OF THE PROJECT PROPOSED:

Proposed project "Palmspring" is a construction of Residential Group Housing Project at Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra

### 2.PROJECT PROPOSAL:

Total Number of Buildings 9 & 44 Bungalows

- No. of Tenements 440
- Buildings A1 to A8: P + 12 Floors.
- Buildings A5 to A8: B + P + 12 Floors
- Bungalows B1 (6 Nos.), B2 (6 Nos.), B3 (6 Nos.), B4 (6 Nos.), C1 (5 Nos.), C2 (5 Nos.), C3 (5Nos.) to D1 (2 Nos.) & D2 (3 Nos.): G + 1
- Building E: P + 10

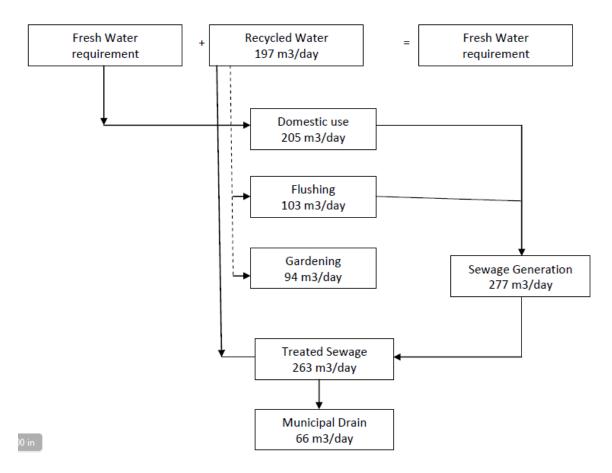
### 3. AREA STATEMENT:

Sr. No.	Description	Area (m <sup>2</sup> )	
1	Total Plot Area	78600.00	
2	Deductions	25405.25	
3	Net Plot Area	53194.75	
4	Net Permissible FSI	71124.51	
5	Proposed Built up area	FSI area	68452.50
		Non FSI area	22715.66
		Total BUA area	91168.16
6	Ground-coverage %	42%	

### 4. PARKING STATEMENT:

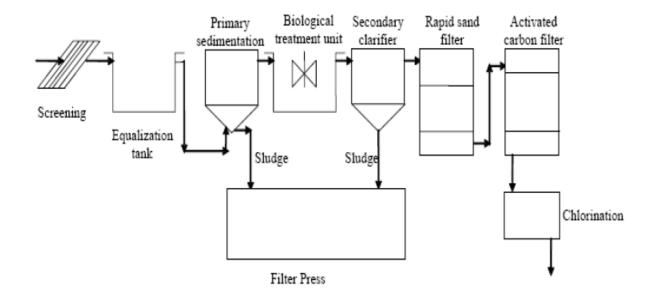
Buildings	Wing	Number of tenements	Parking required 20+3+1.4 m <sup>2</sup> /tenements	Parking provided m <sup>2</sup>
P+12	A1	47	1147	
P+12	A2	47	1147	
P+12	A3	47	1147	
P+12	A4	47	1147	Parking-4940 m <sup>2</sup> + Podium
P+12	A5	47	1147	parking- 10760 m <sup>2</sup> =15700
P+12	A6	47	1147	
P+12	A7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

### 5. WATER CONSUMPTION



### 6. SEWAGE TREATMENT PLANT:

The process flow diagram for sewage treatment plant is shown below:



### 7. SOLID WASTE GENERATION:

Pre construction & Construction Phase	
Waste generation	38 kg/day
Operation Phase	
Dry waste	410 kg/day
Wet waste	616 kg/day
E - waste	Very less amount
Hazardous waste	Spent oil or oil grease for DG sets, etc.
STP sludge	33 kg/day

### 8. DETAILS OF POWER REQUIREMENT:

r. No.	Power Requi	rement
ſ	Source of power supply :MSEB	All and a second se
2	During Construction Phase	63 KVA
3	During Operation Phase,	
	Demand Load	6500 KVA
	Connected Load	11500 KVA
4	DG set as Power Back - up during operation phase	1 no. x 125 KVA 2 nos. x 250 KVA 2 nos. x 500 KVA
3	Fuel used	Diesel

### 9. TREE PLANTATION:

. . . . .

RG on the ground: 8690.57  $m^2$  RG on the podium: 7023.94  $m^2$ 

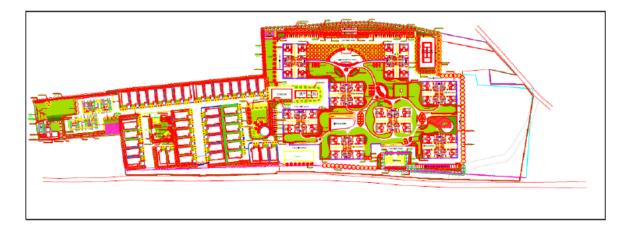
- No. of Trees to be planted on ground : 738
- No. of Shrubs to be planted on ground : 21
- No. of Trees to be planted on podium : 25
- No. of Shrubs to be planted on podium : 21

### Trees on Ground

Name	C/C Dist	Quantity
ALISTONEA SCHOLARIS	4 m C/C	75 nos.
BAUHINIA PURPUREA	5 m C/C	26 nos.
MIMOSOPS ELENGII (BAKUL)	4 m C/C	45 nos.
ANTHOCEPHALUS KADAMBA	4 m C/C	91 nos.
NYCANTHES ARBORTRISTICS (PARIJATAK)	3.5 m C/C	158 nos.
MICHELIA CHAMPAKA	3.5 m C/C	16 nos.
LAGERSTROEMIA FLOS REGINA	5 m C/C	14 nos.
COROUPITA GUINENSIS (KAILASHPATI)	4 m C/C	18 nos.
AZARDIRACHTA INDICA (NEEM)	5 m C/C	4 nos.
PLUMERIA ALBA	3 m C/C	105 nos.
PLUMERIA RUBRA	3 m C/C	58 nos.
MAHOGANY	4 m C/C	16 nos.

### Shrubs on Ground

Name	C/C Distance	Area m <sup>2</sup>
HYMENOCALLIS LITTORALIS (SPIDER LILY)	0.3 m C/C	482.78
TABERNAEMONTANA CORONARIA (TAGAR VARIEGATED)	0.45m C/C	394.96
HEDYCHIUM CORONARIUM (SONTAKKA)	0.45 m C/C	244.51
PLUMBAGO CAPENSIS	0.45 m C/C	383.77
NERIUM OLEANDER DWARF	0.45 m C/C	326.62
CALLIANDRA RED	0.45 m C/C	24.23
IXORA RED HYBRID	0.45 m C/C	48.25
ALLAMANDA DWARF	0.3 m C/C	180.65
ARECA PALMS	0.9 m C/C	13.52
MYENA ERECTA	0.45 m C/C	42.83
CESTRUM NOCTURNUM (RAATRANI)	0.45 m C/C	180.06



### LANDSCAPE LAYOUT ON GROUND

### 10. RAIN WATER HARVESTING

Size of the recharge pits = 3.0m x 3.0m x 3.0m

No. of recharge pit proposed = 10

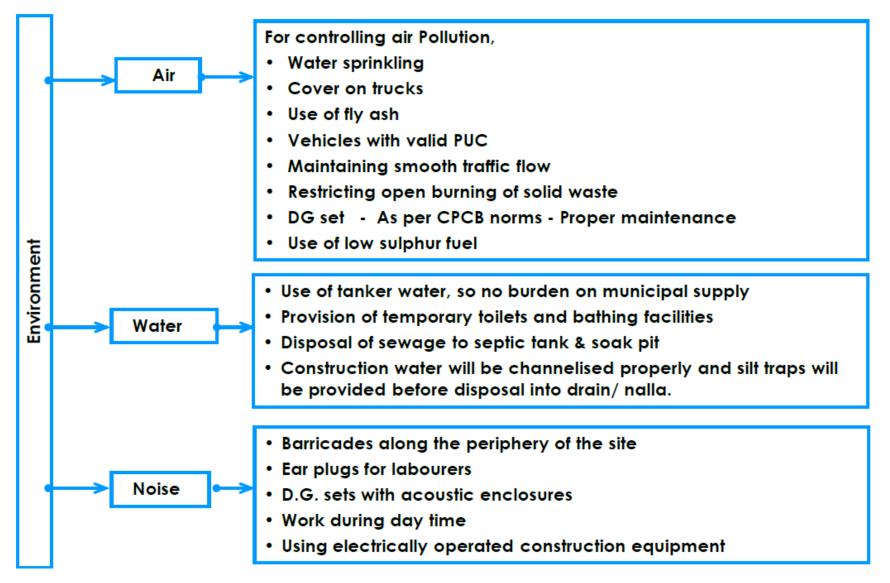
### Rain water Harvesting and Storm water Drain :

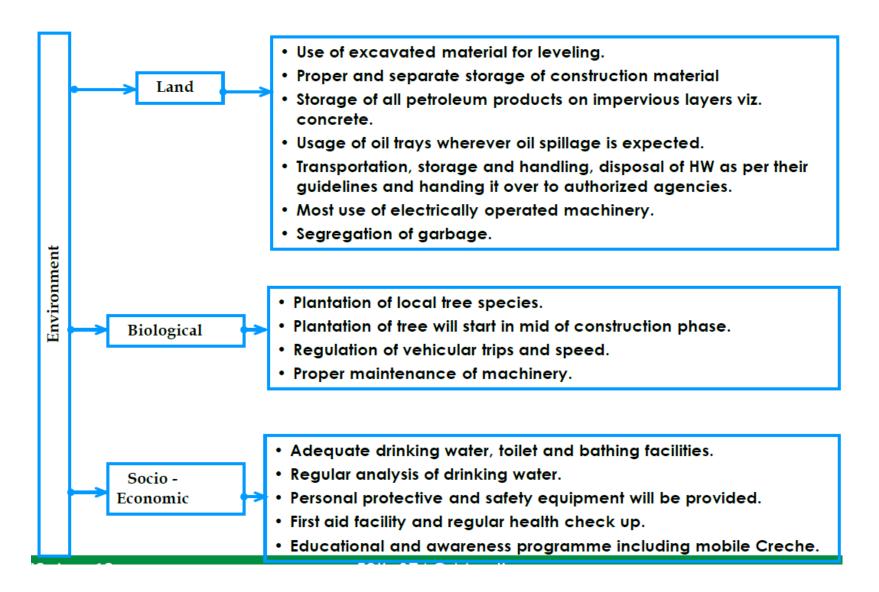
- The rain water harvesting could be done by no of ways. Some of the alternatives are :
- Collection of roof rain water from individual bungalow and using it for specified purpose like drinking, garden etc.
- Collection of storm water and utilizing it for recharging of ground water table through existing and new wells.
- Collection of storm water in protected under ground storage tank / open water body and utilization of the same as per requirement.
- Trenching within the plots.

### We recommend the following:

- The storm water collected in the storm water conveyance system will be used for recharging of ground water table through the bore wells.
- Wherever possible, the trenches would be provided for percolation.
- Percolation of the rain water depends upon the permeability of earth strata. By Providing no. of recharge pits and recharge of bore well necessary efforts will be taken for maximum recharging of ground water.

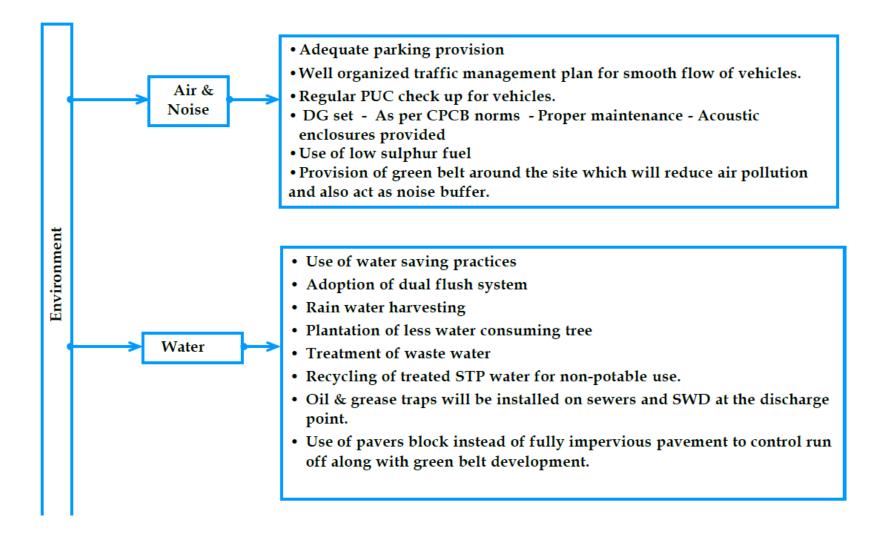
### 11. ENVIRONMENTAL MANAGEMENT PLAN DURING CONSTRUCTION PHASE :

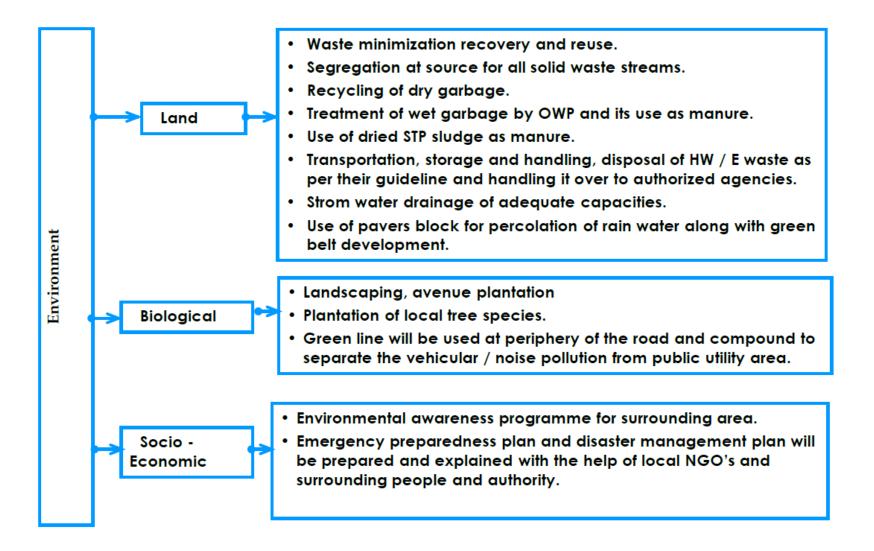




### **OPERATION PHASE :**

Project: "Palmspring" Residential Group Housing Project





### **COMPLIANCE REPORT**

EC No.	:	SEAC-2010/CR.776/TC.2 Dated: 25 <sup>th</sup> July, 2013
Project name	:	"Palmspring" Residential Group Housing Project
Project location	:	S No : 12/1/2,12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1,
		12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri,
		Ta, Haveli, Pune, Maharashtra
Developer name	:	M/s. Kumar Kering Properties Pvt. Ltd.
Developers	:	1 <sup>st</sup> Floor, 2413, east Street Camp, Pune 411001. Maharashtra
address		

Sr. No			EC Conditions	Compliance Status
1	This has reference	to	your communication dated on 25 <sup>th</sup> July, 2013	No comment.
	on the above mer	ntio	ned subject. The proposal was considered as	
	per the EIA Notific	atio	on - 2006 by the State Level Expert Appraisal	
	Committee. Maha	aras	shtra in its 60 <sup>th</sup> meetings and decided to	
	recommend the	pro	ject for prior environmental clearance to	
	SEIAA. Information	suk	mitted by you has been considered by State	
	Level Environmen	t Ir	npact Assessment Authority in its 52 <sup>nd</sup> /62 <sup>nd</sup>	
	meetings.			
2	It is noted that the	prc	posal is for grant of Environmental Clearance	Noted.
	for Residential Gro	up	Housing Scheme at village Undri Tal. Haveli	
	District Pune. SEAC	СО	nsidered the project under screening	
	category 8 (a) B2 a	as p	er EIA Notification 2006.	
	Brief Information of	f the	e Project is summarized as below:	
	Name of the	:	Residential Group Housing Project	
	Project			
	Project	:	M/s. Kumar Kering Properties Pvt. Ltd	
	Proponent			
	Location of the	:	S No : 12/1/2,12/1/3, 12/1/4, 12/2, 12/3A,	
	project		12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7,	
			12/8, 12/12/1, 12/12/3, 13/1/2/1, Village	
			Undri, Ta, Haveli, Pune, Maharashtra	
	Type of Project	:	Group Housing Project	
	Total Plot Area	:	78600.00 m <sup>2</sup>	
	Deductions		25405.25 m <sup>2</sup>	
	Net Plot Area	:	53194.75 m <sup>2</sup>	

Compliance Report

(July'15 – December'15)

Developer: M/s. Kumar Kering Properties Pvt. Ltd.

Net Permissible		71124.51 m <sup>2</sup>	
FSI Proposed Built		FSI area (m²)	68452.50 m <sup>2</sup>
up area (FSI &		Non FSI (m <sup>2</sup> )	22715.66 m <sup>2</sup>
Non FSI)		Total BUA area (m²)	91168.16 m <sup>2</sup>
-		Rs. 113.79 Cr. (Approx.)	
Ground- coverage Percentage (%)		42 %	
No. of Buildings	: 1	Residential: Total Nos. of Bu	uilding= 9 & 44
and its		Bungalows.	
configuration		Nos. of Tenements : 440	
		Buildings A1 to A8: P + 12 Fl	oors
		BunglowsB1 (6 Nos.), B2 (6N	los.), B3 (6
		Nos.),	
		B4(6 Nos.), C1 (5Nos.), C2 (	5 Nos.), C3 (5
		Nos.), D1 (2Nos.) & D2 (3 No	os.): G+1
		Building E: P + 10	
No. of tenant and shops	-	Total No. of Tenants: 440 no	DS.
No. of expected residents/users		2200 persons	
Tenant density per hectare	Į	58 Tenants per hectare	
Height of the building	:	36 m	
Right of way		24 m wide RP road adjace	nt to the site
Turning radius		12 m	
for easy access			
of fire tender			
movement from			
all around the			
building			
excluding the			
width for the			
plantation			

Tet=1)//-/	
Total Water	: Dry seasons:
Requirement	Source: Gram Panchayat
	Fresh Water : 205 m³/day
	Recycled water (Flushing) : 103 m³/day
	Recycled water (Gardening) : 94 m³/day
	Total Water Requirement : 402 m³/day
	Fire Fighting (Underground
	water tank): 300 m³/day
	Fire Fighting (Overhead
	Water Tank): 10 m <sup>3</sup>
	Excess treated water : 66 m³/day
	Wet season:
	Source : Gram Panchayat
	Fresh water : 205 m³/day
	Recycled water (flushing) : 103 m³/day
	Total Water Requirement : 308 m³/day
	Fire Fighting(underground
	Water tank) : 300 m³/day
	Fire Fighting (Overhead
	Water Tank): 10 m <sup>3</sup>
	Excess treated water : 161 m³/day
Rain water	Level of the ground table : 3 m
Harvesting	Size, no of recharge pits and Quantity :
(RWH)	Size of recharge pits = 3 m x 3 m x 3 m
	No. of recharge Pit Proposed = 10 Nos.
	Budgetary allocation (Capital cost and
	O&M cost) :
	Capital cost : 22 Lakhs
	O&M cost : 0.25 Lakhs
Storm Water	: Quantity of storm water :
Drainage	Size of SWD: storm water drain of .045 m
	width & 0.2m @ slope 1:200 will be
	provided along the road in project area.
Sewage and	Sewage generation : 277 m³/day
waste water	STP Technology : SBR
	Capacity of the STP : 300 m <sup>3</sup> /day
	Location of the STP : Ground
	DG sets (During emergency) : 1x 125 KVA
	2x 250 KVA

Developer: M/s. Kumar Kering Properties Pvt. Ltd.

		2X 500 KVA
		Budgetary allocation (Capital cost and
		O&M cost) :
		Capital cost :Rs. 100 Lakhs
		O&M cost)per annum : Rs. 10 Lakhs
Solid waste	:	Waste generation in the Pre Construction
management		& Construction phase :
		Waste generation : 38 kg/day
		Quantity of the top soil to preserved :
		Disposal of the construction way debris :
		Construction debris, Waste concrete and
		broken bricks will be utilized in low land
		leveling, secondary concrete, below
		roads some quantity of excavation soil will
		be use for backfilling and remaining will
		be hand over to authorize vendor.
		Waste generation in the operation phase:
		Dry waste : 410 kg/day
		Wet waste : 616 kg/day
		E-waste : very less amount
		Hazardous waste: spent oil or oil grease for
		DG sets paints etc.
		STP Sludge (Dry Sludge): 33 Kg/ day
		Mode of Disposal of waste:
		Dry waste: Handed over to authorized
		recycler for further handling and Disposal
		Wet Waste: will be converted to compost
		using organic waste processor [OWP]
		model no. EPL 1000
		E-waste : handed over to authorize vendor
		Hazardous waste : handed over to
		authorize vendor
		STP sludge (Dry sludge): will be used as
		manure for gardening
		Area requirement:
		1. Location(s): on Ground
		2. Total area provided for the storage &
		Treatment of the solid waste : For EPL 1000
		$= 100 \text{ m}^2$
		- 100 111

	3. Budgetary allocation	(Capital cost an
	O&M cost) :	
	Capital cost : 10 Lakhs	
	O&M cost : 2 Lakhs/ ann	um
Green Be	It Development:	
Total RG a		
	Garea under greenbelt:	
	G on the ground : 8690.57 m <sup>2</sup>	
	S on the podium : 7023.94 m <sup>2</sup>	
Plantatior		
	e planted on the Ground: 738 Nos. &	Shrubs 21 Nos.
	pe planted on podium: 25 Nos.	
Shrubs to	be planted on podium: 21 Nos.	
Capital c	y allocation (Capital cost and O&M ost : 50 Lakhs	cost) :
	t : 5 Lakhs / annum	
Energy		
Power sup	: vlao	
Sr. No.	Power Requirement	
1	Source of power supply :	MSEB
	During Construction Phase	
2	During Construction Phase a) Demand Load	63 KVA
2	5	63 KVA
2	a) Demand Load	63 KVA 6500 KVA
	a) Demand Load During Operation Phase,	
	a) Demand Load During Operation Phase, a) Demand load b) Connected Load	6500 KVA
	a) Demand Load During Operation Phase, a) Demand load b) Connected Load DG set as Power Back-up during	6500 KVA 11500 KVA
3	a) Demand Load During Operation Phase, a) Demand load b) Connected Load	6500 KVA 11500 KVA 1x 125 KVA

with ha po pa by for • Ele en en imi • Ins • Ccc ligt	building/ areas will be equipped w h heavy duty compact gas fill rmonic filters to maintain THD's less wer factor correction panels to be nels at load end. This is to reduce the low power factor & harmonic disto m. ctrical distribution system will be mo ergy consumption will have check ergy loss will be detected and mediately. ulated roof to reduce heat gain. ommon light load requirement in high hting will be met by use of solar if fer red 50,000 KWH/year.	led capacitors with than 10 % with auto e connected with LT e power losses caused ortions of power wave onitored regularly and c meter, so that any d will be rectified gh rise building/street	
Detail Sr. No.	calculation and % of saving Energy Conservation Measures	Saving %	
Sr.		Saving % 20 % on entire lighting load	
Sr. No.	Energy Conservation Measures Lighting fixtures With CFL & T5 with	20 % on entire	
Sr. No. 1	Energy Conservation Measures Lighting fixtures With CFL & T5 with Electronic Ballast +Power Lighting Control system on BMS	20 % on entire lighting load 10% street and	
Sr. No. 1	Energy Conservation Measures Lighting fixtures With CFL & T5 with Electronic Ballast +Power Lighting Control system on BMS &Sensors	20 % on entire lighting load 10% street and common light	

Danny	g operational F		2x 250		
			3 x 500		
• Type c	of fuel used: Die	esel			
raffic Man					
Buildings	Wing	Number of tenements	Parking required 20+3+1.4 m²/tenem	Parking provided m <sup>2</sup>	
<b>D</b> 10			ents		
P+12	A1	47	1147		
P+12	A2	47	1147	Parking-	
P+12	A3	47	1147	4940 m <sup>2</sup> +	
P+12 P+12	A4 A5	47	1147 1147	Podium parking-	
P+12 P+12	A5 A6	47	1147	10760	
P+12	A0	47	1147	m <sup>2</sup> =15700	
P+12	A8	47	1147		
G+1	B1	6	146	146	
G+1	B2	5	122	122	
G+1	B3	5	122	122	
G+1	B4	6	146	146	
G+1	C1	5	122	122	
G+1	C2	6	146	146	
G+1	C3	6	146	146	
G+1	D1	2	49	49	
G+1	D2	3	73	73	
P+10	E	20	488	488	
Total		440	10736	17262	
Environmer	internal roads Ital Managem struction Phase	ent Plan Budg			
Sr. No.	Para	imeter	Total c	ost in Lakhs	
1	Water and d	ust Suppressic	on	0.7	
2	Site Sanita	tion & Safety		1.5	

3	Environment	al Monitoring	]	2.4
4		ection		1.4
5		Check up		1.5
6	Tota	l Cost		7.5
urina op	eration Phase :			
Sr. No.	Pollution control measures	Recurring Cost Per annum (Rs. Lakhs)	Capital Cost (Rs. Lakhs)	Corpus fund generatio n
1	Pollution control Measures- STP & Noise Control Measures	10 (Includes cost of power, operation & maintena nce)	100 (Construc ion of STP)	
2	Environme nt Monitoring	5 (Monitorin g charges for air, water, waste water, Soil DG stack, noise etc.)	Nil	Corpus generated (in Rupees) at
3	Solid Waste managem ent	2 (includes cost of waste collection, storage and disposal)	10 (includes cost of waste collection storage and disposal)	ft will be collected from flat owner which will
4	Solar water heater system	1.5	83.63	over to society
5	Occupati onal Health	2.5 (includes cost of medical checkup, PPE & first aid kit)	4 (includes cost of PPE & first aid facility)	
6	Green belt developm ent	6 (includes cost of landscapi	85 (includes landscap ng of plot	i

			_ ·		I		
			ng of plot area)	area)			
	7	Rain water Harvesting	.25	22			
	8	Other(EHS orientation & training)	3 (Environm ent & safety training)	10 (Other equipmen ts)			
		Total	30.25	314.63			
3.	The proposal meetings & d said project un Notification. 2 and condition	lecided to a nder the prov 006 subject t	ccord enviro risions of Envir	onmental cle	arance to th act Assessmer	e nt	
(i)	Occupancy o adequate wa line is ready i project.	iter supply is	available to	the project	and sewerag	е	
(ii)	This environm verification lo with request Resolutions C clearance issu and it does n approved the	ical authority to Rules Circulars, etc ued with resp ot mean tha	//planning a regulation c. issued if pect to the e t state level	Notifications any. This nvironmenta	uld ensure th , governmei environmenta I consideratic	is nt al n	
(iii)	The height, C shall be in acc local body &	Construction & Cordance wit it should ens proving lay ent certificat ning permissik	ouilt up area h the existing ure the same out plan te to propo pility for the p	FSI/FAR norm along with & before sed work. UI proposed pro	ns of the urba survey numbe e accordin LB should als	n er g o	
(iv)	'Consent for Pollution Cont be submitted construction v	Establishmen rol Board und to the Enviro	t" shall be c der Air and \ onment depa	obtained fron Water Act an	id a copy sha	all <b>Establish</b> order no 1.0/BO/ 19850-1 2756 da	n: Consent D.: Format ROHQ/PN- 3CE/CC- Ited 014 Copy

		I
(v)	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	Complied. Toilets are provided at site
	Project proponent shall ensure completion of STP, MSW disposal	
(vi)	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 Par-a 2. Prior certification from appropriate authority shall be obtained,	complied.
(∨ii)	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.	Complied. Proper drinking water & toilet facility is provided at site.
(∨iii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should he made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should he ensured.	Complied. Proper drinking water & toilet facility is provided at site.
(ix)	The solid waste generated should be properly collected and segregated dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	Noted & will be complied
(x)	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.	
(xi)	Arrangement shall be made that waste water and storm water do not gel mixed.	Noted and Will be complied.
(xii)	All the top soil excavated during construction activities should be stored for Use in horticulture / landscape development within the proje1 site.	Noted. Top soil will be used for landscaping.
(xiii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	Will be complied.
(xi∨)	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	Noted and will be complied.
(xv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed	Complied. Adequate

taking the necessary precautions for general safely and healthmeasuresaspects of people, only in approved sites with the approval ofprovided.	are
aspects of people, only in approved sites with the approval of provided.	
competent authority.	
(Xvi) Soil and ground water samples will be tested to ascertain that there Complied.	
is no threat to ground water quality by leaching of heavy metals Env. Monit	oring
and other toxic contaminants. report is at	tached
herewith.	
(xvii) Construction spoils, including bituminous material and other Complied.	
hazardous materials must not be allowed to contaminate water Adequate	
courses and the dumpsites for such material must be secured so measures	are
that they should not leach into the ground water. provided.	
(xviii) Any hazardous waste generated during construction phase should Noted.	
be disposed of as per applicable rules and norms with necessary	
approvals of the Maharashtra Pollution Control Board.	
(xix) The diesel generator sets to be used during construction phase Complied.	
should he low sulphur diesel type and should conform to DG sets ar	
Environments (Protection) Rules prescribed (or air and noise acoustice	•
emission standards.	
(XX) The diesel required for operating DG sets shall be stored in Noted.	
underground tanks and it required clearance from concern	
authority shall be taken.	
(Xxi) Vehicles hired for bringing construction material to the site should Complied.	
be in good condition and should have a pollution check certificate Vehicles a	re
and should conform to applicable air and noise emission standards checked f	or PUC
and should be operated only during non peak hours. certificate	
(Xxii) Ambient noise levels should conform to residential standards both Complied.	
during day and night. Incremental pollution loads on the ambient Env. Monit	oring
air and noise quality should be closely monitored during report is at	tached
construction phase. Adequate measures should he made to herewith.	
reduce ambient air ad noise level during construction phase, so as	
to conform to the stipulated standards by CPCB/MPCB.	
(xxiii) Fly ash should be used as building material in the construction as Noted and	d will be
per the provisions of Fly Ash Notification of September 1999 and complied.	
amended as on 27th August. 2003 (The above condition is	
applicable only if the project site is located within the 100Km of	
Thermal Power Stations).	
(xxiv) Ready mixed concrete must be used in building construction. Complied	
(xxv) The approval of competent authority shall be obtained for Noted	
structural safety of the building due to any possible earthquake,	

	adequacy of fire fighting equipments etc. as per National Building	
	Code including measures from lighting.	
(xxvi)	Storm water control and its re-use as per CGWB and BIS standards	Noted
( II)	for various applications.	
(xx∨ii)	Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices referred.	Complied.
(xx∨iii)	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Complied. Env. Monitoring report is attached herewith.
(xxix)	The installation of the Sewage Treatment Plant (STP) should be certified by all independent experts and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating From STP shall he recycle/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.	Will be complied
(Xxx)	Local body should ensure that no occupation certification is issued prior to operate on of STP/MSW site etc. with due permission of MPCB.	Noted.
(xxxi)	Permission to draw ground Water shall be obtained from the competent Authority prior to construction/operation of the project.	Noted.
(Xxxii)	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.	Will be complied.
(Xxxiii)	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.	Noted and will be complied.
(xxxiv)	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.	Noted.
(Xxxv)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Noted.
Xxx∨i	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	Complied.

	commissioning. Use CFLs and TFLs should by 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 maybe 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.	
xxx∨ii	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.	Noted and will be complied.
Xxxviii	Noise should be controlled by 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.	Noted.
Xxxix	Traffic congestion near the entry and exit points from the roads adjoining the proposed project Site must be avoided. Parking should be fully internalized and no public space should be utilized.	Noted.
XI	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.	Noted.
Xli	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Noted and will be complied.
XIII	Regular supervision of the above and other measures for monitoring should tie in place all through the construction phase, so as to avoid disturbance to the surroundings.	Complied. Site engineers supervise proper implementation of EHS safeguard at site.
Xliii	Under the provisions of Environment (Protection) Act. 1986. Legal action shall be initiated against the project proponent if it was found that construction of the project has been started without	Noted. EC letter is attached herewith.

(July'15 – December'15)

	obtaining anvironmental electronica	
	obtaining environmental clearance.	Complied
Xli∨	Six monthly monitoring reports should be submitted to the Department and MPCB.	Complied.
Xlv	A complete set of all the documents submitted to Department	Noted
	should be forwarded to the MPCB.	
Xlvi	In the case of any change(S) in the scope of the project. The	Noted
	project would require a fresh appraisal by this Department.	
Xl∨ii	A separate environment management cell with qualified staff shall	Noted.
	be set up for implementation of the stipulated environmental	
	safeguards.	
XI∨iii	Separate funds shall be allocated for implementation of	
	environmental protection measures/EMP along with item-wise	along with break
	breaks-up. These cost shall he included is part of the project cost.	up attached as
	The funds earmarked for the environment protection measures shall	Annexure-I
	not be diverted for other purposes and year-wise expenditure	
	should reported to the MPCB & this department.	
Xlix	The project management shall advertise at least in Two local	Complied.
	newspapers widely, circulated in the region around the project,	Copy of
	one of which shall be in the Marathi language of the local	advertisement is
	concerned within seven days of issue of this letter informing that the	attached as
	project has been accorded environmental clearance and copies	herewith.
	of clearance letter are available with the Maharashtra Pollution	
	Control Board anti may also be seen at Website at	
	http://envis.maharastra.gov.in	
I	Project management should submit half yearly compliance reports	Complied.
	in respect of the stipulated prior environment clearance terms and	
	conditions in hard & soil copies to the MPCB & this department on	
	1 <sup>st</sup> June & 1 <sup>st</sup> December of each calendar year.	
li	A copy of the clearance letter shall be sent by proponent to rite	Complied.
	concerned Municipal Corporation and the local NGO, if any, from	
	whom suggestions/representations. If any, were received while	
	processing the proposal. The clearance letter shall also be put on	
	the website of the Company by the proponent.	
lii	The proponent shall upload the Status of compliance of the	Noted and
	stipulated EC conditions, including results of monitored data on	complied.
	their website and shall update the same periodically. It shall	The proponent shall
	simultaneously he sent to the Regional Office of MoEF, the	upload the status
	respective Zonal Office of CPCB and the SPCB. The criteria	of compliance of
	pollutant levels namely; SPM, RSPM. SO, NOx (ambient levels as well	the stipulated

	as stack emissions) or critical sectoral parameters, indicated for the	
	project shall be monitored and displayed at a Convenient location	
	near the main gate of the company in the public domain.	
liii	The project proponent shall also submit six monthly reports on the	Noted and
	status of compliance Of the stipulated EC conditions including	complied.
	results 0f 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.	
li∨	The environmental statement for each financial year ending $31^{\mbox{st}}$	Noted.
	March in Form-V as is mandated to be submitted by the project	
	proponent to the concerned State Pollution Control Board a	
	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	Noted.
	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	Noted.
	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	Noted
	condition or to revoke the clearance if conditions stipulated are	
	not implemented to the satisfaction of the department or for that	
	matter, for any ether administrative reason.	
7	Validity of Environment Clearance: The environmental clearance	Noted.
	accorded shall be valid for a period of 5 years.	
8	In case of any deviation or alteration in the project proposed from	Noted and will be
	those submitted to this department for clearance, a fresh reference	Complied.
	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	Noted.
	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	Noted.
	National Green Tribunal, Van Vigyan bhawan, Sec-5 R.K Puram,	
	New Delhi-110 022, if preferred within 30days as prescribed under	
	section 35 o the National Green Tribunal Act 2010.	

# **POST ENVIRONMENT MONITORING REPORT**

### For the Project

## "PALMSPRING"

Residential Group Housing Project At Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1,

Village Undri, Ta. Haveli, Pune, Maharashtra,

Period: July, 2015 - September, 2015

<u>Developer</u> <u>M/s. Kumar Kering Properties Pvt.Ltd.</u> Kumar Capital 1st Floor 2413, East Street, Camp, Pune – 41100, Maharashtra

### **Prepared by**



THE GREEN PEOPLE

GREEN CIRCLE, INC. Vadodara



# **GREEN CIRCLE, INC.**

Integrated HSEQR Consulting Engineers, Scientists & Trainers (Recognized By Ministry of Environmental and Forests, New Delhi Under EPA 1986 and GPCB approved Environmental Auditor – Schedule II) No. Q – 15018/32/2007 - CPW

# <u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Residential Group Hosing Project "Palmspring" at Village Undri, Tal. Haveli, Pune, Maharashtra ; for M/s. Kumar Kering Properties Pvt.Ltd. has been carried out by M/s.Green Circle, Inc., Vadodara during the period of July, 2015 – September 2015.

The study reveals that there is no negative impact on the environment.

For: Green Circle, Inc.

Mr. Pradeep Joshi CEO & Group President

REGD. OFFIC	E: Green Empire (Anupushpam),	Beside Canara Bank, Nr. Y	Yash Complex, Above	Axis Bank, Gotri Mai	n Road, VADODARA -39	0 021, (Gujarat), India
	Tel.: 0265 - 2371028 / 237126	Email: info@greencirclei	inc.com Website: ww	w.greencircleinc.com		
MUMBAI	: Flat No. 6, Ground Floor,	Shakuntala Niwas, M	I. G. Road, Opp.	G. H. School, Be	orivali (E), MUMBAI ·	- 400 066, India
	Tel: 022 - 28943090 Tele					
			: Also at :			
	NEW DELHI	HYDERABAD	PUNE	RAIPUR	KOLKATA	
			VERSEAS AT : -			
	AUSTRALIA	OMAN	KUWAIT	AFRICA	VIETNAM	
	AUSTRALIA	OMAN	KUWAIT	AFRICA	VIETNAM	

### INTRODUCTION:

M/s. Kumar Kering Properties Pvt.Ltd. is the foremost and most preferred real estate developer in India. M/s. Kumar Kering Properties Pvt.Ltd. is proposing to construct "Residential Group Housing Project" at Plot S No : Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra. The Proposed Project has received Environmental Clearance from Ministry of Environment & Forest under the provisions of EIA Notification dated 14th September, 2006, subject to compliance of the conditions as per letter No. SEAC-2010/CR.776/TC.2 Dated: 25th Julyl, 2013 .As per the instruction in the EC letter, Periodic Environmental Monitoring has been carried out by Green Circle, Inc., Vadodara and submitting required report to concern division regularly.

### SCOPE OF WORK:

It includes quarterly monitoring of:

- A. Ambient Air Quality.
- B. Stack Emission from DG Set, if any.
- C. Water & Sewage quality.
- D. Noise Level.
- E. Soil Quality

### A. AMBIENT AIR MONITORING:

Ambient Air Quality Monitoring was carried out at two locations within the project site for 15 days @ 2 Samples/week. Eight hourly samples were collected and analyzed for SPM, RSPM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 1 & the results are summarized in Table 2.

### Table No. 1: Standard Method of Analysis for Ambient Air Quality

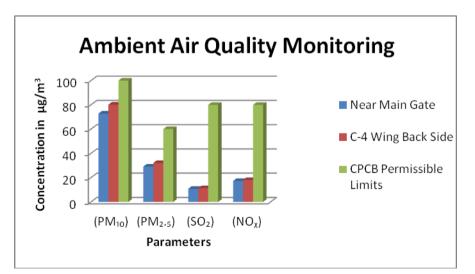
PM10 / PM2.5	:	IS 5182 : Part 23 : 2006/ NAAQS Monitoring & Analysis Guidelines Volume-
PIVI10 / PIVI2.5		I by CPCB
SO <sub>2</sub>	:	IS 5182 : Part 2 : 2001
NOx	:	IS 5182 : Part 6 : 1975

Sr. No.	Parameter	Units	Result				
Sampling locations		C-4 Wing back side	Near Main Gate	NAAQS For 24 Hours	Methods Used		
1.	Particulate Matter (PM10)	µg/m³	72.8	80.2	100	Gravimetric analysis	
2.	Particulate Matter (PM <sub>2.5</sub> )	µg∕m³	29.1	32.1	60	Gravimetric analysis	
3.	3. Sulfur dioxide (SO <sub>2</sub> ) µ		10.8	11.3	80	Improved West & Geake Method	
4.	Oxides of Nitrogen (NOx)	µg/m³	17.3	18.1	80	Jacob & Hochheiser Modified Method	

### Table No. 2: Ambient Air Quality

### Note:

NAAQS: National Ambient Air Quality Standards



Note: \* 01 hourly value shall be complied with 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

### Observations:

From above table and graph it can be observed that,  $PM_{10}$  level ranges from 72 – 82 µg/m<sup>3</sup>,  $PM_{2.5}$  ranges from 29 - 33 µg/m<sup>3</sup>,  $SO_2$  ranges from 10 - 12 µg/m<sup>3</sup>, and  $NO_X$  ranges from 17 - 19 µg/m<sup>3</sup>. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

### B. STACK MONITORING:

Stack Monitoring was carried out for two installed DG sets within the project site. Samples were collected and analyzed for PM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 3 & the results also summarized in Table 3.

Sr.	Parameters	Unit	Re	esults	Reference
No.					method
			Near C-1	Nr.C-3	
			Building	Building	
1	Material of Stack	-	MS	MS	-
2	Stack Height from G.L.	m	5	5.5	-
3	Stack No.	-	01	02	-
4	Stack Attached To	-	DG	DG	-
5	Capacity of stack	KVA	45	125	-
6	Flue Gas Temperature	°K	398	408	-
7	Velocity	m/s	5.56	8.9	-
8	Particulate Matter (PM)	mg/Nm <sup>3</sup>	74.1	74.2	IS 11255: Part 1
9	Sulphur dioxide (SO <sub>2</sub> )	ppm	12.2	13.1	IS 11255: Part 2
10	Oxides of Nitrogen (NOx)	ppm	19.5	20.9	IS 11255: Part 7

### Table 3: Stack Monitoring Result

### C. WATER & SEWAGE QUALITY:

One water samples were collected from nearby Bore well to check the quality of the water. Analysis results are compared with IS 10500:2012 as mentioned in following Table 4:

Sr.	Descention	11	Water sample	Desirable limit as per	
No.	Parameters	Unit	Bore well Water	IS 10500-2012	
1	рН	-	7.63	6.5-8.5	
2	Temperature	0C	26.3	NS	
3	Turbidity	NTU	<1	10	
4	Conductivity	µs/cm	780	NS	
5	Total Dissolved Solids	mg/L	1240	2000	
6	Total Suspended Solids	mg/L	5	NS	
7	Total Hardness	mg/L	74	600	
8	Ca Hardness	mg/L	52	NS	
9	Total Alkalinity	mg/L	120	600	
10	Chloride	mg/L	140	1000	
11	Sulphate	mg/L	92	400	
12	Copper	mg/L	BDL	1.5	
13	Zinc	mg/L	BDL	15	

### Table 4: Quality of Water samples

Note: BDL = Below Detectable Limit & N.S. = Not Specified

### Observations:

The quality of bore well water shows that there is no water contamination and it is suitable for construction purpose.

Sewage: Construction of STP is not yet started

### D. NOISE LEVEL MEASUREMENT:

Noise level monitoring was carried out at five locations within the project site as per standard method by using sound level meter and the results are reported in Table 5.

		Noise Level in dB (A) Leq. during				
Sr. No.	Sampling locations	Day Tir	ne	Night Time		
		Measured	Limit*	Measured	Limit*	
1.	Near Main Gate	55.2	65	48.5	55	
2.	Nr. C4 Wing	56.2	65	49.4	55	
3.	C5 Wing	51.6	65	51.2	55	
4.	B2 Wing	49.8	65	53.6	55	
5.	Nr. Club House	58.7	65	51.1	55	

### Table 5: Ambient Noise Quality

**Note:** \* Ambient Noise level Limit for Residential area as per Noise Pollution (Regulation & Control) Rules, 2003. Day time is reckoned between 6 A.M. to 10 P.M. & Night time between 10 P.M. to 6 A.M.

### **Observations:**

The noise level at site is well within the prescribed limit. However, it is marginally higher at main gate due to vehicular movement.

		Observed Value in dB(A)			
Sr. NO.	Location Name	Results	CPCB Permissible Limit		
1	Near DG -I (25 KVA)	71.7	75		
2	DG –II (45 KVA)	69.2	75		

### ANALYSIS RESULTS of D.G sets Noise Quality

**REMARKS**: As per Observation, results are within the limit.

#### E. SOIL ANALYSIS REPORT

Soil samples were collected from Site at 20 cm depth. Analysis results are tabulated in the following Table 6.

C N.	Parameters	Unit	Results		
Sr. No.			Splinder	Labour Colony	Reference Method
1	рН	-	7.61	7.56	IS 2720 : Part 26 : 1987
2	Moisture Content	%	7.12 8.4		IS 2720 : Part 09: 1992
3	Sulphate	mg/gm	0.83	0.72	IS 2720 : Part 27 : 1977
4	Organic Matter	%	3.3	3.4	IS 2720 : Part 22 : 1972
5	Chloride	%	0.84	0.81	IS 6925: 1973
6	Copper	mg/gm	BDL	BDL	APHA 3500-Cu
7	Total Kjeldhal Nitrogen	mg/gm	0.43	0.44	APHA 4500-Norg
8	Zinc	mg/gm	BDL	BDL	APHA 3500-Zn

#### Table 6: Quality of Soil Sample

**BDL**: Below Detectable Level

#### Observations:

The soil analysis result shows that, the basic parameter like Organic matter & Total Nitrogen are less in the soil. Further, heavy metals like Copper & Zinc are below detectable limit.

## **POST ENVIRONMENT MONITORING REPORT**

## For the Project

## "PALMSPRING"

Residential Group Housing Project At Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra

Period: October, 2015 – December, 2015

**Developer** 

M/s. Kumar Kering Properties Pvt. Ltd. Kumar Capital 1st Floor 2413, East Street, Camp, Pune - 411001. Maharashtra

# Prepared by

THE GREEN PEOPLE

GREEN CIRCLE, INC. Vadodara



## **GREEN CIRCLE, INC.**

Integrated HSEQR Consulting Engineers, Scientists & Trainers (Recognized By Ministry of Environmental and Forests, New Delhi Under EPA 1986 and GPCB approved Environmental Auditor – Schedule II) No. Q – 15018/32/2007 - CPW

## <u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Group Housing Residential Project "Palmspring" at Village Undri, Tal. Haveli, Pune, Maharashtra ; for M/s. Kumar Kering Properties Pvt. Ltd. has been carried out by M/s. Green Circle, Inc., Vadodara during the period of October, 2015 - December, 2015. The study reveals that there is no negative impact on the environment.

For: Green Circle, Inc.

Mr. Pradeep Joshi CEO & Group President

VIETNAM

AFRICA

REGD. OFFIC	E: Green Empire (Anupushpam)	, Beside Canara Bank, Nr. Yas	sh Complex, Above A	Axis Bank, Gotri Main Roa	ad, VADODARA -390 021, (Gujarat), India			
	Tel.: 0265 - 2371028 / 23712	69 Email: info@greencircleinc	.com Website: www	.greencircleinc.com				
MUMBAI	MUMBAI : Flat No. 6, Ground Floor, Shakuntala Niwas, M. G. Road, Opp. G. H. School, Borivali (E), MUMBAI - 400 066, India							
	Tel: 022 - 28943090 Telefax: 022 - 28943060							
: ALSO AT :								
	NEW DELHI HYDERABAD PUNE RAIPUR KOLKATA							
	: OVERSEAS AT :							

KUWAIT

OMAN

AUSTRALIA

#### INTRODUCTION:

M/s. Kumar Kering Properties Pvt.Ltd. is the foremost and most preferred real estate developer in India. M/s. Kumar Kering Properties Pvt.Ltd. is proposing to construct "Residential Group Housing Project" at Plot S No : Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra. The Proposed Project has received Environmental Clearance from Ministry of Environment & Forest under the provisions of EIA Notification dated14th September, 2006, subject to compliance of the conditions as per letter No. SEAC-2010/CR.776/TC.2 dated: 25<sup>th</sup> July, 2013. As per the instruction in the EC letter, Periodic Environmental Monitoring has been carried out by Green Circle, Inc., Vadodara and submitting required report to concern division regularly.

#### SCOPE OF WORK:

It includes quarterly monitoring of:

- A. Ambient Air Quality.
- B. Stack Emission from DG Set, if any.
- C. Water & Sewage quality.
- D. Noise Level.
- E. Soil Quality

#### A. AMBIENT AIR MONITORING:

Ambient Air Quality Monitoring was carried out at two locations within the project site for 15 days @ 2 Samples/week. Eight hourly samples were collected and analyzed for SPM, RSPM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 1 & the results are summarized in Table 2.

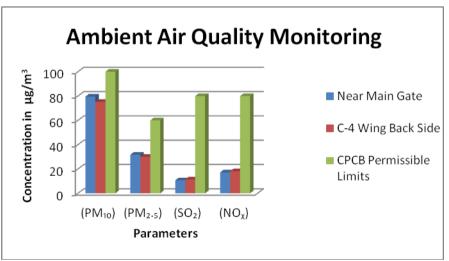
PM10 / PM2.5	:	IS 5182 : Part 23 : 2006/ NAAQS Monitoring & Analysis Guidelines Volume- I by CPCB
SO <sub>2</sub>	:	IS 5182 : Part 2 : 2001
NOx	:	IS 5182 : Part 6 : 1975

#### Table No. 2: Ambient Air Quality

Sr. No.	Parameter   Units		Result				
Sampling locations			C-4 Wing Back Side	Near Main Gate	NAAQS For 24 Hours	Methods Used	
1.	Particulate Matter (PM10)	µg/m³	79.6	75.2	100	Gravimetric analysis	
2.	Particulate Matter(PM <sub>2.5</sub> )	µg∕m³	31.8	30.1	60	Gravimetric analysis	
3.	Sulfur dioxide (SO <sub>2</sub> )	µg∕m³	10.7	11.4	80	Improved West & Geake Method	
4.	Oxides of Nitrogen(NOx)	µg∕m³			Jacob & Hochheiser Modified Method		

#### Note:

NAAQS: National Ambient Air Quality Standards



Note\*\*: 01 hourly value shall be complied with 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

#### Observations:

From above table and graph it can be observed that,  $PM_{10}$  level ranges from 75 - 80 µg/m<sup>3</sup>,  $PM_{2.5}$  ranges from 30 - 32 µg/m<sup>3</sup>,  $SO_2$  ranges from 10 - 12 µg/m<sup>3</sup>, and  $NO_X$  ranges from 17 - 19 µg/m<sup>3</sup>. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

#### B. STACK MONITORING:

Stack Monitoring was carried out for two installed DG sets within the project site. Samples were collected and analyzed for PM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 3 & the results also summarized in Table 3.

Sr.	Derometers	Unit	Resu	Reference method	
No.	Parameters	Unit	Near C-1 Building	Nr.C-3 Building	
1	Material of Stack	-	MS	MS	-
2	Stack Height from G.L.	m	5	5.5	-
3	Stack No.	-	01	02	-
4	Type of Stack	-	DG	DG	-
5	Stack Attached To	KVA	45	125	-
6	Flue Gas Temperature	°K	396	378	-
7	Velocity	m/s	3.01	3.12	-
8	Particulate Matter (PM)	mg/Nm <sup>3</sup>	72.3	71.7	IS 11255: Part 1
9	Sulphur dioxide (SO2)	ppm	11.3	12.2	IS 11255: Part 2
10	Oxides of Nitrogen (NOx)	ppm	18.1	20.6	IS 11255: Part 7

#### Table 3: Stack Monitoring Result

#### C. WATER & SEWAGE QUALITY:

One water samples were collected from nearby Bore well to check the quality of the water. Analysis results are compared with IS 10500:2012 as mentioned in following Table 4:

			Water sample	Desirable limit as per
Sr. No.	Parameters	Unit	Bore well Water	IS 10500-2012
1	рН	-	7.64	6.5-8.5
2	Temperature	<sup>0</sup> C	28.3	NS
3	Turbidity	NTU	<1	10
4	Conductivity	µs/cm	794	NS
5	Total Dissolved Solids	mg/L	1234	2000
6	Total Suspended Solids	mg/L	7	NS
7	Total Hardness	mg/L	82	600
8	Ca Hardness	mg/L	56	NS
9	Total Alkalinity	mg/L	162	600
10	Chloride	mg/L	84	1000
11	Sulphate	mg/L	81	400
12	Copper	mg/L	BDL	1.5
13	Zinc	mg/L	BDL	15

#### Table 4: Quality of Water samples

#### Note:

BDL = Below Detectable Limit N.S. = Not Specified

#### **Observations:**

The quality of bore well water shows that there is no water contamination and it is suitable for construction purpose.

Sewage: Construction of STP is not yet started

#### D. NOISE LEVEL MEASUREMENT:

Noise level monitoring was carried out at five locations within the project site as per standard method by using sound level meter and the results are reported in Table 5.

		Noise Level in dB (A) Leq. during						
Sr. No.	Sampling locations	Day Tin	ne	Night Time				
		Measured	Limit*	Measured	Limit*			
1.	Near Main Gate	60.2	65	49.8	55			
2.	Nr. C4 Wing	56.9	65	51.3	55			
3.	C5 Wing	60.1	65	50.4	55			
4.	B2 Wing	58.4	65	53.6	55			
5.	Nr. Club House	51.8	65	48.7	55			

#### Table 5: Ambient Noise Quality

**Note:**\*Ambient Noise level Limit for Residential area as per Noise Pollution (Regulation & Control) Rules, 2003. Day time is reckoned between 6 A.M. to 10 P.M. & Night time between 10 P.M. to 6 A.M.

#### **Observations:**

The noise level at site is well within the prescribed limit. However, it is marginally higher at main gate due to vehicular movement.

### ANALYSIS RESULTS of D.G sets Noise Quality

<b>C N</b>		Observed Value in dB(A)			
Sr. NO.	Location Name	Results	CPCB Permissible Limit		
1	Near DG -I (25 KVA)	67.2	75		
2	DG –II (45 KVA)	68.5	75		

**REMARKS**: As per Observation, results are within the limit

#### E. SOIL ANALYSIS REPORT

Soil samples were collected from Site at 20 cm depth. Analysis results are tabulated in the following Table 6.

Sr. No.	Parameters	Unit		Results	Reference Method
			Splinder	Labour Colony	
1	рН	-	7.74	7.29	IS 2720 : Part 26 : 1987
2	Moisture Content %		9.4	7.3	IS 2720 : Part 09: 1992
3	Sulphate	mg/gm	0.85	0.54	IS 2720 : Part 27 : 1977
4	Organic Matter	%	4.3	2.8	IS 2720 : Part 22 : 1972
5	Chloride	%	0.94	0.67	IS 6925: 1973
6	Copper	mg/gm	BDL	BDL	APHA 3500-Cu
7	Total Kjeldhal Nitrogen	mg/gm	0.42	0.29	APHA 4500-Norg
8	Zinc	mg/gm	BDL	BDL	APHA 3500-Zn

#### Table 6: Quality of Soil Sample

**BDL**: Below Detectable Level

#### Observations:

The soil analysis result shows that, the basic parameter like Organic matter & Total Nitrogen are less in the soil. Further, heavy metals like Copper & Zinc are below detectable limit.

#### Annexure – II

#### EMP Cost

Sr.	Pollution control	Capital Cost	Recurring Cost Per	Arrangement of					
No.	Measures	(Rs. Lakhs)	Annum (Rs. Lakhs)	Corpus fund					
1		Constructio	on Phase						
	Construction Phase	7	1.5	Developer & Site In					
				Charge					
2		al Phase							
1.	Pollution Control - STP,	10	100	Resident Society &					
	Scrubber & Noise	(Includes cost of power,	(Construction of STP)	AMC with the Supplier					
	Control Measures	operation & maintenance)		for first Five Years					
2.	Environment	5	Nil	Resident Society (As					
	Monitoring	(Monitoring charges for air,		corpus fund an					
		water, waste water, soil,		amount of approx. Rs					
		DG stack, noise etc.)		4/- per square foot					
3.	Solid Waste	2	10	shall be charged per					
	Management	(includes cost of waste	(Includes cost of waste	month)					
		collection, storage and	collection, storage and						
		disposal)	OWC)						
4.	Solar water heater	1.5	83.63						
	system								
5.	Occupational Health	2.5	4						
		(includes cost of medical	(includes cost of PPE, first						
		checkup, PPE & first aid kit)	aid facility)						
6.	Green Belt	6	85						
	development	(includes cost of	(includes landscaping of						
		landscaping of plot area)	plot area)						
7.	Rain water harvesting	0.25	22						
8.	Others (EHS orientation	3	10						
	& training)	(Environment & safety	(other equipments)						
		training)							
	Total	30.25	314.63						

## **Public Notice**

#### **English New paper Public Notice**



#### Marathi New Paper Public Notice

	पुणे शहर			पुणे
	Applicant Applicant		ज म	260%
24.	BANK OF MAHARASH IRA (Tulogeon Dhamchere Branch) Addition	20	प्रा	280
	Rajendra Collections and Others		र्ग क	12 St
<b>त</b>	To, 2) Nathu Baburao Bhulhal, Pabel Chowk, Telegeon Dhamdhere, Talika- Shinz, Dist Pune, Pabel Chowk, Telegeon Dhamdhere, Talika- Shinz, Dist Pune, WHEREAS the shove named Applicant has filed the above referred application/appeal in this WHEREAS the shove named Applicant has filed the above referred application/appeal in this whereas	રંશ	हिन्द्र	340
वटना	Tribunal. Tribunal the strength of the strengt	२२	प्रभ हॉर	196
दोघा	the application to subserve the this Tribunal in person or through all nutrower for should not be 3. You are directed to appear before this Tribunal in person or through all nutrower for should not be	53	प्रभ ही	8
The second	statement/say on 01111/2013 at 1000 at	28	अ	T
-ऑप क्रेडीट	Given under my hand allo sold with the Begistrar/Assistant Registrar/	24	प्र	
पुणे सातारा	Tribunal	51		भा
न्यामुळे त्यांनी हीर लिलावाने	जाहीर सुचना	P		गढा
ज्ञानदीए को-	जाहार पुनः प् आन्ही मे.कुमार के अरिंग प्रॉपटींज प्रा.लि. याद्वारे सर्वसाधारण जनतेस कळवू आन्ही मे.कुमार के अरिंग प्रॉपटींज प्रा.लि. याद्वारे सर्वते नं. १२/१/२,	2		प्रभा रस्ता
तेल जंपाजवळ सन् घ्यावयाचा	इच्छितों की, महाराष्ट्र सरकारच्या पर्य , १२/३व, १२/४, १२/५अ/१, १२/५व, १२/१/४, १२/१४, १२/१४, १२/५व, १२/१४, १२/१४, १२/५व,		26	प्रभाग रस्त्य
याजयौ	9२/६/९, १२/७, १२/८, ७२/१२/ गर्ग ग्रहप्रकल्पाला" २५ जुले २०१३ ता हवेली, जिल्हा पुणे, येथील आमच्या "गृहप्रकल्पाला" २५ जुले २०१३		29	प्रभाग पर्यंतर चौका
किंमत विंस्पत १४९८.१५०/	- हिली आहे. पयावरण विषयक नजुराना महाराष्ट्र सरकार याच्या।		30	प्रभाग बांघणे
1	http://www.envis.manarashtuarg	1	38	प्रभाग मी. ड
1	आहे. मे.कुमार केअरिंग प्रॉपटींज प्रा.लि.		74	प्रभाग

#### PROJECT STATUS REPORT

#### BACKGROUND

EC No.	:	SEAC-2010/CR.776/TC.2 Dated: 25 <sup>th</sup> July 2013
Project name	:	Residential Group Housing Project
Project	:	Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4,
location		12/5A/1, 12/5B, 12/6/1, 12/7,12/8, 12/12/1, 12/12/3,
		Village Undri, Ta. Haveli, Pune, Maharashtra.
Developer	<b>Developer</b> : M/s. Kumar Kering Properties Pvt. Ltd.	
name		
Developers	:	Kumar Capital, 1 <sup>st</sup> Floor, 2413, east Street Camp, Pune
address		411001. Maharashtra

#### **PROJECT STATUS**

	:	December, 2015
of	:	Phase – I Completed
	:	100 % Completed for Phase – I
	of	of :

#### **CONSTRUCTION DETAILS – Phase I**

Sr. No	Building Name/ other	Current status of Work		
1	Bungalows 44 Nos.	Completed		
2	Gardening/Landscape	Completed for Phase – I		
3	STP	Septic Tank provided for Phase – I		
4	RWH	Completed		
5	Internal Roads	Completed		
6	Lighting	Completed		
7	Plumbing	Completed		
8	Solid Waste	Vermicomposting provided		
	Management			

In addition to Bungalows, work for RCC/BBM & Plaster is in progress for 6 Bungalows. For rest, RCC is 100% complete.

#### **CONSTRUCTION DETAILS – Phase II**

Status updated on			:	December, 2015
Activity	Phase	of	:	Phase-II Not Started
project				
Excavation details			:	Not Started

#### **CONSTRUCTION DETAILS – Phase II**

Sr. No	Building Name/ other	Current status of Work	
1	Building A1 to A8 (P + 12 Floors)	Work yet not started	
2	Building E (P + 10 Floors)	Work yet not started	
3	Solid Waste	Work yet not started	
	Management		
4	STP	Work yet not started	
5	Gardening/Landscape	Work yet not started	
6	RWH	Work yet not started	
7	Internal Roads	Work yet not started	
8	Lighting	Work yet not started	
9	Plumbing	Work yet not started	

Note: Phase – I Construction work Completed and Phase – II work yet not started

## MAHARASHTRA POLLUTION CONTROL BOARD

Phone : - 24010437/24020781/24014701

Fax :- 24044532 / 24023516

Email :- enquiry@mpcb.gov.in

Visit At:- http://mpcb.gov.in

Infrastructure/Orange/L.S.I

Consent order No: Format 1.0/BO/ROHQ/PN-19850-13CE/CAC - 2756

Date 21 /03/2014

Kalpataru Point, 3rd & 4th floor, Sion-

Cine Planet Cinema, Near Sion Circle,

Matunga Scheme Road No. 8, Opp.

Sion (E), Mumbai - 400 022

To,

M/s. Kumar Kering Properties Pvt. Ltd. "Palmspring" S.No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A&B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village : Undri, Tal : Haveli, Dist : Pune 411001

Subject: Consent to Establish in Orange category Residential / construction project.

Ref : Minutes of Consent Committee meeting held on 13/03/2014

Your application CE1311000495 date 18/11/2013.

For: Consent to Establish.

Under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Municipal Solid Waste (Management & Handling) Rule 2000 and E-Waste (Management & Handling Rule 2011 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- 1. The consent to Establish is granted for a period upto:- <u>Commissioning of the unit or five years</u>, <u>whichever is earlier</u>.
- 2. The Proposed Capital investment of the Project is <u>Rs 113.79 Cr</u>. (As per CA certificate).
- 3. The Consent to Establish is valid for Residential project develop by M/s. Kumar Kering Properties Pvt. Ltd. names as "Palmspring" at S.No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A&B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village : Undri Tal : Haveli, Dist : Pune 411001. on total plot area of <u>78,600.0 Sq. mtrs</u> and total construction built up area of <u>91,168.16 Sq. mtrs</u>. As per construction commencement certificate issued by local body.
- 4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1.	Trade effluent	Nil	NA	NA
2.	Domestic effluent	277.00 CMD	As per Schedule –I	60% shall be reused & recycled and remaining shall be discharged in municipal sewer.

SRO Pune 11/1/0/L/96423000

MAHARASHTRA

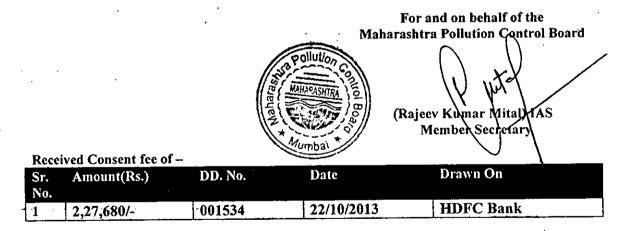
#### 5. Conditions under Air (P&CP) Act, 1981 for air emissions:

Sr. No.	Description of stack / source	Number of Stack	Standards to be achieved
1.	DG sets (180 KVA)	1	As per Schedule –II
2.	DG sets (125 KVA)	1	As per Schedule –II
3.	DG sets (250 KVA) 2 Nos	2	As per Schedule –II
4.	DG sets (500 KVA) 2 Nos	2	As per Schedule –II

Conditions under Municipal Solid Waste (Management and Handling) Rule,2000

1	Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
	1.	Biodegradable Waste	616.0	Kg/Day	On site Composting	Used as manure
	. 2.	Non Biodegradable Waste	410.0	Kg/Day	Segregation	By sale
	3.	STP Sludge	45.0	Kg/D		Used as manure

- 7. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- 8. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
- 9. The applicant shall comply with the conditions stipulated in Environment Clearance granted by GOM, vide no: SEAC-2010/CR-776/TC-2, dated 25<sup>th</sup> July 2013.
- 10. The applicant shall submit Board Resolution from Company Board, towards starting of construction work without obtaining consent to establish from the MPC Board thus violated the provisions of Environmental laws and in future, they will not do such violations and B.G. of Rs. 2 laks towards submission of Board Resolution by 01/04/2014.



#### Copy to:

- 1. Regional Officer, MPCB, Pune. And Sub-Regional Officer, Pune-II, they are directed to ensure the compliance of the consent conditions.
- 2. Chief Accounts Officer, MPCB, Mumbai.
- 3. CC/CAC desk- for record & website updation purposes.

Page Page Althouse and a state of the state

SRO Pune 11/1/O/L/96423000

#### Terms & conditions for compliance of Water Pollution Control:

1)

A] As per your consent application, you have proposed to provide the sewage treatment system with the design capacity of 300.0 CMD.

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

1	pH	Not to exceed .	6.5 to 9.0
2	Suspended Solids	Not to exceed	100 mg/l.
3	BOD 3 Days 27 degree C	Not to exceed	100 mg/l.
4	Detergent	Not to exceed	01 mg/l.

C) The treated domestic effluent shall be 60% recycled and reused for flushing, fire fighting and cooling of Air conditioners etc. The remaining shall be discharged into Municipal sewer/ utilized on land for gardening after conforming to above standards. The firm shall affix the separate meter for ensurance of 60% recycling of treated sewage and keep the records of the same. In no case effluent shall find its way to any water body directly /indirectly at any time.

- 2) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of water, works for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- ...3)...The firm shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
  - 4) In case, the water consumption of the project is not covered under the water consumption of local body, in that situation, the project proponent shall submit the CESS Returns in the prescribed format given under the provision of Water (Prevention & Control of Pollution) Cess Act, 1977 and Rules made thereunder for various category of water consumption.

In case the water consumption is duly assessed under the quantity of water consumption of local body, the project proponent shall submit certificate to that effect from the concern local body with the request not to assess CESS on their water consumption, being already assessed on the water consumption of local body.

Sr. no.	Purpose for water consumed	Water consumption quantity
		(CMD)
1.	Domestic purpose	308.00

5) The firm shall provide Specific Water Pollution control system as per the conditions of EPAct, 1986 and rule made there under from time to time/ Environmental Clearance.

SRO Pune II/I/O/L/96423000

#### <u>Schedule-II</u>

#### Terms & conditions for compliance of Air & Noise Pollution Control:

1. As per your application, you have proposed to erect following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	Height in (Above roof top)	Type Fuel	of	Quantity
<u> </u>	DG sets (180.0 KVA)	5.0			
2.	DG sets (125.0 KVA)	5.0	HSI	<b>)</b>	120Lit/Hr.
3.	DG sets (250.0 KVA) 2 Nos	5.0		,	12012011
4.	DG sets (500.0 KVA) 2 Nos	5.0	 	<u></u>	

\* D.G. Set shall be operate only in case of power failure.

2. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

	Natite avenue	150.00 mg/Nm <sup>3</sup> .
Particulate matter	i Not to exceed	100.00 mg/14m

- 3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary)
- 5. Conditions during construction phase:-

a	During construction phase, applicant shall provide temporary sewage disposal and MSW facility for staff and worker quarters.
<b>b</b> .	During construction phase, the ambient air and noise quality should be closely monitored to achieve Ambient Air Quality Standards and Noise by the project proponent through MoEF approved laboratory.
C	Noise generating activity shall be carried out during day time only.

ollutic

SRO Pune II/I/O/L/96423000

#### Schedule-III Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
¥	Éstablish	Rs. 5.0 lakhs	15 days	Rs. 5.0 lakhs for ensuring the compliance of consent conditions.		Five years
2	Establish	Rs. 2.0 Lakh	15 days	Rs. 2.0 Lakh towards submission of 'Board resolution by 31/03/2014	1/04/2014	30/08/14

f ≰ - .

ollu

Page

SRO Pune 11/1/0/L/96423000

#### Schedule-IV

#### **General Conditions:**

1) The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

2) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and environmental protection Act 1986 and Municipal Solid Waste (Management & Handling) Rule 2000 and E-Waste (Management & Handling Rule 2011.

- 3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

#### 5) Conditions for D.G. Set

- a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the
- ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- -c) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the \_\_\_\_\_\_ time \_\_\_\_\_ between 6 \_\_a.m. to 10 p. m and night time is reckoned between 10 p.m to 6 a.m.
- d) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
- e) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- f) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
- g) D.G. Set shall be operated only in case of power failure.
- h) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- i) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 6) Solid Waste The applicant shall provide onsite municipal solid waste processing system & shall comply with Municipal Solid Waste (Management & Handling) Rule 2000 & E-Waste (M & H) Rule 2011.
- 7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 9) The treated sewage shall be disinfected using suitable disinfection method.

10) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.

11) The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

SRO Pune 11/1/0/L/96423000

#### **Government of Maharashtra**

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

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

#### Subject: Environmental clearance for proposed Residential Group Housing Scheme at village Undri, Tal Haveli, Dist. Pune by M/s. Kumar Kering Properties Pvt. Ltd -Environmental clearance regarding.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee, Maharashtra in its  $60^{th}$  meetings and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its  $52^{nd} \& 62^{nd}$  Meetings.

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

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

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

-1-

Estimated cost of the project	Rs. 113.79 Crores (Approx)		
No. of buildings & its	Total Number of Buildings 9 & 44 Bungalows		
configurations	Nos. of Tenements: 440		
	<ul> <li>Buildings A1 to A8: P + 12 Floors</li> <li>Bungalows B1 (6 Nos.), B2 (6 Nos.), B3 (6 Nos.), B4</li> </ul>		
	(6 Nos.), C1 (5 Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2		
	Nos.) & D2 (3 Nos.): G + 1		
	• Building E: P + 10		
Number of tenants and shops	Total tenants: 440 nos.		
Number of expected residents /	2200 persons		
users			
Tenant density per hector	58 Tenants/Hector		
Height of the building	36 m		
Right of way	24 m Wide RP road adjacent to the site		
Turning radius for easy access of	12 m		
fire tender movement from all			
around the building excluding			
the width for the plantation			
Total Water Requirement	Dry season:		
	Source: Gram Panchayat		
	• Fresh water : 205 m <sup>3</sup> /day		
	• Recycled water (Flushing) : 103 m <sup>3</sup> /day		
	• Recycled water (Gardening) : 94 m <sup>3</sup> /day		
	• Total Water Requirement : 402 m <sup>3</sup> /day		
	• Fire fighting (Underground		
	water tank) : 300 m <sup>3</sup>		
	• Fire fighting (Overhead		
	water tank) $: 10 \text{ m}^3$		
	• Excess treated water : 66 m <sup>3</sup> /day		
	· · · · · · · · · · · · · · · · · · ·		
	Wet Season:		
	Source : Gram Panchayat		
	• Fresh water : 205 m <sup>3</sup> /day		
	• Recycled water (Flushing) : 103 m <sup>3</sup> /day		
•	• Total Water Requirement : 308 m <sup>3</sup> /day		
	• Fire fighting (Underground		
	water tank) : 300 m <sup>3</sup>		
	• Fire fighting (Overhead		
	water tank) : 10 m <sup>3</sup>		
	• Excess treated water : 161 m <sup>3</sup> /day		

Rain Water Harvesting (RWH)	• Level of the Ground water table : 3 m
	• Size, no of recharge pits and Quantity :
	• Size of the recharge pit = $3.0 \text{ m x} 3.0 \text{ m x} 3.0 \text{ m}$
	• Once of the recharge $p_{11} = 3.0 \text{ m} \times 3.0 \text{ m} \times 3.0 \text{ m}$
	• No of recharge pit proposed = 10 Nos.
	• Budgetary allocation (Capital cost and O&M cost)
	Capital Cost: 22 Lakhs
·	• O & M Cost per Annum: 0.25 Lakhs
Storm water drainage	Quantity of storm water :
	• Size of SWD: Strom water drain of 0.45m width &
	0.2m depth @ slope 1:200 will be provided along the
	road in project area.
Sewage and Waste water	• Sewage generation : 277 m <sup>3</sup> /day
<u>त</u>	STP technology : -Sequential Batch Reactor
	<ul> <li>Capacity of STP : 300 m<sup>3</sup>/day</li> </ul>
	• Location of the STP : Ground
	DG sets (during emergency) : 1 X 125 KVA
	2 X 250 KVA
:	2 X 500 KVA
· ·	Budgetary allocation (Capital cost and O&M cost):
	Capital Cost: Rs. 100 Lakhs
	• O & M Cost per Annum: Rs. 10 Lakhs
Solid waste Management	Waste generation in the Pre Construction & Construction
	phase
	<ul> <li>Waste generation : 38 kg /day</li> </ul>
	• Quantity of the top soil to be preserved :
	• Disposal of the construction way debris: Construction
	debris. Waste concrete and broken bricks will be
* 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	utilized in low-land leveling, secondary concrete,
	below roads. Some quantity of Excavation soil will be
	use for backfilling and remaining will be hand over to authorized vendor.
· · · ·	Waste generation in the operation Phase:
•	• Dry waste : 410 kg/day
	• Wet waste : 616 kg/day
	• E - waste very less amount
	• Hazardous waste: spent oil or oil grease for DG sets
	paints etc.
	STP Sludge (Dry sludge) : 33 kg/day
	Mode of Disposal of waste:
	• Dry waste : Handed over to authorized recycler for
<	further handling and disposal
	• Wet waste: Will be converted to compost using
	Organic Waste Processor [OWP] model no. EPI, 1000
	• E - waste : Handed over to authorized Vendor
	• Hazardous waste : Handed over to authorized Vendor
	• STP Sludge (Dry sludge) : Will be used as manure for
	gardening Area requirement:
	1. Location(s) : On Ground -3-

	n Belt Dev		LAMS/ANAURI
RG¢	on the groun	$nd : 8690.57 m^2$	
KU C	on the podu	um: 7023.94 m <sup>2</sup>	•.
	ation:	6	
rces	s to be plan	ted on the Ground 738 Nos. & Shrubs 21	Nos.
		ted on podium: 25 Nos. inted on podium: 21 Nos.	
		ation (Capital cost and O&M cost) :	
Ca	pital Cost	85 Lakhs	
0	& M Cost	6 Lakh/annum	
Ener			· · · · · · · · · · · · · · · · · · ·
Ener	gy er súpply: Sr. No.	Power Requ	irement
Ener	er supply: Sr. No.		irement
Ener	er supply:	Power Requ Source of power supply :MSEB	irement
Ener	er supply: Sr. No.		tirement 63 KVA
Ener	er supply: Sr. No. 1 2	Source of power supply :MSEB During Construction Phase	
Ener	er súpply: Sr. No. 1	Source of power supply :MSEB	
Ener	er supply: Sr. No. 1 2	Source of power supply :MSEB During Construction Phase During Operation Phase,	63 KVA
Ener	er supply: Sr. No. 1 2	Source of power supply :MSEB During Construction Phase	
Ener	er supply: Sr. No. 1 2	Source of power supply :MSEB During Construction Phase During Operation Phase,	63 KVA
Ener	er supply: Sr. No. 1 2	Source of power supply :MSEB During Construction Phase During Operation Phase, Demand Load Connected Load	63 KVA 6500 KVA
Ener	er supply: Sr. No. 1 2 3	Source of power supply :MSEB During Construction Phase During Operation Phase, Demand Load	63 KVA 6500 KVA 11500 KVA
Ener	er supply: Sr. No. 1 2 3	Source of power supply :MSEB During Construction Phase During Operation Phase, Demand Load Connected Load DG set as Power Backup during	63 KVA 6500 KVA 11500 KVA 1 no. x 125 KVA

Energy saving by non-conventional method:

Energy saving measures

- All Fluorescent lights/ LED with Electronic ballast in place of Copper chokes & Tube T5 type, in place of T8 type, to reduce the power consumption by 12 watts per lamp & increase in lumens by 14%. Further reduction by use of sensors (Power saving 1,63,146 KWH /year).
   r/l=7760x0.8x6hr/dayx365d/yrx12watts
- Hot water requirement for low rise, will be met by Solar water heating system (Power saving 12,56,661 KWH /year).
- All Buildings/ Areas will be equipped with Capacitor Banks, with heavy duty compact gas

-4-

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

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

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

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

Capital Cost: Rs. 83.63 Lakhs

O & M Cost: Rs.1.5 Lakhs/Annum

DG Set:

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

During Construction Phase : 1 nos. X 80 KVA

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

2 nos. X 250 KVA

2 nos: X 500 KVA

• Type of fuel used : Diesel

Traffic Management

化浓缩加强 化化化物化化化物

Buildings	Wing	Number of tenements	Parking required 20+3+1.4=24.4 m <sup>2</sup> per tenement	Parking provided m
P+12	A1	47	1147	
P+12	A2	47	1147	
P+12	A3	47	1147	
P+12	A4	47	1147	Stilt parking-4940 m² +
P+12	A5	47	1147	Stilt parking: 4940 m² + Podium Parking: 10760 m² = 15700
P+12	A6		1147	= 15700
P+12	.A7.	47	1147	:
P+12		47	1147	
G+1	Bt	6	1147	······································
G+1	B2	.5		146
G+1	B3	5	122	122
G+1	64	6	122	122
G+1	a	5		146
G+1	C2	6.	122	122
G+1	C3	in an	146	146
G+1	Di	6	146	146
G+1	1	2	49	49
 P+10	D2		73	73
	E	20		488
TOTAL		440	10736	17262

Width of all Internal roads (m): 7.5 m, 9 m & 12 m Wide Environmental Management plan Budgetary Allocation : During Construction Phase:

Sr. No.	Parameter	Total cost in Lacs
1	Water for Dust Suppression	07
2	Site Sanitation & Safety	15
3	Environmental Monitoring	24
4	Disinfection	14
5	Health Check up	15
6	Total Cost	7.5

#### During Operation Phase:

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

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

The proposal has been considered by SEIAA in its 52<sup>nd</sup> & 62<sup>nd</sup> meetings and decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:-

3.

- (i) Occupancy certificate should not be issued to the project unless adequate water supply is available to the project and sewerage line is ready in all respects to receive treated sewerage from the project.
- (ii) This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.
- (iii) The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- (iv) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- (v) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (vi) Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.

-7-

- (vii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and First Aid Room etc.
- (viii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- (ix) The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material
- (x) Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
- (xi) Arrangement shall be made that waste water and storm water do not get mixed.
- (xii) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (xiii) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (xiv) Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xv) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions forgeneral safety and health aspects of people, only in approved sites with the approval of competent authority.
- (xvi) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (xvii) Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
- (xviii) Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- (xix) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- (xx) The diesel required for operating DG sets shall be stored in underground tanks and it required, clearance from concern authority shall be taken.
- (xxi) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- (xxii) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
- (xxiii) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).

-8-

(xxiv) Ready mixed concrete must be used in building construction.

- 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 (xxv) per National Building Code including measures from lighting.
- (xxvi) Storm water control and its re-use as per CGWB and BIS standards for various
- (xxvii) Water demand during construction should be reduced by use of pre-mixed concrete, applications. curing agents and other oest practices referred.
- (xxviii)The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (xxix) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.

Local body should ensure that no occupation certification is issued prior to operation (XXX) of STP/MSW site etc. with due permission of MPCB.

(xxxi) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.

(xxxii) Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.

(xxxiii)Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

(xxxiv)Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special

reflective coating in windows.

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

(xxxvi)Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non conventional energy source as source of energy.

(xxxvii) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.

(xxxviii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During nightlime the noise levels measured at the boundary of the building

shall be restricted to the permissible levels to comply with the prevalent regulations. (xxxix)Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no

public space should be utilized.

Opaque wall should meet prescriptive requirement as per Energy Conservation (xl)Building Code, which is proposed to be mandatory for all air-conditioned spaces

-9-

while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement

- (xli) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- (xlii) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- (xliii) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
- (xliv) Six monthly monitoring reports should be submitted to the Department and MPCB.
- (xlv) A complete set of all the documents submitted to Department should be forwarded to the MPCB
- (xlvi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (xlvii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xlviii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
- (xlix) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://doi.org/anharashtra.gov/an.
- (1) 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 1<sup>st</sup> June & 1<sup>st</sup> December of each calendar year.
- (li) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (bi) 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<sub>2</sub>, NO<sub>2</sub> (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (liii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

(liv) The environmental statement for each financial year ending 31<sup>st</sup> 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.
- Any appeal against this environmental clearance shall lie with the National Green Tribunal, Van Vigyan Bhawan, Sec- 5, R.K. Puram, New Dehli – 110 022, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

Copy to:

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

- 2. Dr. S. Devotta, Chairman, SEAC, T2/302 Sky City, Vanagaram –Ambattur Road, Chennai 600 095
- 3. Additional Secretary, MOEF, 'Paryavaran Bhawan' CGO Complex, Lodhi Road, New Delhi - 110510
- 4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- 5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal-462 016). (MP).
- 6. Regional Office, MPCB, Pune.

7. Collector, Pune.

- 8. Commissioner, Pune Municipal Corporation, Pune.
- 9. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.

10. Director (TC-1), Dy. Secretary (TC-2), Scientist-1, Environment Department.

11. Select file (TC-3).

-12-

#### **COMPLIANCE REPORT**

EC No.	:	SEAC-2010/CR.776/TC.2 Dated: 25 <sup>th</sup> July, 2013
Project name	Project name         : "Palmspring" Residential Group Housing Project	
Project location	<b>Project location</b> : S No : 12/1/2,12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1,	
		12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri,
		Ta, Haveli, Pune, Maharashtra
Developer name	:	M/s. Kumar Kering Properties Pvt. Ltd.
Developers	:	1 <sup>st</sup> Floor, 2413, east Street Camp, Pune 411001. Maharashtra
address		

Sr. No			EC Conditions	Compliance Status
1	This has reference	to	your communication dated on 25 <sup>th</sup> July, 2013	No comment.
	on the above mer	ntio	ned subject. The proposal was considered as	
	per the EIA Notific	atio	on - 2006 by the State Level Expert Appraisal	
	Committee. Maha	aras	shtra in its 60 <sup>th</sup> meetings and decided to	
	recommend the	pro	ject for prior environmental clearance to	
	SEIAA. Information	suk	mitted by you has been considered by State	
	Level Environmen	t Ir	npact Assessment Authority in its 52 <sup>nd</sup> /62 <sup>nd</sup>	
	meetings.			
2	It is noted that the	prc	posal is for grant of Environmental Clearance	Noted.
	for Residential Gro	up	Housing Scheme at village Undri Tal. Haveli	
	District Pune. SEAC	СО	nsidered the project under screening	
	category 8 (a) B2 a	as p	er EIA Notification 2006.	
	Brief Information of	f the	e Project is summarized as below:	
	Name of the	:	Residential Group Housing Project	
	Project			
	Project	:	M/s. Kumar Kering Properties Pvt. Ltd	
	Proponent			
	Location of the	:	S No : 12/1/2,12/1/3, 12/1/4, 12/2, 12/3A,	
	project		12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7,	
			12/8, 12/12/1, 12/12/3, 13/1/2/1, Village	
			Undri, Ta, Haveli, Pune, Maharashtra	
	Type of Project	:	Group Housing Project	
	Total Plot Area	:	78600.00 m <sup>2</sup>	
	Deductions		25405.25 m <sup>2</sup>	
	Net Plot Area	:	53194.75 m <sup>2</sup>	

Compliance Report

(July'15 – December'15)

Developer: M/s. Kumar Kering Properties Pvt. Ltd.

Non FSI)       Total BUA area (m²)       91168.16 m²         Estimated cost of the project       Rs. 113.79 Cr. (Approx.)         Ground-coverage       42 %         Percentage (%)       Residential: Total Nos. of Building= 9 & 44         Bungalows.       Nos. of Buildings A1 to A8: P + 12 Floors         BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6       Nos.),         No. of tenant and shops       Total No. of Tenants: 440         No. of expected       2200 persons         residents/users       58 Tenants per hectare         Per hectare       58 Tenants per hectare         Height of the building       36 m         12 m       12 m	Net Permissible	71124.51 m <sup>2</sup>		
up area (FSI & Non FSI (m²)       22715.66 m²         Non FSI)       Total BUA area (m²)       91168.16 m²         Estimated cost       :       Rs. 113.79 Cr. (Approx.)         of the project       42 %         Ground- coverage       42 %         Percentage (%)       Nos. of Buildings         No. of Buildings       :         Residential: Total Nos. of Building= 9 & 44         Bungalows.         configuration       Nos. of Tenements : 440         Buildings A1 to A8: P + 12 Floors         BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6         Nos.),       B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5         Nos. of tenant       Total No. of Tenants: 440 nos.         and shops       No         No. of tenant       Total No. of Tenants: 440 nos.         and shops       2200 persons         residents/users       58 Tenants per hectare         per hectare       58 Tenants per hectare         Height of the       36 m         building       12 m         for easy access       12 m         for easy access       12 m		FSI area (m <sup>2</sup> )	68	3452.50 m <sup>2</sup>
Non FSI)       Total BUA area (m²)       91168.16 m²         Estimated cost of the project       Rs. 113.79 Cr. (Approx.)         Ground-coverage       42 %         Percentage (%)       Residential: Total Nos. of Building= 9 & 44         Bungalows.       Nos. of Buildings A1 to A8: P + 12 Floors         BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6       Nos.),         No. of tenant and shops       Total No. of Tenants: 440         No. of expected       2200 persons         residents/users       58 Tenants per hectare         Per hectare       58 Tenants per hectare         Height of the building       36 m         12 m       12 m	up area (FSI &		22	2715.66 m <sup>2</sup>
Estimated cost       :       Rs. 113.79 Cr. (Approx.)         of the project       42 %         Ground- coverage       42 %         Percentage (%)       .         No. of Buildings and its       :         Residential: Total Nos. of Building= 9 & 44         Bungalows.         Nos. of Tenements : 440         Buildings A1 to A8: P + 12 Floors         BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6 Nos.),         B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1         Building E: P + 10         No. of tenant and shops         No. of tenant ersidents/users         Tenant density per hectare         Height of the building         36 m         State Tenants per hectare         Turning radius for easy access         of fire tender movement from all around the building         excluding the				
coverage Percentage (%)Residential: Total Nos. of Building= 9 & 44 Bungalows.No. of Buildings and its configuration:Residential: Total Nos. of Building= 9 & 44 Bungalows.Nos. of Tenements : 440 Buildings A1 to A8: P + 12 Floors BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6 Nos.), B4 (6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1 Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 mTurning radius for easy access of fire tender movement from all around the building12 m	- -			
anditsBungalows.configurationNos. of Tenements : 440Buildings A1 to A8: P + 12 FloorsBunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6Nos.),B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1Building E: P + 10No. of tenantand shopsNo. of expected2200 personsresidents/usersTenant density58 Tenants per hectareper hectareHeight of thebuildingRight of way24 m wide RP road adjacent to the siteTurning radius12 mfor easy accessof fire tendermovement fromall around thebuildingexcluding the	Ground- coverage Percentage (%)	42 %		
configurationNos. of Tenements : 440Buildings A1 to A8: P + 12 FloorsBunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6Nos.),B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1Building E: P + 10No. of tenantand shopsNo. of expected2200 personsresidents/usersTenant density58 Tenants per hectareHeight of thebuildingXight of way24 m wide RP road adjacent to the siteTurning radiusfor easy accessof fire tendermovement fromall around thebuildingexcluding the	No. of Buildings	: Residential: Tota	al Nos. of Build	ing= 9 & 44
Buildings A1 to A8: P + 12 Floors BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6 Nos.), B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1 Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant building58 Tenants per hectareHeight of the building36 m12 m12 mTor asy access 	and its	Bungalows.		
BunglowsB1 (6 Nos.), B2 (6Nos.), B3 (6 Nos.), B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1 Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 mTurning radius for easy access of fire tender movement from all around the building12 m	configuration	Nos. of Tenemer	nts : 440	
Nos.), B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1 Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 m12 m12 mfor easy access of fire tender movement from all around the building12 m		Buildings A1 to A	48: P + 12 Floo	ors
B4(6 Nos.), C1 (5Nos.), C2 (5 Nos.), C3 (5 Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1 Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 mRight of way24 m wide RP road adjacent to the siteTurning radius for easy access of fire tender movement from all around the building12 m		BunglowsB1 (6 N	Jos.), B2 (6Nos	s.), B3 (6
Nos.), D1 (2Nos.) & D2 (3 Nos.): G+1 Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 mRight of way24 m wide RP road adjacent to the siteTurning radius for easy access of fire tender movement from all around the building12 m		Nos.),		
Building E: P + 10No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 mRight of way24 m wide RP road adjacent to the siteTurning radius for easy access of fire tender movement from all around the building12 m		B4(6 Nos.), C1 (5	5Nos.), C2 (5 N	los.), C3 (5
No. of tenant and shopsTotal No. of Tenants: 440 nos.No. of expected residents/users2200 personsTenant density per hectare58 Tenants per hectareHeight of the building36 mRight of way24 m wide RP road adjacent to the siteTurning radius for easy access of fire tender movement from all around the building12 m		Nos.), D1 (2Nos.)	) & D2 (3 Nos.)	): G+1
and shopsINo. of expected2200 personsresidents/users58 Tenants per hectareper hectare58 Tenants per hectareHeight of the36 mbuilding24 m wide RP road adjacent to the siteTurning radius12 mfor easy access12 mof fire tender12 mmovement from11 mall around the11 mbuilding11 m		Building E: P + 10	0	
residents/users58 Tenants per hectareTenant density per hectare58 Tenants per hectareHeight of the building36 mRight of way24 m wide RP road adjacent to the siteTurning radius for easy access of fire tender movement from all around the building12 m	No. of tenant and shops	Total No. of Tena	ants: 440 nos.	
per hectare36 mHeight of the building36 mRight of way24 m wide RP road adjacent to the siteTurning radius for easy access of fire tender 	No. of expected residents/users	2200 persons		
Height of the building36 mRight of way24 m wide RP road adjacent to the siteRight of way12 mTurning radius for easy access of fire tender movement from all around the building excluding the	Tenant density per hectare	58 Tenants per h	nectare	
Right of way24 m wide RP road adjacent to the siteTurning radius12 mfor easy access12 mof fire tendernovement fromall around thenovement frombuildingnovement fromexcluding thenovement from	Height of the	36 m		
Turning     radius     12 m       for easy access     of fire tender       movement from     all around the       building     excluding the		24 m wide RP ro	ad adjacent	to the site
of fire tender movement from all around the building excluding the		12 m	-	
of fire tender movement from all around the building excluding the	0			
movement from all around the building excluding the	of fire tender			
all around the building excluding the	movement from			
building excluding the	all around the			
excluding the				
	-			
	width for the			
	plantation			

Total Water	: Dry seasons:	
Requirement	Source: Gram Panchayat	
	Fresh Water : 205 m³/day	
	Recycled water (Flushing) : 103 m³/day	
	Recycled water (Gardening) : 94 m³/day	
	Total Water Requirement : 402 m³/day	
	Fire Fighting (Underground	
	water tank): 300 m³/day	
	Fire Fighting (Overhead	
	Water Tank): 10 m <sup>3</sup>	
	Excess treated water : 66 m³/day	
	Wet season:	
	Source : Gram Panchayat	
	Fresh water : 205 m³/day	
	Recycled water (flushing) : 103 m³/day	
	Total Water Requirement : 308 m³/day	
	Fire Fighting(underground	
	Water tank) : 300 m³/day	
	Fire Fighting (Overhead	
	Water Tank): 10 m <sup>3</sup>	
	Excess treated water : 161 m <sup>3</sup> /day	
Rain water	Level of the ground table : 3 m	
Harvesting	Size, no of recharge pits and Quantity :	
(RWH)	Size of recharge pits = 3 m x 3 m x 3 m	
	No. of recharge Pit Proposed = 10 Nos.	
	Budgetary allocation (Capital cost and	
	O&M cost) :	
	Capital cost : 22 Lakhs	
	O&M cost : 0.25 Lakhs	
Storm Water	: Quantity of storm water :	
Drainage	Size of SWD: storm water drain of .045 m	
	width & 0.2m @ slope 1:200 will be	
	provided along the road in project area.	
Sewage and	Sewage generation : 277 m <sup>3</sup> /day	
waste water	STP Technology : SBR	
	Capacity of the STP : 300 m <sup>3</sup> /day	
	Location of the STP : Ground	
	DG sets (During emergency) : 1x 125 KVA	
	2x 250 KVA	

Developer: M/s. Kumar Kering Properties Pvt. Ltd.

		2X 500 KVA
		Budgetary allocation (Capital cost and
		O&M cost) :
		Capital cost :Rs. 100 Lakhs
		O&M cost)per annum : Rs. 10 Lakhs
Solid waste	:	Waste generation in the Pre Construction
management		& Construction phase :
		Waste generation : 38 kg/day
		Quantity of the top soil to preserved :
		Disposal of the construction way debris :
		Construction debris, Waste concrete and
		broken bricks will be utilized in low land
		leveling, secondary concrete, below
		roads some quantity of excavation soil will
		be use for backfilling and remaining will
		be hand over to authorize vendor.
		Waste generation in the operation phase:
		Dry waste : 410 kg/day
		Wet waste : 616 kg/day
		E-waste : very less amount
		Hazardous waste: spent oil or oil grease for
		DG sets paints etc.
		STP Sludge (Dry Sludge): 33 Kg/ day
		Mode of Disposal of waste:
		Dry waste: Handed over to authorized
		recycler for further handling and Disposal
		Wet Waste: will be converted to compost
		using organic waste processor [OWP]
		model no. EPL 1000
		E-waste : handed over to authorize vendor
		Hazardous waste : handed over to
		authorize vendor
		STP sludge (Dry sludge): will be used as
		manure for gardening
		Area requirement:
		1. Location(s): on Ground
		2. Total area provided for the storage &
		Treatment of the solid waste : For EPL 1000
		= $100 \text{ m}^2$
		- 100111

	3. Budgetary allocation	(Capital cost an
	O&M cost) :	
	Capital cost : 10 Lakhs	
	O&M cost : 2 Lakhs/ ann	num
Green Be	It Development:	
Total RG a		
	Garea under greenbelt:	
	G on the ground : 8690.57 m <sup>2</sup>	
	S on the podium : 7023.94 m <sup>2</sup>	
Plantatio		
	pe planted on the Ground: 738 Nos. 8	A Shrubs 21 Nos.
	pe planted on podium: 25 Nos.	
Shrubs to	be planted on podium: 21 Nos.	
Capital c	y allocation (Capital cost and O&M ost : 50 Lakhs t : 5 Lakhs / annum	cost) :
Energy		
Power su	oply :	
Sr. No.	Power Requirement	t
1	Source of power supply :	MSEB
2	During Construction Phase a) Demand Load	63 KVA
2	3	63 KVA
2	a) Demand Load	63 KVA 6500 KVA
	a) Demand Load During Operation Phase,	
	a) Demand Load During Operation Phase, a) Demand load b) Connected Load	6500 KVA
	a) Demand Load During Operation Phase, a) Demand load b) Connected Load DG set as Power Back-up during	6500 KVA 11500 KVA
3	a) Demand Load During Operation Phase, a) Demand load b) Connected Load	6500 KVA 11500 KVA 1x 125 KVA

with ha po pa by for • Ele en en imi • Ins • Ccc ligt	building/ areas will be equipped w h heavy duty compact gas fill rmonic filters to maintain THD's less wer factor correction panels to be nels at load end. This is to reduce the low power factor & harmonic disto m. ctrical distribution system will be mo ergy consumption will have check ergy loss will be detected and mediately. ulated roof to reduce heat gain. ommon light load requirement in high hting will be met by use of solar if fer red 50,000 KWH/year.		
Detail Sr. No.	calculation and % of saving Energy Conservation Measures	Saving %	
Sr.		Saving % 20 % on entire lighting load	
Sr. No.	Energy Conservation Measures Lighting fixtures With CFL & T5 with	20 % on entire	
Sr. No. 1	Energy Conservation Measures Lighting fixtures With CFL & T5 with Electronic Ballast +Power Lighting Control system on BMS	20 % on entire lighting load 10% street and	
Sr. No. 1	Energy Conservation Measures Lighting fixtures With CFL & T5 with Electronic Ballast +Power Lighting Control system on BMS &Sensors	20 % on entire lighting load 10% street and common light	

Danny	g operational F		2x 250		
			3 x 500		
• Type c	of fuel used: Die	esel			
raffic Man					
Buildings	Wing	Number of tenements	Parking required 20+3+1.4 m²/tenem	Parking provided m <sup>2</sup>	
<b>D</b> 10			ents		
P+12	A1	47	1147		
P+12	A2	47	1147	Parking-	
P+12	A3	47	1147	4940 m <sup>2</sup> +	
P+12 P+12	A4 A5	47	1147 1147	Podium parking-	
P+12 P+12	A5 A6	47	1147	10760	
P+12	A0	47	1147	m <sup>2</sup> =15700	
P+12	A8	47	1147		
G+1	B1	6	146	146	
G+1	B2	5	122	122	
G+1	B3	5	122	122	
G+1	B4	6	146	146	
G+1	C1	5	122	122	
G+1	C2	6	146	146	
G+1	C3	6	146	146	
G+1	D1	2	49	49	
G+1	D2	3	73	73	
P+10	E	20	488	488	
Total		440	10736	17262	
Environmer	internal roads Ital Managem struction Phase	ent Plan Budg			
Sr. No.	Para	imeter	Total c	ost in Lakhs	
1	Water and d	ust Suppressic	on	0.7	
2	Site Sanita	tion & Safety		1.5	

3	Environment	al Monitoring	]	2.4	
4		ection		1.4	
5		Health Check up		1.5	
6	Tota	l Cost		7.5	
urina op	eration Phase :				
Sr. No.	Pollution control measures	Recurring Cost Per annum (Rs. Lakhs)	Capital Cost (Rs. Lakhs)	Corpus fund generatio n	
1	Pollution control Measures- STP & Noise Control Measures	10 (Includes cost of power, operation & maintena nce)	100 (Construc ion of STP)		
2	Environme nt Monitoring	5 (Monitorin g charges for air, water, waste water, Soil DG stack, noise etc.)	Nil	Corpus generated (in Rupees) at	
3	Solid Waste managem ent	2 (includes cost of waste collection, storage and disposal)	10 (includes cost of waste collection storage and disposal)	ft will be collected from flat owner which will	
4	Solar water heater system	1.5	83.63	over to society	
5	Occupati onal Health	2.5 (includes cost of medical checkup, PPE & first aid kit)	4 (includes cost of PPE & first aid facility)		
6	Green belt developm ent	6 (includes cost of landscapi	85 (includes landscap ng of plot	i	

			_ ·		I		
			ng of plot area)	area)			
	7	Rain water Harvesting	.25	22			
	8	Other(EHS orientation & training)	3 (Environm ent & safety training)	10 (Other equipmen ts)			
		Total	30.25	314.63			
3.	The proposal meetings & d said project un Notification. 2 and condition	lecided to a nder the prov 006 subject t	ccord enviro risions of Envir	onmental cle	arance to th act Assessmer	e nt	
(i)	Occupancy o adequate wa line is ready i project.	iter supply is	available to	the project	and sewerag	е	
(ii)	This environm verification lo with request Resolutions C clearance issu and it does n approved the	is nt al n					
(iii)	The height, C shall be in acc local body &	Construction & Cordance wit it should ens proving lay ent certificat ning permissik	ouilt up area h the existing ure the same out plan te to propo pility for the p	FSI/FAR norm along with & before sed work. UI proposed pro	ns of the urba survey numbe e accordin LB should als	n er g o	
(iv)	'Consent for Pollution Cont be submitted construction v	Establishmen rol Board und to the Enviro	t" shall be c der Air and \ onment depa	obtained fror Water Act an	id a copy sha	all <b>Establish</b> order no 1.0/BO/ 19850-1 2756 da	n: Consent D.: Format ROHQ/PN- 3CE/CC- Ited 014 Copy

		I
(v)	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	Complied. Toilets are provided at site
	Project proponent shall ensure completion of STP, MSW disposal	
(vi)	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 Par-a 2. Prior certification from appropriate authority shall be obtained,	complied.
(∨ii)	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.	Complied. Proper drinking water & toilet facility is provided at site.
(∨iii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should he made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should he ensured.	Complied. Proper drinking water & toilet facility is provided at site.
(ix)	The solid waste generated should be properly collected and segregated dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	Noted & will be complied
(x)	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.	
(xi)	Arrangement shall be made that waste water and storm water do not gel mixed.	Noted and Will be complied.
(xii)	All the top soil excavated during construction activities should be stored for Use in horticulture / landscape development within the proje1 site.	Noted. Top soil will be used for landscaping.
(xiii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	Will be complied.
(xi∨)	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	Noted and will be complied.
(xv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed	Complied. Adequate

taking the necessary precautions for general safely and healthmeasuresaspects of people, only in approved sites with the approval ofprovided.	are
aspects of people, only in approved sites with the approval of provided.	
competent authority.	
(Xvi) Soil and ground water samples will be tested to ascertain that there Complied.	
is no threat to ground water quality by leaching of heavy metals Env. Monit	oring
and other toxic contaminants. report is at	tached
herewith.	
(xvii) Construction spoils, including bituminous material and other Complied.	
hazardous materials must not be allowed to contaminate water Adequate	
courses and the dumpsites for such material must be secured so measures	are
that they should not leach into the ground water. provided.	
(xviii) Any hazardous waste generated during construction phase should Noted.	
be disposed of as per applicable rules and norms with necessary	
approvals of the Maharashtra Pollution Control Board.	
(xix) The diesel generator sets to be used during construction phase Complied.	
should he low sulphur diesel type and should conform to DG sets ar	
Environments (Protection) Rules prescribed (or air and noise acoustice	•
emission standards.	
(XX) The diesel required for operating DG sets shall be stored in Noted.	
underground tanks and it required clearance from concern	
authority shall be taken.	
(Xxi) Vehicles hired for bringing construction material to the site should Complied.	
be in good condition and should have a pollution check certificate Vehicles a	re
and should conform to applicable air and noise emission standards checked f	or PUC
and should be operated only during non peak hours. certificate	
(Xxii) Ambient noise levels should conform to residential standards both Complied.	
during day and night. Incremental pollution loads on the ambient Env. Monit	oring
air and noise quality should be closely monitored during report is at	tached
construction phase. Adequate measures should he made to herewith.	
reduce ambient air ad noise level during construction phase, so as	
to conform to the stipulated standards by CPCB/MPCB.	
(xxiii) Fly ash should be used as building material in the construction as Noted and	d will be
per the provisions of Fly Ash Notification of September 1999 and complied.	
amended as on 27th August. 2003 (The above condition is	
applicable only if the project site is located within the 100Km of	
Thermal Power Stations).	
(xxiv) Ready mixed concrete must be used in building construction. Complied	
(xxv) The approval of competent authority shall be obtained for Noted	
structural safety of the building due to any possible earthquake,	

	adequacy of fire fighting equipments etc. as per National Building	
	Code including measures from lighting.	
(xxvi)	Storm water control and its re-use as per CGWB and BIS standards	Noted
( II)	for various applications.	
(xx∨ii)	Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices referred.	Complied.
(xx∨iii)	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Complied. Env. Monitoring report is attached herewith.
(xxix)	The installation of the Sewage Treatment Plant (STP) should be certified by all independent experts and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating From STP shall he recycle/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.	Will be complied
(Xxx)	Local body should ensure that no occupation certification is issued prior to operate on of STP/MSW site etc. with due permission of MPCB.	Noted.
(xxxi)	Permission to draw ground Water shall be obtained from the competent Authority prior to construction/operation of the project.	Noted.
(Xxxii)	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.	Will be complied.
(Xxxiii)	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.	Noted and will be complied.
(xxxiv)	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.	Noted.
(Xxxv)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Noted.
Xxx∨i	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	Complied.

	commissioning. Use CFLs and TFLs should by 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 maybe 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.	
xxx∨ii	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.	Noted and will be complied.
Xxxviii	Noise should be controlled by 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.	Noted.
Xxxix	Traffic congestion near the entry and exit points from the roads adjoining the proposed project Site must be avoided. Parking should be fully internalized and no public space should be utilized.	Noted.
XI	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.	Noted.
Xli	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Noted and will be complied.
XIII	Regular supervision of the above and other measures for monitoring should tie in place all through the construction phase, so as to avoid disturbance to the surroundings.	Complied. Site engineers supervise proper implementation of EHS safeguard at site.
Xliii	Under the provisions of Environment (Protection) Act. 1986. Legal action shall be initiated against the project proponent if it was found that construction of the project has been started without	Noted. EC letter is attached herewith.

(July'15 – December'15)

	obtaining anvironmental elegrance	
	obtaining environmental clearance.	Complied
Xli∨	Six monthly monitoring reports should be submitted to the Department and MPCB.	Complied.
Xlv	A complete set of all the documents submitted to Department	Noted
	should be forwarded to the MPCB.	
Xlvi	In the case of any change(S) in the scope of the project. The	Noted
	project would require a fresh appraisal by this Department.	
Xl∨ii	A separate environment management cell with qualified staff shall	Noted.
	be set up for implementation of the stipulated environmental	
	safeguards.	
XI∨iii	Separate funds shall be allocated for implementation of	
	environmental protection measures/EMP along with item-wise	along with break
	breaks-up. These cost shall he included is part of the project cost.	up attached as
	The funds earmarked for the environment protection measures shall	Annexure-I
	not be diverted for other purposes and year-wise expenditure	
	should reported to the MPCB & this department.	
Xlix	The project management shall advertise at least in Two local	Complied.
	newspapers widely, circulated in the region around the project,	Copy of
	one of which shall be in the Marathi language of the local	advertisement is
	concerned within seven days of issue of this letter informing that the	attached as
	project has been accorded environmental clearance and copies	herewith.
	of clearance letter are available with the Maharashtra Pollution	
	Control Board anti may also be seen at Website at	
	http://envis.maharastra.gov.in	
I	Project management should submit half yearly compliance reports	Complied.
	in respect of the stipulated prior environment clearance terms and	
	conditions in hard & soil copies to the MPCB & this department on	
	1 <sup>st</sup> June & 1 <sup>st</sup> December of each calendar year.	
li	A copy of the clearance letter shall be sent by proponent to rite	Complied.
	concerned Municipal Corporation and the local NGO, if any, from	
	whom suggestions/representations. If any, were received while	
	processing the proposal. The clearance letter shall also be put on	
	the website of the Company by the proponent.	
lii	The proponent shall upload the Status of compliance of the	Noted and
	stipulated EC conditions, including results of monitored data on	complied.
	their website and shall update the same periodically. It shall	The proponent shall
	simultaneously he sent to the Regional Office of MoEF, the	upload the status
	respective Zonal Office of CPCB and the SPCB. The criteria	of compliance of
	pollutant levels namely; SPM, RSPM. SO, NOx (ambient levels as well	the stipulated

·		
	as stack emissions) or critical sectoral parameters, indicated for the	
	project shall be monitored and displayed at a Convenient location	
	near the main gate of the company in the public domain.	
liii	The project proponent shall also submit six monthly reports on the	Noted and
	status of compliance Of the stipulated EC conditions including	complied.
	results 0f 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.	
li∨	The environmental statement for each financial year ending $31^{\mbox{st}}$	Noted.
	March in Form-V as is mandated to be submitted by the project	
	proponent to the concerned State Pollution Control Board a	
	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	Noted.
	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	Noted.
	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	Noted
	condition or to revoke the clearance if conditions stipulated are	
	not implemented to the satisfaction of the department or for that	
	matter, for any ether administrative reason.	
7	Validity of Environment Clearance: The environmental clearance	Noted.
	accorded shall be valid for a period of 5 years.	
8	In case of any deviation or alteration in the project proposed from	Noted and will be
	those submitted to this department for clearance, a fresh reference	Complied.
	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	Noted.
	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	Noted.
	National Green Tribunal, Van Vigyan bhawan, Sec-5 R.K Puram,	
	New Delhi-110 022, if preferred within 30days as prescribed under	
	section 35 o the National Green Tribunal Act 2010.	

# **POST ENVIRONMENT MONITORING REPORT**

## For the Project

## "PALMSPRING"

Residential Group Housing Project At Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1,

Village Undri, Ta. Haveli, Pune, Maharashtra,

Period: July, 2015 - September, 2015

<u>Developer</u> <u>M/s. Kumar Kering Properties Pvt.Ltd.</u> Kumar Capital 1st Floor 2413, East Street, Camp, Pune – 41100, Maharashtra

## **Prepared by**



THE GREEN PEOPLE

GREEN CIRCLE, INC. Vadodara



# **GREEN CIRCLE, INC.**

Integrated HSEQR Consulting Engineers, Scientists & Trainers (Recognized By Ministry of Environmental and Forests, New Delhi Under EPA 1986 and GPCB approved Environmental Auditor – Schedule II) No. Q – 15018/32/2007 - CPW

# <u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Residential Group Hosing Project "Palmspring" at Village Undri, Tal. Haveli, Pune, Maharashtra ; for M/s. Kumar Kering Properties Pvt.Ltd. has been carried out by M/s.Green Circle, Inc., Vadodara during the period of July, 2015 – September 2015.

The study reveals that there is no negative impact on the environment.

For: Green Circle, Inc.

Mr. Pradeep Joshi CEO & Group President

REGD. OFFIC	CE: Green Empire (Anupushpam),	Beside Canara Bank, Nr. \	Yash Complex, Above	e Axis Bank, Gotri Mai	n Road, VADODARA -39	0 021, (Gujarat), India
	Tel.: 0265 - 2371028 / 237126	Email: info@greencirclei	inc.com Website: ww	w.greencircleinc.com		
MUMBAI	: Flat No. 6, Ground Floor,	Shakuntala Niwas, M	I. G. Road, Opp.	G. H. School, B	orivali (E), MUMBAI ·	- 400 066, India
	Tel: 022 - 28943090 Tele					
			: Also at :			
	NEW DELHI	HYDERABAD	PUNE	RAIPUR	KOLKATA	
			VERSEAS AT : -			
	AUSTRALIA	OMAN	KUWAIT	AFRICA	VIETNAM	
				AFRICA	VIETNAM	

#### INTRODUCTION:

M/s. Kumar Kering Properties Pvt.Ltd. is the foremost and most preferred real estate developer in India. M/s. Kumar Kering Properties Pvt.Ltd. is proposing to construct "Residential Group Housing Project" at Plot S No : Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra. The Proposed Project has received Environmental Clearance from Ministry of Environment & Forest under the provisions of EIA Notification dated 14th September, 2006, subject to compliance of the conditions as per letter No. SEAC-2010/CR.776/TC.2 Dated: 25th Julyl, 2013 .As per the instruction in the EC letter, Periodic Environmental Monitoring has been carried out by Green Circle, Inc., Vadodara and submitting required report to concern division regularly.

#### SCOPE OF WORK:

It includes quarterly monitoring of:

- A. Ambient Air Quality.
- B. Stack Emission from DG Set, if any.
- C. Water & Sewage quality.
- D. Noise Level.
- E. Soil Quality

#### A. AMBIENT AIR MONITORING:

Ambient Air Quality Monitoring was carried out at two locations within the project site for 15 days @ 2 Samples/week. Eight hourly samples were collected and analyzed for SPM, RSPM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 1 & the results are summarized in Table 2.

#### Table No. 1: Standard Method of Analysis for Ambient Air Quality

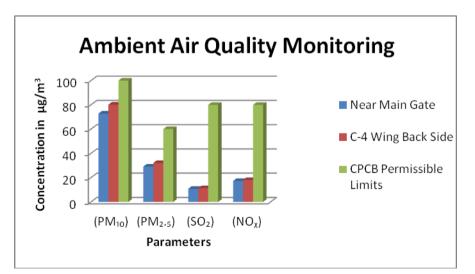
	:	IS 5182 : Part 23 : 2006/ NAAQS Monitoring & Analysis Guidelines Volume-
PM10 / PM2.5		I by CPCB
SO <sub>2</sub>	:	IS 5182 : Part 2 : 2001
NOx	:	IS 5182 : Part 6 : 1975

Sr. No.	Parameter			Result				
	Sampling locations	C-4 Wing back side	Near Main Gate	NAAQS For 24 Hours	Methods Used			
1.	Particulate Matter (PM10)	µg/m³	72.8	80.2	100	Gravimetric analysis		
2.	2. Particulate Matter (PM <sub>2.5</sub> )		29.1	32.1	60	Gravimetric analysis		
3.	3. Sulfur dioxide (SO <sub>2</sub> )		10.8	11.3	80	Improved West & Geake Method		
4.	Oxides of Nitrogen (NOx)	µg/m³	17.3	18.1	80	Jacob & Hochheiser Modified Method		

#### Table No. 2: Ambient Air Quality

#### Note:

NAAQS: National Ambient Air Quality Standards



Note: \* 01 hourly value shall be complied with 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

#### Observations:

From above table and graph it can be observed that,  $PM_{10}$  level ranges from 72 – 82 µg/m<sup>3</sup>,  $PM_{2.5}$  ranges from 29 - 33 µg/m<sup>3</sup>,  $SO_2$  ranges from 10 - 12 µg/m<sup>3</sup>, and  $NO_X$  ranges from 17 - 19 µg/m<sup>3</sup>. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

#### B. STACK MONITORING:

Stack Monitoring was carried out for two installed DG sets within the project site. Samples were collected and analyzed for PM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 3 & the results also summarized in Table 3.

Sr.	Parameters	Unit	Re	esults	Reference
No.					method
			Near C-1 Nr.C-3		
			Building	Building	
1	Material of Stack	-	MS	MS	-
2	Stack Height from G.L.	m	5	5.5	-
3	Stack No.	-	01	02	-
4	Stack Attached To	-	DG	DG	-
5	Capacity of stack	KVA	45	125	-
6	Flue Gas Temperature	°K	398	408	-
7	Velocity	m/s	5.56	8.9	-
8	Particulate Matter (PM)	mg/Nm <sup>3</sup>	74.1	74.2	IS 11255: Part 1
9	Sulphur dioxide (SO <sub>2</sub> )	ppm	12.2	13.1	IS 11255: Part 2
10	Oxides of Nitrogen (NOx)	ppm	19.5	20.9	IS 11255: Part 7

#### Table 3: Stack Monitoring Result

#### C. WATER & SEWAGE QUALITY:

One water samples were collected from nearby Bore well to check the quality of the water. Analysis results are compared with IS 10500:2012 as mentioned in following Table 4:

Sr.	Descention	11.21	Water sample	Desirable limit as per
No.	Parameters	Unit	Bore well Water	IS 10500-2012
1	рН	-	7.63	6.5-8.5
2	Temperature	0C	26.3	NS
3	Turbidity	NTU	<1	10
4	Conductivity	µs/cm	780	NS
5	Total Dissolved Solids	mg/L	1240	2000
6	Total Suspended Solids	mg/L	5	NS
7	Total Hardness	mg/L	74	600
8	Ca Hardness	mg/L	52	NS
9	Total Alkalinity	mg/L	120	600
10	Chloride	mg/L	140	1000
11	Sulphate	mg/L	92	400
12	Copper	mg/L	BDL	1.5
13	Zinc	mg/L	BDL	15

#### Table 4: Quality of Water samples

Note: BDL = Below Detectable Limit & N.S. = Not Specified

#### Observations:

The quality of bore well water shows that there is no water contamination and it is suitable for construction purpose.

Sewage: Construction of STP is not yet started

#### D. NOISE LEVEL MEASUREMENT:

Noise level monitoring was carried out at five locations within the project site as per standard method by using sound level meter and the results are reported in Table 5.

		Noise Level in dB (A) Leq. during						
Sr. No.	Sampling locations	Day Tir	ne	Night Time				
		Measured	Limit*	Measured	Limit*			
1.	Near Main Gate	55.2	65	48.5	55			
2.	Nr. C4 Wing	56.2	65	49.4	55			
3.	C5 Wing	51.6	65	51.2	55			
4.	B2 Wing	49.8	65	53.6	55			
5.	Nr. Club House	58.7	65	51.1	55			

#### Table 5: Ambient Noise Quality

**Note:** \* Ambient Noise level Limit for Residential area as per Noise Pollution (Regulation & Control) Rules, 2003. Day time is reckoned between 6 A.M. to 10 P.M. & Night time between 10 P.M. to 6 A.M.

#### **Observations:**

The noise level at site is well within the prescribed limit. However, it is marginally higher at main gate due to vehicular movement.

		Observed Value in dB(A)			
Sr. NO.	Location Name	Results	CPCB Permissible Limit		
1	Near DG -I (25 KVA)	71.7	75		
2	DG –II (45 KVA)	69.2	75		

#### ANALYSIS RESULTS of D.G sets Noise Quality

**REMARKS**: As per Observation, results are within the limit.

#### E. SOIL ANALYSIS REPORT

Soil samples were collected from Site at 20 cm depth. Analysis results are tabulated in the following Table 6.

C N.	Parameters	Unit	F	Results	Defense e Metheed	
Sr. No.			Splinder	Labour Colony	Reference Method	
1	рН	-	7.61	7.56	IS 2720 : Part 26 : 1987	
2	Moisture Content	%	7.12	8.4	IS 2720 : Part 09: 1992	
3	Sulphate	mg/gm	0.83	0.72	IS 2720 : Part 27 : 1977	
4	Organic Matter	%	3.3	3.4	IS 2720 : Part 22 : 1972	
5	Chloride	%	0.84	0.81	IS 6925: 1973	
6	Copper	mg/gm	BDL	BDL	APHA 3500-Cu	
7	Total Kjeldhal Nitrogen	mg/gm	0.43	0.44	APHA 4500-Norg	
8	Zinc	mg/gm	BDL	BDL	APHA 3500-Zn	

#### Table 6: Quality of Soil Sample

**BDL**: Below Detectable Level

#### Observations:

The soil analysis result shows that, the basic parameter like Organic matter & Total Nitrogen are less in the soil. Further, heavy metals like Copper & Zinc are below detectable limit.

# **POST ENVIRONMENT MONITORING REPORT**

## For the Project

# "PALMSPRING"

Residential Group Housing Project At Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra

Period: October, 2015 – December, 2015

**Developer** 

M/s. Kumar Kering Properties Pvt. Ltd. Kumar Capital 1st Floor 2413, East Street, Camp, Pune - 411001. Maharashtra

# Prepared by

THE GREEN PEOPLE

GREEN CIRCLE, INC. Vadodara



# **GREEN CIRCLE, INC.**

Integrated HSEQR Consulting Engineers, Scientists & Trainers (Recognized By Ministry of Environmental and Forests, New Delhi Under EPA 1986 and GPCB approved Environmental Auditor – Schedule II) No. Q – 15018/32/2007 - CPW

# <u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Group Housing Residential Project "Palmspring" at Village Undri, Tal. Haveli, Pune, Maharashtra ; for M/s. Kumar Kering Properties Pvt. Ltd. has been carried out by M/s. Green Circle, Inc., Vadodara during the period of October, 2015 - December, 2015. The study reveals that there is no negative impact on the environment.

For: Green Circle, Inc.

Mr. Pradeep Joshi CEO & Group President

VIETNAM

AFRICA

REGD. OFFIC	E: Green Empire (Anupushpam)	, Beside Canara Bank, Nr. Yas	sh Complex, Above A	Axis Bank, Gotri Main Roa	ad, VADODARA -390 021, (Gujarat), India			
Tel.: 0265 - 2371028 / 2371269 Email: info@greencircleinc.com Website: www.greencircleinc.com								
MUMBAI	MUMBAI : Flat No. 6, Ground Floor, Shakuntala Niwas, M. G. Road, Opp. G. H. School, Borivali (E), MUMBAI - 400 066, India							
	Tel: 022 - 28943090 Telefax: 022 - 28943060 : ALSO AT :							
					VOLVATA			
	NEW DELHI	HYDERABAD	PUNE	RAIPUR	KOLKATA			
			ERSEAS AT : -					

KUWAIT

OMAN

AUSTRALIA

#### INTRODUCTION:

M/s. Kumar Kering Properties Pvt.Ltd. is the foremost and most preferred real estate developer in India. M/s. Kumar Kering Properties Pvt.Ltd. is proposing to construct "Residential Group Housing Project" at Plot S No : Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra. The Proposed Project has received Environmental Clearance from Ministry of Environment & Forest under the provisions of EIA Notification dated14th September, 2006, subject to compliance of the conditions as per letter No. SEAC-2010/CR.776/TC.2 dated: 25<sup>th</sup> July, 2013. As per the instruction in the EC letter, Periodic Environmental Monitoring has been carried out by Green Circle, Inc., Vadodara and submitting required report to concern division regularly.

#### SCOPE OF WORK:

It includes quarterly monitoring of:

- A. Ambient Air Quality.
- B. Stack Emission from DG Set, if any.
- C. Water & Sewage quality.
- D. Noise Level.
- E. Soil Quality

#### A. AMBIENT AIR MONITORING:

Ambient Air Quality Monitoring was carried out at two locations within the project site for 15 days @ 2 Samples/week. Eight hourly samples were collected and analyzed for SPM, RSPM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 1 & the results are summarized in Table 2.

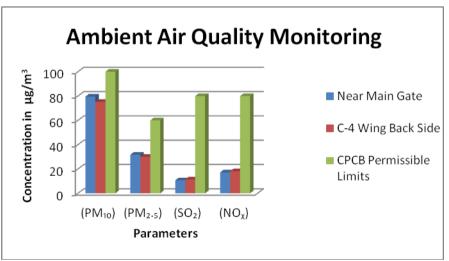
PM10 / PM2.5	:	IS 5182 : Part 23 : 2006/ NAAQS Monitoring & Analysis Guidelines Volume- I by CPCB
SO <sub>2</sub>	:	IS 5182 : Part 2 : 2001
NOx	:	IS 5182 : Part 6 : 1975

#### Table No. 2: Ambient Air Quality

Sr. No.	Parameter	Units			Result	
	Sampling locations	C-4 Wing Back Side	Near Main Gate	NAAQS For 24 Hours	Methods Used	
1.	Particulate Matter (PM10)	µg/m³	79.6	75.2	100	Gravimetric analysis
2.	Particulate Matter(PM <sub>2.5</sub> )	µg∕m³	31.8	30.1	60	Gravimetric analysis
3.	Sulfur dioxide (SO <sub>2</sub> )	µg∕m³	10.7	11.4	80	Improved West & Geake Method
4.	Oxides of Nitrogen(NOx)	µg∕m³	17.2	18.2	80	Jacob & Hochheiser Modified Method

#### Note:

NAAQS: National Ambient Air Quality Standards



Note\*\*: 01 hourly value shall be complied with 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

#### Observations:

From above table and graph it can be observed that,  $PM_{10}$  level ranges from 75 - 80 µg/m<sup>3</sup>,  $PM_{2.5}$  ranges from 30 - 32 µg/m<sup>3</sup>,  $SO_2$  ranges from 10 - 12 µg/m<sup>3</sup>, and  $NO_X$  ranges from 17 - 19 µg/m<sup>3</sup>. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

#### B. STACK MONITORING:

Stack Monitoring was carried out for two installed DG sets within the project site. Samples were collected and analyzed for PM, SO<sub>2</sub>, & NO<sub>x</sub> as per the standard methods mentioned in Table 3 & the results also summarized in Table 3.

Sr.	Derometers	Unit	Resu	Reference method	
No.	Parameters	Unit	Near C-1 Building	Nr.C-3 Building	
1	Material of Stack	-	MS	MS	-
2	Stack Height from G.L.	m	5	5.5	-
3	Stack No.	-	01	02	-
4	Type of Stack	-	DG	DG	-
5	Stack Attached To	KVA	45	125	-
6	Flue Gas Temperature	°K	396	378	-
7	Velocity	m/s	3.01	3.12	-
8	Particulate Matter (PM)	mg/Nm <sup>3</sup>	72.3	71.7	IS 11255: Part 1
9	Sulphur dioxide (SO2)	ppm	11.3	12.2	IS 11255: Part 2
10	Oxides of Nitrogen (NOx)	ppm	18.1	20.6	IS 11255: Part 7

#### Table 3: Stack Monitoring Result

#### C. WATER & SEWAGE QUALITY:

One water samples were collected from nearby Bore well to check the quality of the water. Analysis results are compared with IS 10500:2012 as mentioned in following Table 4:

			Water sample	Desirable limit as per
Sr. No.	Parameters	Unit	Bore well Water	IS 10500-2012
1	рН	-	7.64	6.5-8.5
2	Temperature	<sup>0</sup> C	28.3	NS
3	Turbidity	NTU	<1	10
4	Conductivity	µs/cm	794	NS
5	Total Dissolved Solids	mg/L	1234	2000
6	Total Suspended Solids	mg/L	7	NS
7	Total Hardness	mg/L	82	600
8	Ca Hardness	mg/L	56	NS
9	Total Alkalinity	mg/L	162	600
10	Chloride	mg/L	84	1000
11	Sulphate	mg/L	81	400
12	Copper	mg/L	BDL	1.5
13	Zinc	mg/L	BDL	15

#### Table 4: Quality of Water samples

#### Note:

BDL = Below Detectable Limit N.S. = Not Specified

#### **Observations:**

The quality of bore well water shows that there is no water contamination and it is suitable for construction purpose.

Sewage: Construction of STP is not yet started

#### D. NOISE LEVEL MEASUREMENT:

Noise level monitoring was carried out at five locations within the project site as per standard method by using sound level meter and the results are reported in Table 5.

		Noise Level in dB (A) Leq. during					
Sr. No.	Sampling locations	Day Tin	ne	Night Time			
		Measured	Limit*	Measured	Limit*		
1.	Near Main Gate	60.2	65	49.8	55		
2.	Nr. C4 Wing	56.9	65	51.3	55		
3.	C5 Wing	60.1	65	50.4	55		
4.	B2 Wing	58.4	65	53.6	55		
5.	Nr. Club House	51.8	65	48.7	55		

#### Table 5: Ambient Noise Quality

**Note:**\*Ambient Noise level Limit for Residential area as per Noise Pollution (Regulation & Control) Rules, 2003. Day time is reckoned between 6 A.M. to 10 P.M. & Night time between 10 P.M. to 6 A.M.

#### **Observations:**

The noise level at site is well within the prescribed limit. However, it is marginally higher at main gate due to vehicular movement.

### ANALYSIS RESULTS of D.G sets Noise Quality

<b>C N</b>		Observed Value in dB(A)			
Sr. NO.	Location Name	Results	CPCB Permissible Limit		
1	Near DG -I (25 KVA)	67.2	75		
2	DG –II (45 KVA)	68.5	75		

**REMARKS**: As per Observation, results are within the limit

#### E. SOIL ANALYSIS REPORT

Soil samples were collected from Site at 20 cm depth. Analysis results are tabulated in the following Table 6.

Sr. No.	Parameters	Unit	Results		Reference Method
			Splinder	Labour Colony	
1	рН	-	7.74	7.29	IS 2720 : Part 26 : 1987
2	Moisture Content	%	9.4	7.3	IS 2720 : Part 09: 1992
3	Sulphate	mg/gm	0.85	0.54	IS 2720 : Part 27 : 1977
4	Organic Matter	%	4.3	2.8	IS 2720 : Part 22 : 1972
5	Chloride	%	0.94	0.67	IS 6925: 1973
6	Copper	mg/gm	BDL	BDL	APHA 3500-Cu
7	Total Kjeldhal Nitrogen	mg/gm	0.42	0.29	APHA 4500-Norg
8	Zinc	mg/gm	BDL	BDL	APHA 3500-Zn

#### Table 6: Quality of Soil Sample

**BDL**: Below Detectable Level

#### Observations:

The soil analysis result shows that, the basic parameter like Organic matter & Total Nitrogen are less in the soil. Further, heavy metals like Copper & Zinc are below detectable limit.

#### Annexure – II

#### EMP Cost

Sr.	Pollution control	Capital Cost	Recurring Cost Per	Arrangement of
No.	Measures	(Rs. Lakhs)	Annum (Rs. Lakhs)	Corpus fund
1				
	Construction Phase	7	1.5	Developer & Site In
				Charge
2		Operationa	al Phase	
1.	Pollution Control - STP,	10	100	Resident Society &
	Scrubber & Noise	(Includes cost of power,	(Construction of STP)	AMC with the Supplier
	Control Measures	operation & maintenance)		for first Five Years
2.	Environment	5	Nil	Resident Society (As
	Monitoring	(Monitoring charges for air,		corpus fund an
		water, waste water, soil,		amount of approx. Rs
		DG stack, noise etc.)		4/- per square foot
3.	Solid Waste	2	10	shall be charged per
	Management	(includes cost of waste	(Includes cost of waste	month)
		collection, storage and	collection, storage and	
		disposal)	OWC)	
4.	Solar water heater	1.5	83.63	
	system			
5.	Occupational Health	2.5	4	
		(includes cost of medical	(includes cost of PPE, first	
		checkup, PPE & first aid kit)	aid facility)	
6.	Green Belt	6	85	
	development	(includes cost of	(includes landscaping of	
		landscaping of plot area)	plot area)	
7.	Rain water harvesting	0.25	22	
8.	Others (EHS orientation	3	10	
	& training)	(Environment & safety	(other equipments)	
		training)		
	Total	30.25	314.63	

## **Public Notice**

#### **English New paper Public Notice**



#### Marathi New Paper Public Notice

	पुणे शहर			पुणे
	Applicant Applicant		ज म	260%
24.	BANK OF MAHARASH IRA (Tulogeon Dhamchere Branch) Addition	20	प्रा	280
	Rajendra Collections and Others		र्ग क	F .
<b>त</b>	To, 2) Nathu Baburao Bhulhal, Pabel Chowk, Telegeon Dhamdhere, Talika- Shinz, Dist Pune, Pabel Chowk, Telegeon Dhamdhere, Talika- Shinz, Dist Pune, WHEREAS the shove named Applicant has filed the above referred application/appeal in this WHEREAS the shove named Applicant has filed the above referred application/appeal in this whereas	રંશ	हिन्द्र	340
वटना	Tribunal. Tribunal to a second police could not be affected in the ordinary manner	२२	प्रभ हॉर	196
दोघा	the application to subserve the this Tribunal in person or through all nutrower for should not be 3. You are directed to appear before this Tribunal in person or through all nutrower for should not be	53	प्रभ ही	8
The second	statement/say on 01111/2013 at 1000 at	28	अ	T
-ऑप क्रेडीट	Given under my hand allo sold with the Begistrar/Assistant Registrar/	24	प्र	
पुणे सातारा	Tribunal	51		भा
न्यामुळे त्यांनी हीर लिलावाने	जाहीर सुचना	P		गढा
ज्ञानदीए को-	जाहार पुनः प् आन्ही मे.कुमार के अरिंग प्रॉपटींज प्रा.लि. याद्वारे सर्वसाधारण जनतेस कळवू आन्ही मे.कुमार के अरिंग प्रॉपटींज प्रा.लि. याद्वारे सर्वते नं. १२/१/२,	2		प्रभा रस्ता
तेल जंपाजवळ सन् घ्यावयाचा	इच्छितों की, महाराष्ट्र सरकारव्या पर्य , १२/३व, १२/४, १२/५अ/१, १२/५व, १२/१/४, १२/१४, १२/५४, १२/५व, १२/१४, १२/५४, १२/५४, १२/५४, १२/५४, १२/५४, १२/५४, १२/५४, १२/५४,		26	प्रभाग रस्त्य
याजयौ	9२/६/९, १२/७, १२/८, ७२/१२/ गर्ग ग्रहप्रकल्पाला" २५ जुले २०१३ ता हवेली, जिल्हा पुणे, येथील आमच्या "गृहप्रकल्पाला" २५ जुले २०१३		29	प्रभाग पर्यंतर चौका
किंमत विंस्पत १४९८.१५०/	- हिली आहे. पयावरण विषयक नजुराना महाराष्ट्र सरकार याच्या।		30	प्रभाग बांघणे
1	http://www.envis.manarashtuarg	1	38	प्रभाग मी. ड
1	आहे. मे.कुमार केअरिंग प्रॉपटींज प्रा.लि.		74	प्रभाग

## MAHARASHTRA POLLUTION CONTROL BOARD

Phone : - 24010437/24020781/24014701

Fax :- 24044532 / 24023516

Email :- enquiry@mpcb.gov.in

Visit At:- http://mpcb.gov.in

Infrastructure/Orange/L.S.I

Consent order No: Format 1.0/BO/ROHQ/PN-19850-13CE/CAC - 2756

Date 21 /03/2014

Kalpataru Point, 3rd & 4th floor, Sion-

Cine Planet Cinema, Near Sion Circle,

Matunga Scheme Road No. 8, Opp.

Sion (E), Mumbai - 400 022

To,

M/s. Kumar Kering Properties Pvt. Ltd. "Palmspring" S.No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A&B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village : Undri, Tal : Haveli, Dist : Pune 411001

Subject: Consent to Establish in Orange category Residential / construction project.

Ref : Minutes of Consent Committee meeting held on 13/03/2014

Your application CE1311000495 date 18/11/2013.

For: Consent to Establish.

Under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Municipal Solid Waste (Management & Handling) Rule 2000 and E-Waste (Management & Handling Rule 2011 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- 1. The consent to Establish is granted for a period upto:- <u>Commissioning of the unit or five years</u>, <u>whichever is earlier</u>.
- 2. The Proposed Capital investment of the Project is <u>Rs 113.79 Cr</u>. (As per CA certificate).
- 3. The Consent to Establish is valid for Residential project develop by M/s. Kumar Kering Properties Pvt. Ltd. names as "Palmspring" at S.No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A&B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village : Undri Tal : Haveli, Dist : Pune 411001. on total plot area of <u>78,600.0 Sq. mtrs</u> and total construction built up area of <u>91,168.16 Sq. mtrs</u>. As per construction commencement certificate issued by local body.
- 4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1.	Trade effluent	Nil	NA	NA
2.	Domestic effluent	277.00 CMD	As per Schedule –I	60% shall be reused & recycled and remaining shall be discharged in municipal sewer.

SRO Pune 11/1/0/L/96423000

MAHARASHTRA

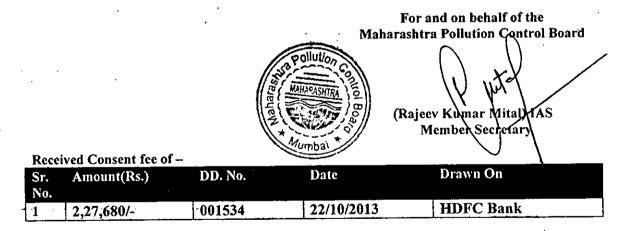
#### 5. Conditions under Air (P&CP) Act, 1981 for air emissions:

Sr. No.	Description of stack / source	Number of Stack	Standards to be achieved
1.	DG sets (180 KVA)	1	As per Schedule –II
2.	DG sets (125 KVA)	1	As per Schedule –II
3.	DG sets (250 KVA) 2 Nos	2	As per Schedule –II
4.	DG sets (500 KVA) 2 Nos	2	As per Schedule –II

Conditions under Municipal Solid Waste (Management and Handling) Rule,2000

1	Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
	1.	Biodegradable Waste	616.0	Kg/Day	On site Composting	Used as manure
	. 2.	Non Biodegradable Waste	410.0	Kg/Day	Segregation	By sale
	3.	STP Sludge	45.0	Kg/D		Used as manure

- 7. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- 8. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
- 9. The applicant shall comply with the conditions stipulated in Environment Clearance granted by GOM, vide no: SEAC-2010/CR-776/TC-2, dated 25<sup>th</sup> July 2013.
- 10. The applicant shall submit Board Resolution from Company Board, towards starting of construction work without obtaining consent to establish from the MPC Board thus violated the provisions of Environmental laws and in future, they will not do such violations and B.G. of Rs. 2 laks towards submission of Board Resolution by 01/04/2014.



#### Copy to:

- 1. Regional Officer, MPCB, Pune. And Sub-Regional Officer, Pune-II, they are directed to ensure the compliance of the consent conditions.
- 2. Chief Accounts Officer, MPCB, Mumbai.
- 3. CC/CAC desk- for record & website updation purposes.

Page Page Althouse and a state of the state

SRO Pune 11/1/O/L/96423000

#### Terms & conditions for compliance of Water Pollution Control:

1)

A] As per your consent application, you have proposed to provide the sewage treatment system with the design capacity of 300.0 CMD.

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

1	pH	Not to exceed .	6.5 to 9.0
2	Suspended Solids	Not to exceed	100 mg/l.
3	BOD 3 Days 27 degree C	Not to exceed	100 mg/l.
4	Detergent	Not to exceed	01 mg/l.

C] The treated domestic effluent shall be 60% recycled and reused for flushing, fire fighting and cooling of Air conditioners etc. The remaining shall be discharged into Municipal sewer/ utilized on land for gardening after conforming to above standards. The firm shall affix the separate meter for ensurance of 60% recycling of treated sewage and keep the records of the same. In no case effluent shall find its way to any water body directly /indirectly at any time.

- 2) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of water, works for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- ...3)...The firm shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
  - 4) In case, the water consumption of the project is not covered under the water consumption of local body, in that situation, the project proponent shall submit the CESS Returns in the prescribed format given under the provision of Water (Prevention & Control of Pollution) Cess Act, 1977 and Rules made thereunder for various category of water consumption.

In case the water consumption is duly assessed under the quantity of water consumption of local body, the project proponent shall submit certificate to that effect from the concern local body with the request not to assess CESS on their water consumption, being already assessed on the water consumption of local body.

Sr. no.	Purpose for water consumed	Water consumption quantity
		(CMD)
1.	Domestic purpose	308.00

5) The firm shall provide Specific Water Pollution control system as per the conditions of EPAct, 1986 and rule made there under from time to time/ Environmental Clearance.

SRO Pune II/I/O/L/96423000

#### <u>Schedule-II</u>

#### Terms & conditions for compliance of Air & Noise Pollution Control:

1. As per your application, you have proposed to erect following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	Height in (Above roof top)		Type Fuel	of	Quantity
<u> </u>	DG sets (180.0 KVA)	5.0				
2.	DG sets (125.0 KVA)	5.0		HSD	120Lit/Hr.	
3.	DG sets (250.0 KVA) 2 Nos	5.0				12012011
4.	DG sets (500.0 KVA) 2 Nos	5.0				

\* D.G. Set shall be operate only in case of power failure.

2. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

	Natite avenue	150.00 mg/Nm <sup>3</sup> .
Particulate matter	i Not to exceed	100.00 mg/14m

- 3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary)
- 5. Conditions during construction phase:-

a	During construction phase, applicant shall provide temporary sewage disposal and MSW facility for staff and worker quarters.
<b>b</b> .	During construction phase, the ambient air and noise quality should be closely monitored to achieve Ambient Air Quality Standards and Noise by the project proponent through MoEF approved laboratory.
C	Noise generating activity shall be carried out during day time only.

ollutic

SRO Pune II/I/O/L/96423000

#### Schedule-III Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
¥	Éstablish	Rs. 5.0 lakhs	15 days	Rs. 5.0 lakhs for ensuring the compliance of consent conditions.		Five years
2	Establish	Rs. 2.0 Lakh	15 days	Rs. 2.0 Lakh towards submission of 'Board resolution by 31/03/2014	1/04/2014	30/08/14

f ≰ - .

ollu

Page

SRO Pune 11/1/0/L/96423000

#### Schedule-IV

#### **General Conditions:**

1) The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

2) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and environmental protection Act 1986 and Municipal Solid Waste (Management & Handling) Rule 2000 and E-Waste (Management & Handling Rule 2011.

- 3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

#### 5) Conditions for D.G. Set

- a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the
- ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- -c) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the \_\_\_\_\_\_ time \_\_\_\_\_ between 6 \_\_a.m. to 10 p. m and night time is reckoned between 10 p.m to 6 a.m.
- d) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
- e) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- f) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
- g) D.G. Set shall be operated only in case of power failure.
- h) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- i) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 6) Solid Waste The applicant shall provide onsite municipal solid waste processing system & shall comply with Municipal Solid Waste (Management & Handling) Rule 2000 & E-Waste (M & H) Rule 2011.
- 7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 9) The treated sewage shall be disinfected using suitable disinfection method.

10) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.

11) The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

SRO Pune 11/1/0/L/96423000

#### ANNEXURE – I

#### 1. NAME AND ADDRESS OF THE PROJECT PROPOSED:

Proposed project "Palmspring" is a construction of Residential Group Housing Project at Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4, 12/5A/1, 12/5B, 12/6/1, 12/7, 12/8, 12/12/1, 12/12/3, 13/1/2/1, Village Undri, Ta. Haveli, Pune, Maharashtra

#### 2.PROJECT PROPOSAL:

Total Number of Buildings 9 & 44 Bungalows

- No. of Tenements 440
- Buildings A1 to A8: P + 12 Floors.
- Buildings A5 to A8: B + P + 12 Floors
- Bungalows B1 (6 Nos.), B2 (6 Nos.), B3 (6 Nos.), B4 (6 Nos.), C1 (5 Nos.), C2 (5 Nos.), C3 (5Nos.) to D1 (2 Nos.) & D2 (3 Nos.): G + 1
- Building E: P + 10

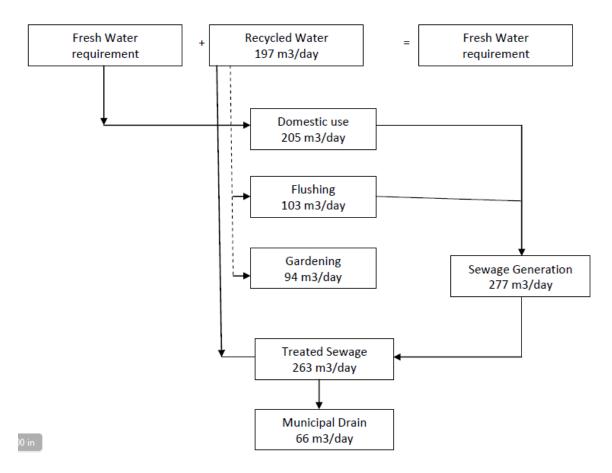
#### 3. AREA STATEMENT:

Sr. No.	Description	Area (m <sup>2</sup> )		
1	Total Plot Area	78600.00		
2	Deductions	25405.25		
3	Net Plot Area 53194.75			
4	Net Permissible FSI	71124.51		
5	Proposed Built up area	FSI area	68452.50	
		Non FSI area	22715.66	
		Total BUA area	91168.16	
6	Ground-coverage %	42%		

#### 4. PARKING STATEMENT:

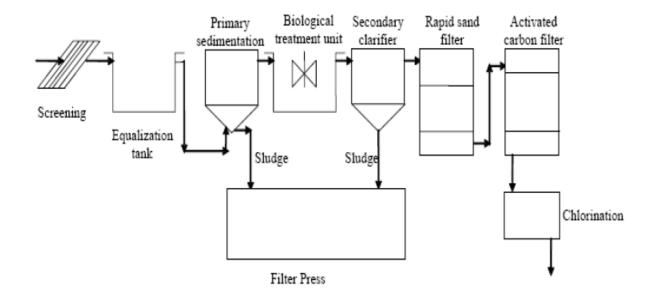
Buildings	Wing	Number of tenements	Parking required 20+3+1.4 m <sup>2</sup> /tenements	Parking provided m <sup>2</sup>
P+12	A1	47	1147	
P+12	A2	47	1147	
P+12	A3	47	1147	
P+12	A4	47	1147	Parking-4940 m <sup>2</sup> + Podium
P+12	A5	47	1147	parking- 10760 m <sup>2</sup> =15700
P+12	A6	47	1147	
P+12	A7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

#### 5. WATER CONSUMPTION



#### 6. SEWAGE TREATMENT PLANT:

The process flow diagram for sewage treatment plant is shown below:



#### 7. SOLID WASTE GENERATION:

Pre construction & Construction Phase				
Waste generation	38 kg/day			
Operation Phase				
Dry waste	410 kg/day			
Wet waste	616 kg/day			
E - waste	Very less amount			
Hazardous waste	Spent oil or oil grease for DG sets, etc.			
STP sludge	33 kg/day			

#### 8. DETAILS OF POWER REQUIREMENT:

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

#### 9. TREE PLANTATION:

. . . . .

RG on the ground: 8690.57  $m^2$  RG on the podium: 7023.94  $m^2$ 

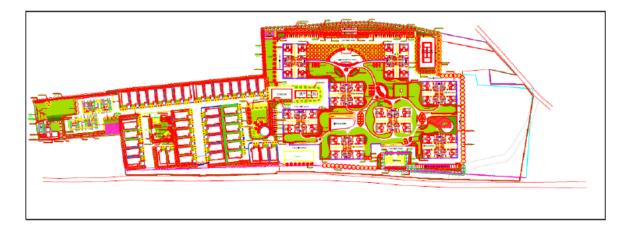
- No. of Trees to be planted on ground : 738
- No. of Shrubs to be planted on ground : 21
- No. of Trees to be planted on podium : 25
- No. of Shrubs to be planted on podium : 21

#### Trees on Ground

Name	C/C Dist	Quantity
ALISTONEA SCHOLARIS	4 m C/C	75 nos.
BAUHINIA PURPUREA	5 m C/C	26 nos.
MIMOSOPS ELENGII (BAKUL)	4 m C/C	45 nos.
ANTHOCEPHALUS KADAMBA	4 m C/C	91 nos.
NYCANTHES ARBORTRISTICS (PARIJATAK)	3.5 m C/C	158 nos.
MICHELIA CHAMPAKA	3.5 m C/C	16 nos.
LAGERSTROEMIA FLOS REGINA	5 m C/C	14 nos.
COROUPITA GUINENSIS (KAILASHPATI)	4 m C/C	18 nos.
AZARDIRACHTA INDICA (NEEM)	5 m C/C	4 nos.
PLUMERIA ALBA	3 m C/C	105 nos.
PLUMERIA RUBRA	3 m C/C	58 nos.
MAHOGANY	4 m C/C	16 nos.

#### Shrubs on Ground

Name	C/C Distance	Area m <sup>2</sup>
HYMENOCALLIS LITTORALIS (SPIDER LILY)	0.3 m C/C	482.78
TABERNAEMONTANA CORONARIA (TAGAR VARIEGATED)	0.45m C/C	394.96
HEDYCHIUM CORONARIUM (SONTAKKA)	0.45 m C/C	244.51
PLUMBAGO CAPENSIS	0.45 m C/C	383.77
NERIUM OLEANDER DWARF	0.45 m C/C	326.62
CALLIANDRA RED	0.45 m C/C	24.23
IXORA RED HYBRID	0.45 m C/C	48.25
ALLAMANDA DWARF	0.3 m C/C	180.65
ARECA PALMS	0.9 m C/C	13.52
MYENA ERECTA	0.45 m C/C	42.83
CESTRUM NOCTURNUM (RAATRANI)	0.45 m C/C	180.06



#### LANDSCAPE LAYOUT ON GROUND

#### 10. RAIN WATER HARVESTING

Size of the recharge pits = 3.0m x 3.0m x 3.0m

No. of recharge pit proposed = 10

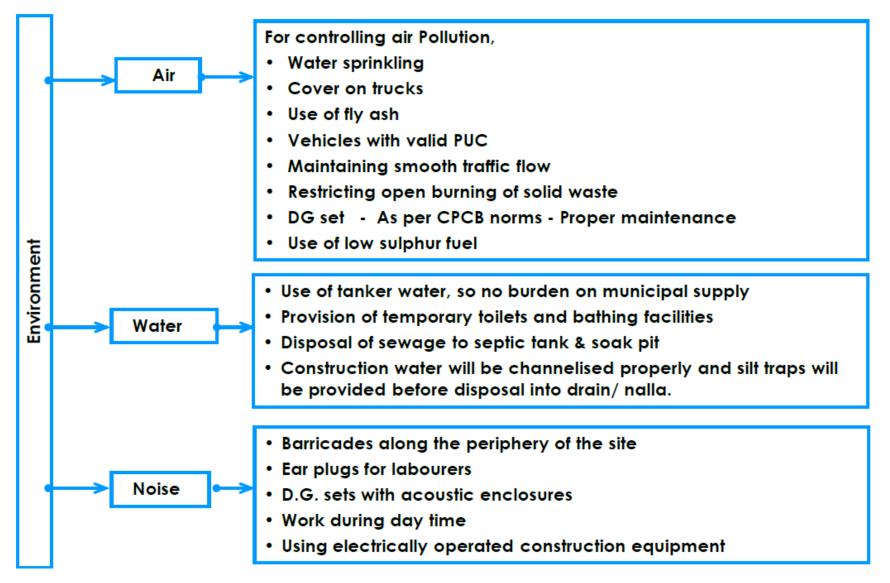
#### Rain water Harvesting and Storm water Drain :

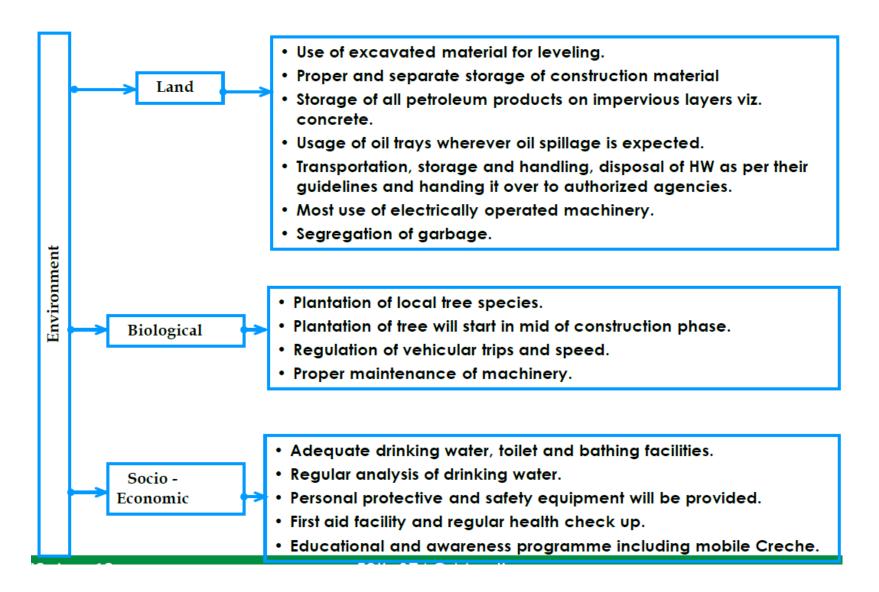
- The rain water harvesting could be done by no of ways. Some of the alternatives are :
- Collection of roof rain water from individual bungalow and using it for specified purpose like drinking, garden etc.
- Collection of storm water and utilizing it for recharging of ground water table through existing and new wells.
- Collection of storm water in protected under ground storage tank / open water body and utilization of the same as per requirement.
- Trenching within the plots.

#### We recommend the following:

- The storm water collected in the storm water conveyance system will be used for recharging of ground water table through the bore wells.
- Wherever possible, the trenches would be provided for percolation.
- Percolation of the rain water depends upon the permeability of earth strata. By Providing no. of recharge pits and recharge of bore well necessary efforts will be taken for maximum recharging of ground water.

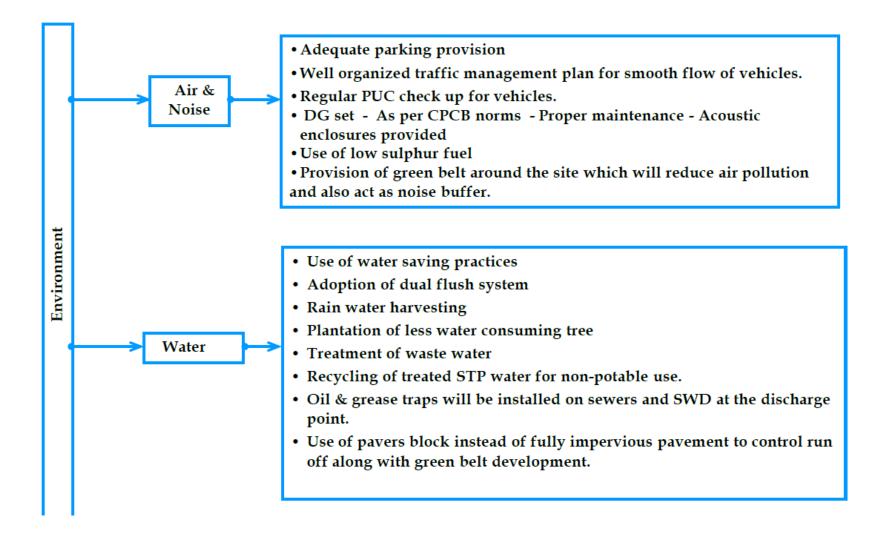
#### 11. ENVIRONMENTAL MANAGEMENT PLAN DURING CONSTRUCTION PHASE :

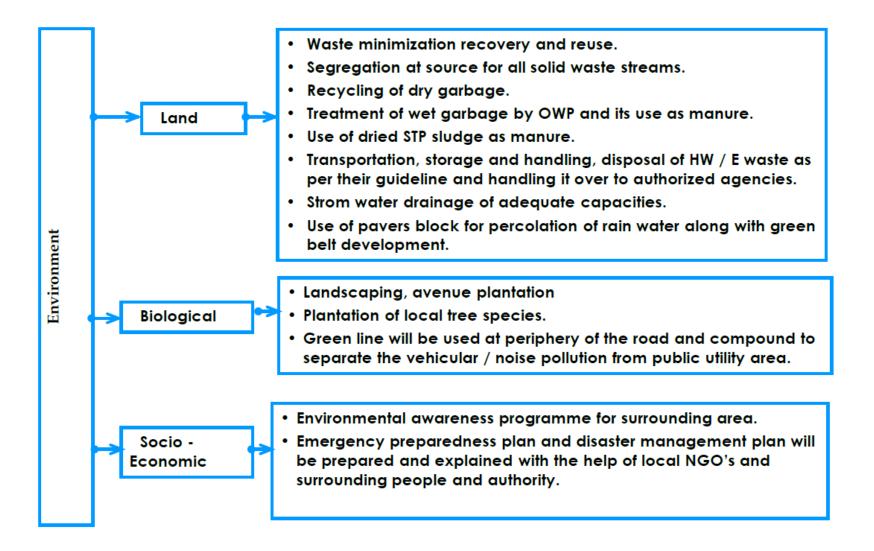




#### **OPERATION PHASE :**

Project: "Palmspring" Residential Group Housing Project





#### PROJECT STATUS REPORT

#### BACKGROUND

EC No.	:	SEAC-2010/CR.776/TC.2 Dated: 25 <sup>th</sup> July 2013	
Project name	:	Residential Group Housing Project	
Project	:	Sr. No. 12/1/2, 12/1/3, 12/1/4, 12/2, 12/3A, 12/3B, 12/4,	
location		12/5A/1, 12/5B, 12/6/1, 12/7,12/8, 12/12/1, 12/12/3,	
		Village Undri, Ta. Haveli, Pune, Maharashtra.	
Developer	:	M/s. Kumar Kering Properties Pvt. Ltd.	
name			
Developers	:	Kumar Capital, 1 <sup>st</sup> Floor, 2413, east Street Camp, Pune	
address		411001. Maharashtra	

#### **PROJECT STATUS**

Status upd	lated on		:	December, 2015
Activity	Phase	of	:	Phase – I Completed
project				
Excavatio	n details		:	100 % Completed for Phase – I
				I

#### **CONSTRUCTION DETAILS – Phase I**

Sr. No	Building Name/ other	Current status of Work
1	Bungalows 44 Nos.	Completed
2	Gardening/Landscape	Completed for Phase – I
3	STP	Septic Tank provided for Phase – I
4	RWH	Completed
5	Internal Roads	Completed
6	Lighting	Completed
7	Plumbing	Completed
8	Solid Waste	Vermicomposting provided
	Management	

In addition to Bungalows, work for RCC/BBM & Plaster is in progress for 6 Bungalows. For rest, RCC is 100% complete.

#### **CONSTRUCTION DETAILS – Phase II**

Status updated on			:	December, 2015
Activity	Phase	of	:	Phase-II Not Started
project				
<b>Excavation details</b>			:	Not Started

#### **CONSTRUCTION DETAILS – Phase II**

Sr. No	Building Name/ other	Current status of Work		
1	Building A1 to A8 (P + 12 Floors)	Work yet not started		
2	Building E (P + 10 Floors)	Work yet not started		
3	Solid Waste	Work yet not started		
	Management			
4	STP	Work yet not started		
5	Gardening/Landscape	Work yet not started		
6	RWH	Work yet not started		
7	Internal Roads	Work yet not started		
8	Lighting	Work yet not started		
9	Plumbing	Work yet not started		

Note: Phase – I Construction work Completed and Phase – II work yet not started