# MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

# MINISTRY OF ENVIRONMENT & FORESTS Regional Office (W), Bhopal

	Manitaring Da		-4
	Monitoring Re	-	
	PART – I DATA SHEI		
No.:			Date: June'12
1.	Project type: River –Valley/ Mining/ Industry/ Thermal/ Nuclear/ other (specify)	:	Construction Project (Residential Complex)
2.	Name of the project	:	"Hill View Residency"
3.	Clearance letter (s)/OM no. and date	:	SEAC-2010/CR.727/TC.2 Dated: 26 <sup>th</sup> December, 2011
4.	Location	:	S. No 69/5B/2, 69/8 & 70/1 to 17A/1 Kothrud, District Pune, Maharastra
	(a) District	:	Pune
	(b) State	:	Maharashtra
	(c) Latitude / Longitude	:	Latitude: 18° 31' N Longitude: 73° 51' E
5.	(a) Address for correspondence		Add.: Kumar Capital, 2 <sup>nd</sup> Floor, 2413, east Street Camp, Pune 411001. Maharashtra
	(b) Address of Executive Project Engineer/ Manager (with pin code / Fax)	:	Mr. Manish Jain, (Director) Add.: M/s. Kumar Beharay. Kumar Capital, 2 <sup>nd</sup> Floor, 2413, east Street Camp, Pune 411001. Maharashtra
6.	Salient Features		
	(a) Of the project	:	Refer Annexure 1-Project Details
	(b) Of Environmental Management Plans	:	Refer Annexure 1-Project Details
7.	Break up of the project area		
	(a) Submergence area: forest & non forest.	:	Nil
	(b) Others	:	The entire project area is non-agricultural land.
8.	Break up 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. 65.00 Crores
	(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 light of actual field experience so far	:	Not applicable
11.	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information	:	Nil
12.	Status of construction.	•	
12.	a) Date of commencement (Actual and/or planned)	:	Excavation Started: Jan 2012
	b) Date of completion (Actual and/or planned)	:	December 2016
13.	Reason for the delay if the project is yet to start.	:	Not applicable
14.	Dates of site visits	t	No
	(a) The dates on which the project was monitored by the Regional Office on previous occasions, if any	:	No
	(b) Date of site visit for this monitoring report	:	February'2012 and May'2012. (Env. Monitoring report done by Green Circle, Inc. is attached herewith)
15.	Details of correspondence with project authorities for obtaining action plans / information on status of	:	Letter issued by MoEF:

compliance to safeguards other than the routine letters for logistic support for site visits.	ECNo. SEAC-2010/CR.727/TC.2 26 <sup>th</sup> December, 2011	Dated:
(The first monitoring report may contain the details of all the letters issued so far, but the later reports may cover only the letters issued subsequently.		

File No.: SEAC- 2010/CR.727/TC.2

Environment department, Room No. 217, 2<sup>nd</sup> floor, Mantralaya Annexe, Mumbai 400 032 Date: 26<sup>th</sup> December, 2011

To,

M/s. Rathi, Kumar and Beharay. Kumar Capital, 1<sup>st</sup> floor, 2413, East street, Camp, Pune – 411 001 Telephone No. : 020 - 26350660

#### Subject: Proposed Residential Project at Kothrud, Pune by M/s Rathi, Kumar and Beharay. - 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 43<sup>rd</sup> meeting 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 40<sup>th</sup> Meeting held on 12<sup>th</sup>/13<sup>th</sup> October, 2011.

 It is noted that the proposal is for grant of Environmental Clearance for Proposed Residential Project at Kothrud, Pune M/s Rathi, Kumar and Beharay. SEAC considered the project under screening category 8 (a) as per EIA Notification 2006.

Name of the Project	:	Residential project		
Project Proponent :		M/s Rathi, Kumar and Beharay		
Location of the : project		S No. 69/5B/2, 68/8 and 70/1 to 17A/1 Kothrud, Pune		
Type of Project	18	Construction project		
Total Plot Area	彩	58,371 sq. m.		
Proposed Total built up area	2002	<ul> <li>FSI Area: 82,689.61 sq. m</li> <li>Non FSI area : 24378.5 sq. m.</li> <li>Total construction area : 1,07,068.11 sq. m.</li> </ul>		
Estimated cost of the project	1	Rs. 207 Cr		
No. of Buildings		<ul> <li>Residential – 19 (P+12) with 893 flats</li> <li>Commercial – one (G+1)</li> </ul>		
Total Water Requirement		Fresh water: 496.65 CMD and Recycled water: 177 CMD		
Sewage Generation		498 CMD		

#### Brief Information of the project is summarized as below-

Ruph

-1-

STP capacity	498 CMD 10 nos. of recharge pits are proposed.			
Rain water Harvesting				
Solid waste management	<ul> <li>Biodegradable waste: 1071.6 kg/day</li> <li>Non biodegradable waste: 714 kg/day</li> <li>STP Sludge: 20 kg/day</li> </ul>			
Disposal	<ul> <li>Biodegradable waste will be treated by Organic Waste converter.</li> <li>Dry waste will be handed over to authorized contractors.</li> <li>STP sludge will be used as manure.</li> <li>E waste will be disposed through authorized agency.</li> <li>Waste oil will be stored and subsequently given to the authorized hazardous waste management agencies.</li> </ul>			
Green Belt Development	<ul> <li>Landscape area: 16,347 sq.m.</li> <li>No of trees to be planted: 504 nos.</li> </ul>			
Energy Requirement	<ul> <li>Maximum demand – 3800KVA</li> <li>DG sets of 125KVA x 1, 250 KVA x 2 and 500 KVA x 2.</li> </ul>			
Traffic Management	1292 four wheelers, 2477 two-wheelers and 2766 cycles			
Energy Conservation measures	<ul> <li>Use of CFL and T5,</li> <li>Use of solar water heaters.</li> <li>Solar lights wherever feasible.</li> </ul>			
Environmental Management Plan	<ul> <li>Capital Cost: Rs. 307 Lakhs</li> <li>O &amp; M Cost: Rs. 36 Lakhs</li> </ul>			

3. The proposal has been considered by SEIAA in its 40<sup>th</sup> meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :-

- (i) This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with request 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.
- (ii) 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.
- (iii) "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.
- (iv) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (v) 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.

Mabaha"

- (vi) 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.
- (vii) 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.
- (viii) 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
- (ix) 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.
- (x) Arrangement shall be made that waste water and storm water do not get mixed.
- (xi) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (xii) 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.
- (xiii) Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dcpt.
- (xiv) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.
- (xviii) 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.
- (xix) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- (xx) 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 nonpeak hours.
- (xxi) 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.
- (xxii) 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).
- (xxiii) Ready mixed concrete must be used in building construction.

Palakhen"

- (xxiv) The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquake, adequacy of fire fighting equipments etc. as per National Building Code including measures from lighting.
- (xxv) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xxvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxvii) The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (xxviii)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. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Treatment of 100% gray water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Maharashtra Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- (xxix) Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
- (xxx) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxxi) Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
- (xxxii) 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.
- (xxxiii)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.
- (xxxiv)Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement
- (xxxv) 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.
- (xxxvi)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.
- (xxxvii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (xxxviii) 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.
- (xxxix)Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces

austa

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

- (xl) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation
- (xli) 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.
- (xlii) 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.
- (xliii) Six monthly monitoring reports should be submitted to the Department and MPCB.
- (xliv) A complete set of all the documents submitted to Department should be forwarded to the MPCB
- (xlv) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (xlvi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xivii) 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.
- (xlviii) 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://envis.maharashtra.gov.ln.
- (xlix) 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.
- (1) 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.
- (li) 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>, NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (lii) 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.
- (liii) 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.

Valikhen"

- 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.
- 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.
- 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 35 of the National Green Tribunal Act, 2010.

(Valsa R Nair Singh) Secretary, Environment department & MS, SEIAA

Copy to:

- Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEIAA, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
- Shri. Dr. S. Devotta, Chairman, SEAC, T2/302 Sky City, Vanagaram Ambattur Road, Chennai – 600 095
- Additional Secretary, MOEF, 'Paryavaran Bhawan' CGO Complex, Lodhi Road, New Delhi – 110510

- Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- 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 Mumnicipal Corporation, Pune.
- 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).

23

# **COMPLIANCE REPORT**

EC No.	:	SEAC-2010/CR.727/TC.2 Dated: 26 <sup>th</sup> December, 2011
Project name	:	"Hill View Residency"
Project location	:	S. No 69/5B/2,69/8 and 70/1 to 17A/1 Kothrud, District Pune, Maharastra
Developer name	:	M/s. Kumar Beharay
Developers address	:	Kumar Capital, 1 <sup>st</sup> Floor, 2413, east Street Camp, Pune 411001. Maharashtra

Sr. No.		E	C Conditions	Compliance Status
1	This has reference	to	your communication on the above	No comment.
	mentioned subject. T			
	EIA Notification - 20			
	Committee. Maharas			
	recommend the proje			
	SEIAA. Information			
	by State Level Enviro	onn	nent Impact Assessment Authority in	
	its 40 <sup>th</sup> meeting held	On	12 <sup>th</sup> /13 <sup>th</sup> October, 2011.	
2	It is noted that the pro-	opo	sal is for grant of Environmental	Noted.
	Clearance for propose	ed F	Residential Project at Kothrud,	
	District Pune, Mahara	asht	ra, by M/s. Rathi, Kumar and	
	Beharay SEAC consi	dere	ed the project under screening	
	category 8(a) as per H			
	Brief Information of			
	Name of the			
	Project			
	Project Proponent	:	M/s. Rathi, Kumar and Beharay	
	Location of the	:	S. No 69/5B/2,68/8 and 70/1 to	
	project		17A/1 Kothrud, District Pune,	
			Maharastra	
	Type of Project	:	Construction Project	
	Plot Area	:	58.371 sq.m	
	Built up Area	:	FSI Area: 82,689.61 sq.m	
			Non FSI Area: 24378.5 sq.m	
			Total construction area:	
			1,07,068.11 sq.m	

Estimated cost of	:	Rs.207 Cr.	
the project			
No. of Buildings	:	Residential-19 (P+2) with 893 flats Commercial- one(G+1)	
Total Water	:	Fresh water: 496.65 CMD and	
Requirement		Recycled Water: 177 CMD	
Sewage Generation	:	498 CMD	
STP Capacity	:	498 CMD	
Rain water Harvesting	:	10 nos.of recharge pits are proposed	
Solid waste	:	• Biodegradable waste: 1071.6	
management		Kg/day	
		• Non biodegradable waste: 291	
		Kg/day	
		• STP sludge: 20kg/day	
Disposal	:	<ul> <li>Biodegradable waste will be treated by Organic Waste converter.</li> <li>Dry waste will be handed over to authorized contractors.</li> <li>STP sludge will be used as manure.</li> <li>E waste will be disposed through authorized agency.</li> <li>Waste oil will be stored and subsequently given to the authorized hazardous waste management agencies.</li> </ul>	
Green Belt	:	• Landscape area: 16,347 sq.m	
Development		• No of trees to be planted: 504	
Energy		os. Maximum demand: 3800 KVA.	
Requirement	•	DG sets of 154KVA X 1,	
Requirement		250KVA X 2and 500KVA X 2	
Traffic	:	250KVA X 2and 500KVA X 2. 1292 for four-wheelers,2477 for	

	Energy	: • Use of CFL and T5.	
	Conservation	• Solar water heaters.	
	measures	• Solar lights wherever feasible.	
		• Use of electronic ballasts.	
	Environmental	: Capital Cost: Rs 307Lakhs	
	Mgt Plan	O & M Cost: Rs. 36 Lakhs	
3.	The proposal has b	een considered by SEIAA in its 40 <sup>th</sup>	Noted
	meetings & decided t	to accord environmental clearance to the	
	said project under t	the provisions of Environment Impact	
	Assessment Notificat	ion. 2006 subject to implementation of	
	the following terms a	nd conditions:	
i	This environmental	clearance is issued subject to land use	Noted
	verification local aut	hority/planning authority should ensure	
	this with request	to Rules regulation Notifications,	
	government Resoluti	ons Circulars, etc. issued if any. This	
	environmental clear	rance issued with respect to the	
	environmental consid	leration and it does not mean that state	
	level Impact Assess	ment (SEIAA) approved the proposed	
	land use.		
ii	The height, Const	ruction built up area of proposed	Noted
	construction shall	be in accordance with the existing	
	FSI/FAR norms of the	he urban local body & it should ensure	
	the same along with	survey number before approving layout	
	plan & before acc	cording commencement certificate to	
	proposed work. U	LB should also ensure the zoning	
	permissibility for the	e proposed project as per the approved	
	development plan of	the area.	
iii	'Consent for Estab	blishment" shall be obtained from	Applied
	Maharashtra Pollutio	n Control Board under Air and Water	
	Act and a copy sh	all be submitted to the Environment	
	department before sta	art of any construction work at the site.	
iv	All required sanitary	and hygienic measures should be in	Complied.
	place before startin	ng construction activities and to be	Toilets are provided at
	maintained throughout	at the construction phase.	site

	1	1
v	Project proponent shall ensure completion of STP, MSW disposal facility green belt development prior to occupation	Noted and will be complied.
	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,	
vi	Provision shall be made for the housing of construction	Complied.
	labour within the site with all necessary infrastructure and	Proper drinking water &
	facilities such as fuel for cooking, Mobile toilets. mobile	toilet facility is provided
	STP, safe drinking water, medical health care, crèche etc.	at site.
vii	Adequate drinking water and sanitary facilities should be	Complied.
	provided for construction workers at the site. Provision	Proper drinking water &
	should he made for mobile toilets. The safe disposal of	toilet facility is provided
	wastewater and solid wastes generated during the	at site.
	construction phase should he ensured.	
viii	The solid waste generated should be properly collected and	Noted & will be
	segregated dry/inert solid waste should be disposed off to the	complied
	approved sites for land filling after recovering recyclable	
	material.	
ix	Wet garbage should be treated by Organic Waste Converter	Will be complied
	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.	
х	Arrangement shall be made that waste water and storm water	Noted and Will be
	do not gel mixed.	complied.
xi	All the top soil excavated during construction activities	Noted.
	should be stored for Use in horticulture / landscape	Top soil will be used for
	development within the projel site.	landscaping.
xii	Additional soil for leveling of the proposed site shall be	Will be complied.
	generated within the sites to the extent possible) so that	,, in oc complica.
	natural drainage system of the area is protected and	
	improved.	
xiii	Green Belt Development shall be carried out considering	Noted and will be
	CPCB guidelines including selection of plant species and in	complied.
	consultation with the local DFO/ Agriculture Dept.	
xiv	Disposal of muck during construction phase should not create	Complied.
ΛIΫ	Disposar of mark during construction phase should not create	- -

	Ι	
	any adverse effect on the neighboring communities and be	Adequate measures are
	disposed taking the necessary precautions [or general safely	provided.
	and health aspects of people. only in approved sites with the	
	approval of competent authority.	
XV	Soil and ground water samples will be tested to ascertain that	Complied.
	there is no threat to ground water quality by leaching of	Env. Monitoring report is
	heavy metals and other toxic contaminants.	attached herewith.
xvi	Construction spoils, including bituminous material and other	Complied.
	hazardous materials must not be allowed to contaminate	Adequate measures are
	water courses and the dumpsites for such material must be	provided.
	secured so that they should not leach into the ground water.	
xvii	Any hazardous waste generated during construction phase	Noted.
	should be disposed of as per applicable rules and norms with	
	necessary approvals of the Maharashtra Pollution Control	
	Board.	
Xviii	The diesel generator sets to be used during construction phase	Complied.
	should he low sulphur diesel type and should conform to	DG sets are having
	Environments (Protection) Rules prescribed (or air and noise	acoustic enclosure.
	emission standards.	
Xix	The diesel required for operating DG stack shall be slored in	Noted.
	underground tanks and it required, clearance from concern	
	authority shall he taken.	
Xx	Vehicles hired for bringing construction material to the site	Complied.
	should be in good condition and should have a pollution	Vehicles are checked for
	check certificate and should conform to applicable air and	PUC certificate.
	noise emission standards and should he operated only during	
	non peak hours.	
Xxi	Ambient noise levels should conform to residential standards	Complied.
	both during day and night. Incremental pollution loads on the	Env. Monitoring report is
	ambient air and noise quality should be closely monitored	attached herewith.
	during construction phase. Adequate measures should he	
	made to reduce ambient air ad noise level during construction	
	phase, so as to conform to he stipulated standards by	
	CPCB/M PCB.	
xxii	Fly ash should be used as building material in the	Noted and will be
	construction as per the provisions of Fly Ash Notification of	complied.
	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).	
xxiii	Ready mixed concrete must be used in building construction.	Complied
xxiv	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.	
XXV	Storm water control and its re-use as per CGWB and BIS	Noted
	standards for various applications.	
Xxvi	Water demand during construction should be reduced by use	Complied.
	of premixed concrete, curing agents and other best practices	
	referred.	
xxvii	The ground water level and its quality should be monitored	Complied.
	regularly in consultation with Ground Water Authority.	Env. Monitoring report is
		attached herewith.
Xxviii	The installation of the Sewage Treatment Plant (STP) should	Will be complied
	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. Treatment of 100% gray water by decentralized	
	treatment should be done. Discharge of unused treated	
	affluent shall conform to the norms and standards of the	
	Maharashtra Pollution on Control Board. Necessary measures	
	should be made to mitigate the odour problem from STP.	
Xxix	Local body should ensure that no occupation certification is	Noted.
	issued prior to operate on of STP/MSW site etc. with due	
	permission of MPCB.	
XXX	Permission to draw ground Water shall be obtained from the	Noted.
	competent Authority prior to construction/operation of the	
<b>X</b> 7 ·	project.	*****
Xxxi	Separation of gray and black water should be done by the use	Will be complied.
	of dual plumbing line for separation of gray and black water.	
Xxxii	Fixtures for showers, toilet flushing and drinking should be of	Noted and will be
	low flow either by use of aerators or pressure reducing	complied.
	devices or sensor based control.	
xxxiii	Use of glass may be reduced up to 40% to reduce the	Noted.
	electricity consumption and load on air conditioning. If	
	necessary, use high quality double glass with special	

	reflective coating in windows.	
Xxxiv	Roof should meet prescriptive requirement as per Energy	Noted.
	Conservation Building Code by using appropriate thermal	
	insulation material to fulfill requirement.	
Xxxv	Energy conservation measures like installation of CFLs/TFLs	Complied.
	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 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.	
xxxvi	Diesel power generating sets proposed as source of back up	Noted and will be
	power for elevators and common area illumination during	complied.
	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 consulation with Maharashtra Pollution	
	Control Board.	
Xxxvii	Noise should be controlled by ensure that it does not exceed	Noted.
	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.	N <sub>2</sub> 4, 1
Xxxvii	Traffic congestion near the entry and exit points from the	Noted.
i	roads adjoining the proposed project Site must be avoided.	
	Parking should be fully internalized and no public space	
	should be utilized.	Noted
xxxix	Opaque wall should meet prescriptive requirement as per	Noted.
	energy Conservation Building Code, which is proposed to be	
	mandatory for all air-conditioned spaces while it is	
	aspirational for non-air-conditioned spaces by use of	
	appropriate thermal insulation material to fulfill requirement.	

r		
Xl	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air	Noted and will be complied.
	and ventilation.	
Xli	Regular supervision of the above and other measures for	Complied.
	monitoring should tie in place all through the construction	Site engineers supervise
	phase, so as to avoid disturbance to the surroundings.	proper implementation of
		EHS safeguard at site.
Xlii	Under the provisions of Environment (Protection) Act. 1986.	Noted. EC letter is
	Legal action shall be initiated against the project proponent if	attached herewith.
	it was found that construction of the project has been started	
	without obtaining environmental clearance.	
Xliii	Six monthly monitoring reports should be submitted 10 the	Complied.
	Department and MPCB.	
Xliv	A complete set of all the documents submitted to Department	Noted
	should be forwarded to the MPCB.	
Xlv	In the case of any change(S) in the scope of the project. The	Noted
	project would require a fresh appraisal by this Department.	
Xlvi	A separate environment management cell with qualified staff	Noted
	shall be set up for implementation of the stipulated	
	environmental safeguards.	
Xlvii	Separate funds shall be allocated for implementation of	Complied EMP along
	environmental protection measures/EMP along with item-	with break up attached as
	wise breaks-up. These cost shall he included is part of the	Annexure-I
	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.	
Xlviii	The project management shall advertise at least in Two local	Complied.
	newspapers widely, circulated in the region around the	Copy of advertisement is attached as herewith.
	project, one of which shall be in the Marathi language of the	attached as herewith.
	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 anti may also be seen at	
	Website at <u>http://envis.maharastra.gov.in</u>	
Xlix	Project management should submit half yearly compliance	Complied.
	reports 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	
		l

	calendar year.	
l	A copy of the clearance letter shall be sent by proponent to rite 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.	Complied.
li	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 came periodically. It shall simultaneously he sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO, NOx (ambient levels as well 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.	Noted and complied.
lii	The project proponent shall also submit six monthly reports on the status of compliance 0f the stipulated EC conditions including 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.	Noted and complied.
liii	The environmental statement for each financial ear 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 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.	Noted
4	The environmental clearance is being issued without prejudice to the 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 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.	Noted

r		
5	In case of submission of false document and non compliance	Noted.
	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. I 986,	
6	The Environment department reserves the right to add any	Noted
	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 ether administrative	
	reason.	
7	Validity of Environment Clearance: The environmental	Noted.
	clearance accorded shall be valid for a period of 5 years.	
8	In case of any deviation or alteration in the project proposed	Noted and will be
	from those submitted to this department for clearance, a fresh	Complied.
	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	Noted.
	under the Water (Prevention arid	
	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	Noted.
	the National Green Tribunal, Van Vigyan bhawan, sec-5 R.K	
	Puram, New Delhi-110 022, if preferred within 30 days as	
	prescribed under section 35 o the National Green Tribunal	
	Act 2010.	

# POST ENVIRONMENT MONITORING REPORT

For the Project "Residential"

**Construction Project** 

At Kothrud,

Pune, Maharashtra

# Period: January,2012-March,2012

<u>Developer</u> M/s. Rathi, Kumar and Beharay East Street Camp, Pune 411001. Maharashtra

# **Prepared by**



GREEN CIRCLE, INC. Vadodara

# <u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Construction of Kothrud, Pune for M/s. Rathi, Kumar and Beharay. has been carried out by M/s. Green Circle, Inc., Vadodara during the period of January,2012-March,2012. The study reveals that there is no negative impact on the environment.

For: Green Circle, Inc.

Mr. Pradeep Joshi CEO & Group President

# **INTRODUCTION:**

M/s. Rathi, Kumar and Beharay is the foremost and most preferred real estate developer in India. M/s. Rathi, Kumar and Beharay any is proposing to construction "RKB" Project at S. No 69/5B/2,69/8 and 70/1 to 17A/1 Kothrud, District Pune, Maharastra.The Proposed Project has received Environmental Clearance from Ministry of Environment & Forest under the provisions of EIA Notification dtd. 14th September, 2006, subject to compliance of the conditions as per letter No. SEAC-2010/CR.727/TC.2 Dated: 26<sup>th</sup> December, 2011As 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

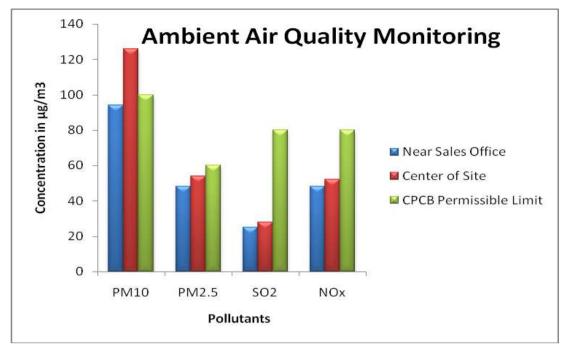
PM10 / PM2.5	:	IS 5182 : Part 23 : 2006/ NAAQS Monitoring & Analysis Guidelines Volume- I by CPCB
SO <sub>2</sub>	:	IS 5182 : Part 2 : 2001
NOx	:	IS 5182 : Part 6 : 1975

## Table No. 2: Ambient Air Quality

Sr. No.	Parameter	Units	rs Result						
	Sampling locations	NAAQS For 24 Hours	Near Sales Office	Center of Site	Methods Used				
1.	Particulate Matter (PM10)	µg/m³	100	94	126	Gravimetric analysis			
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m³	60	48	54	Gravimetric analysis			
3.	Sulfur dioxide (SO <sub>2</sub> )	µg/m³	80	25	28	Improved West & Geake Method			
4.	Oxides of Nitrogen (NOx)	µg/m³	80	48	52	Jacob & Hochheiser Modified Method			

Note:

NAAQS: National Ambient Air Quality Standards



\*\*: 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, PM10 level ranges from 94-126  $\mu$ g/m<sup>3</sup>, PM2.5 ranges from 48-54  $\mu$ g/m<sup>3</sup>, SO<sub>2</sub> ranges from 25-28  $\mu$ g/m<sup>3</sup>, and NO<sub>x</sub> ranges from 48-52  $\mu$ g/m<sup>3</sup>. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

# B. STACK MONITORING:

Stack Monitoring is not yet started.

# 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 10500:1992 as mentioned in following Table 3:

Sr. No.	Parameters	Unit	Bore Well Water	Reference Method	Permissible limit as per IS-10500- 1992 for Drinking Water					
1.	рН	-	7.5	APHA 4500	6.5-8.5					
2.	Temperature	οC	542	APHA 2550	NS					
3.	Turbidity	NTU	352	APHA 2130	10					
4.	Conductivity	µs/cm	25.2	APHA 2510	NS					
5.	Total Dissolved Solids	mg/l	5	APHA 2540 C	2000					
6.	Total Suspended Solids	mg/l	6	APHA 2540 D	NS					
7.	Total Hardness	mg/l	12.5	APHA 2340	600					
8.	Ca Hardness	mg/l	105	APHA 3500 Ca	NS					
9.	Total Alkalinity	mg/l	124	APHA 2320	600					
10.	Chloride	mg/l	165	APHA 4500 Cl	1000					
11.	Sulphate	mg/l	52	APHA 4500 SO4	400					
12.	Copper	mg/l	BDL	APHA 3500 Cu	1.5					
13.	Zinc	mg/l	BDL	APHA 3500 Zn	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 six locations within the project site as per standard method by using sound level meter and the results are reported in Table 4.

<b>6</b>		Noise Level in dB (A) Leq. during						
Sr. No.	Sampling locations	Day Ti	me	Night Time				
NO.		Measured	Limit*	Measured	Limit*			
1.	S-E Entrance	42.1	65	40.3	55			
2.	S-W Entrance	47.2	65	45.1	55			
3.	Center of Site	52.0	65	49.7	55			
4.	West Side Corner	48.2	65	47.5	55			
5.	East Boundary	48.7	65	46.8	55			
6.	Near Site Office	50.9	65	49.1	55			

# Table 6: 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.

# E. SOIL ANALYSIS REPORT

Soil samples were collected from Site at 20 cm depth. Analysis results are tabulated in the following Table 5.

Sr.	Parameters	Unit	Re	sults	Reference Method
No.			Near Site Office	Center of Site	
1.	рН	-	8.2	8.6	IS 2720 : Part 26 : 1987
2.	Moisture Content	%	11.4	12.2	IS 2720 : Part 09: 1992
3.	Sulphate	mg/gm	2.5	2.4	IS 2720 : Part 27 : 1977
4.	Organic Matter	%	1.8	2.0	IS 2720 : Part 22 : 1972
5.	Chloride	%	0.8	0.85	IS 6925: 1973
6.	Copper as Cu	mg/gm	BDL	BDL	APHA 3500-Cu
7.	Total Kjeldhal Nitrogen	mg/gm	0.14	0.18	APHA 4500-Norg
8.	Zinc as Zn	mg/gm	BDL	BDL	APHA 3500-Zn

# Table 7: 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 "Residential"

Construction Project At Kothrud,

Pune, Maharashtra

# Period: April,2012-June,2012

<u>Developer</u> M/s. Rathi, Kumar and Beharay East Street Camp, Pune 411001. Maharashtra

# **Prepared by**



GREEN CIRCLE, INC. Vadodara

# <u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Construction of Kothrud, Pune for M/s. Rathi, Kumar and Beharay has been carried out by M/s. Green Circle, Inc., Vadodara during the period of April, 2012-June, 2012. The study reveals that there is no negative impact on the environment.

For: Green Circle, Inc.

Mr. Pradeep Joshi CEO & Group President

# **INTRODUCTION:**

M/s. Rathi, Kumar and Beharay is the foremost and most preferred real estate developer in India. M/s. Rathi, Kumar and Beharay any is proposing to construction "RKB" Project at S. No 69/5B/2,69/8 and 70/1 to 17A/1 Kothrud, District Pune, Maharastra.The Proposed Project has received Environmental Clearance from Ministry of Environment & Forest under the provisions of EIA Notification dtd. 14th September, 2006, subject to compliance of the conditions as per letter No. SEAC-2010/CR.727/TC.2 Dated: 26<sup>th</sup> December, 2011As 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

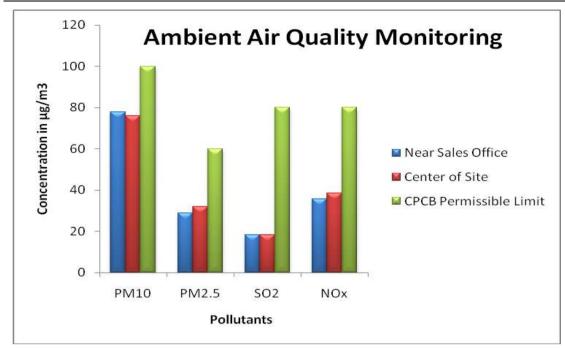
PM10 / PM2.5	:	IS 5182 : Part 23 : 2006/ NAAQS Monitoring & Analysis Guidelines Volume- I by CPCB
SO <sub>2</sub>	:	IS 5182 : Part 2 : 2001
NOx	:	IS 5182 : Part 6 : 1975

## Table No. 2: Ambient Air Quality

Sr. No.	Parameter	Units	Units Result						
	Sampling locations	NAAQS For 24 Hours	Near Sales Office	Center of Site	Methods Used				
1.	Particulate Matter (PM10)	µg/m³	100	78	76	Gravimetric analysis			
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m³	60	29	32	Gravimetric analysis			
3.	Sulfur dioxide (SO <sub>2</sub> )	µg/m³	80	18.4	18.2	Improved West & Geake Method			
4.	Oxides of Nitrogen (NOx)	µg/m³	80	35.6	38.4	Jacob & Hochheiser Modified Method			

Note:

NAAQS: National Ambient Air Quality Standards



\*\*: 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, PM10 level ranges from 76-78  $\mu$ g/m<sup>3</sup>, PM2.5 ranges from 29-32  $\mu$ g/m<sup>3</sup>, SO<sub>2</sub> ranges from 18-19  $\mu$ g/m<sup>3</sup>, and NO<sub>x</sub> ranges from 36-38  $\mu$ g/m<sup>3</sup>. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

# B. STACK MONITORING:

Stack Monitoring is not yet started.

# 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 10500:1992 as mentioned in following Table 3:

Sr. No.	Parameters	Unit	Bore Well Water	Reference Method	Permissible limit as per IS-10500- 1992 for Drinking Water					
1.	рН	-	7.9	APHA 4500	6.5-8.5					
2.	Temperature	0C	682	APHA 2550	NS					
3.	Turbidity	NTU	492	APHA 2130	10					
4.	Conductivity	µs/cm	29.5	APHA 2510	NS					
5.	Total Dissolved Solids	mg/l	7	APHA 2540 C	2000					
6.	Total Suspended Solids	mg/l	8	APHA 2540 D	NS					
7.	Total Hardness	mg/l	18.5	APHA 2340	600					
8.	Ca Hardness	mg/l	120	APHA 3500 Ca	NS					
9.	Total Alkalinity	mg/l	148	APHA 2320	600					
10.	Chloride	mg/l	182	APHA 4500 Cl	1000					
11.	Sulphate	mg/l	102	APHA 4500 SO₄	400					
12.	Copper	mg/l	BDL	APHA 3500 Cu	1.5					
13.	Zinc	mg/l	BDL	APHA 3500 Zn	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 six locations within the project site as per standard method by using sound level meter and the results are reported in Table 4.

Sr. No.	Sampling locations	Noise Level in dB (A) Leq. during				
		Day Time		Night Time		
		Measured	Limit*	Measured	Limit*	
1.	S-E Entrance	45.6	65	41.8	55	
2.	S-W Entrance	49.5	65	42.8	55	
3.	Center of Site	55.4	65	50.8	55	
4.	West Side Corner	50.6	65	49.2	55	
5.	East Boundary	50.9	65	48.7	55	
6.	Near Site Office	52.6	65	50.3	55	

# Table 6: 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.

# E. SOIL ANALYSIS REPORT

Soil samples were collected from Site at 20 cm depth. Analysis results are tabulated in the following Table 5.

Sr.	Parameters	Unit	Results		<b>Reference Method</b>	
No.			Near Site Office	Center of Site		
1.	рН	-	8.5	8.0	IS 2720 : Part 26 : 1987	
2.	Moisture Content	%	9.4	9.8	IS 2720 : Part 09: 1992	
3.	Sulphate	mg/gm	2.0	2.15	IS 2720 : Part 27 : 1977	
4.	Organic Matter	%	1.5	1.6	IS 2720 : Part 22 : 1972	
5.	Chloride	%	0.78	0.82	IS 6925: 1973	
6.	Copper as Cu	mg/gm	BDL	BDL	APHA 3500-Cu	
7.	Total Kjeldhal Nitrogen	mg/gm	0.15	0.20	APHA 4500-Norg	
8.	Zinc as Zn	mg/gm	BDL	BDL	APHA 3500-Zn	

# Table 7: 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.

#### <u>ANNEXURE – I</u>

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

A proposed project is a construction named as "RKB" Residential at S. No 69/5B/2,69/8 and 70/1 to 17A/1 Kothrud, District Pune, Maharastra

#### 2. PROJECT PROPOSAL:

Residential-19 (P+2) with 893 flats Commercial- one(G+1)

#### 3. AREA STATEMENT:

Sr.No	Area Statement	AREA in Sq. mt.
1.	Area of Plot	58370.91
2.	Deductions For	
	a. Area under open Space	6749.98
	b. Area for transformer	605.00
3.	Balance area of plot	51015.96
4.	ADD FSI	31760.09
а	18m wide DP road	6481.89
b	12 m wide Service road	3665.28
с	9m wide internal road	17855.59
d	40% Amenity TDR	20406.38
5.	Total Area	82776.05

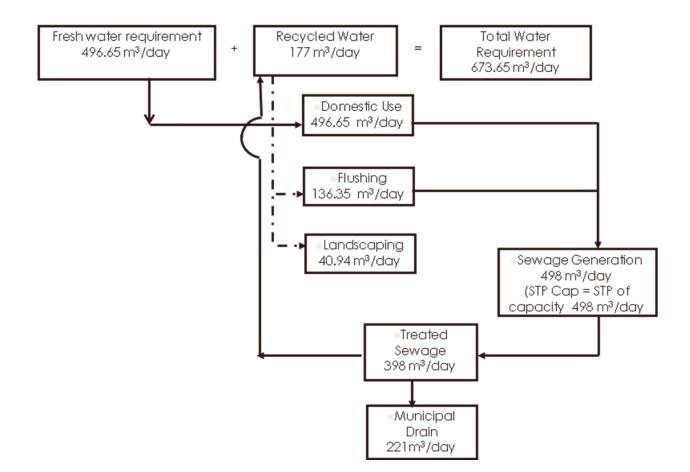
6.	Residential FSI & Floor space permissible	82776.05
7.	Residential FSI & Floor space proposed	80687.11
8.	Commercial FSI & Floor space permissible	2088.94
9.	Commercial FSI & Floor space permissible	2002.50
10.	Total commercial and residential FSI	82689.61

## PARKING STATEMENT

	Required Parking as per DC	Parking Provided
Cars	1208	1292
Scooters	2446	2477
Cycles	2766	2766

## 4. WATER CONSUMPTION:

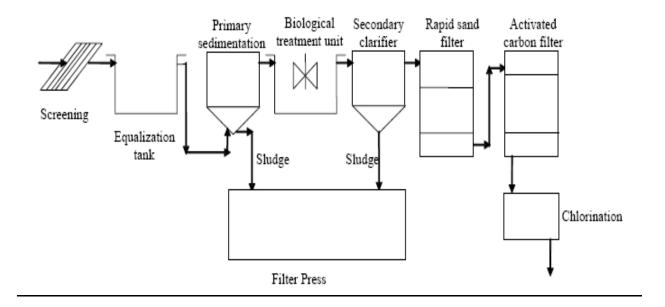
- > Total Water Requirement =  $673.65 \text{ m}^3/\text{day}$
- Fresh Water Requirement = 496.65 m3/day
- Total Sewage Generation = 498 m3/day
- > STP Capacity =  $498 \text{ m}^3/\text{day}$
- > The treated water shall be used for flushing & Landscaping.



## 5. SEWAGE TREATMENT PLANT:

Total sewage generation during operation will be 498 m3/day. Sewage Treatment Plants (STP) of capacity 498 m3/day is proposed to treat generated sewage at site. The treated sewage will be 398m3/day out of which 177 m3/day will be reused for Landscaping & Flushing. Excess treated water 221 m3/day will be disposed off in to the municipal sewer line.

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



#### **SEWAGE CHARACTERISTICS:**

Sr. No.	Parameter	Unit	Raw sewage characteristics	Treated sewage Characteristics
1.	рН		7.0-10.0	6.0-7.0
2.	BOD 5 days at 27ºC	mg/l	250-350	< 5 mg/lts

3.	COD	mg/l	600	< 15 mg/lts
4.	Suspended Solids	mg/l	150	< 10 mg /l <del>l</del> .

## 6. SOLID WASTE GENERATION:

#### Solid Waste Generation :

#### **During Construction Phase:**

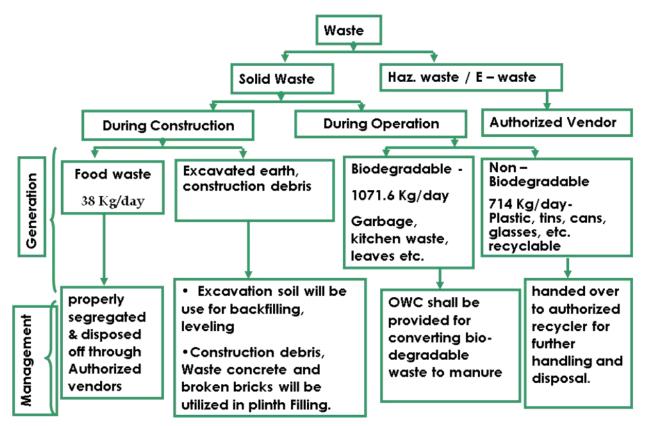
Solid waste from Worker : 38 kg/day

#### **During Operation Phase:**

- a) Biodegradable : 1071.6 Kg/day
- b) Non-biodegradable : 714 Kg/day
- c) STP Sludge : 20 kg/day
- The segregation of waste will be done on the basis of Biodegradable & Non-biodegradable

#### • <u>Disposal :</u>

- 1. During construction phase generated debris will be used for low-land leveling, secondary concrete, below roads.
- 2. Excavated soil will be used for refilling or foundation trenches and balance quantity will be handed over to the authorized vendors.
- 3. Non Biodegradable waste would be disposed through authorized contractor.
- 4. Biodegradable waste will be treated as organic waste converter.
- 5. STP Sludge would be used as manure for gardening.



#### 7. DETAILS OF POWER REQUIREMENT:

SR. NO.	POWER REQUIREMENT	
1.	Source of power supply : MSEB	
2.	During Construction Phase	63 KVA
3.	During Operation Phase, a) Connected Load	9500 KVA
	b) Demand Load	3800 KVA
4.	DG set as Power Back – up during operation	125 KVA X 1 250 KVA X 2 500 KVA X 2

#### **ENERGY CONSERVATION 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 2,40,000KWH /year ). r/l =5000x.8x0.1x6hr/dayx300d/yrx.5
  - Hot water requirement for low rise, will be met by Solar water heating system (Power saving 3,60,000 KWH /year).

- All Buildings/ Areas will be equipped with Capacitor Banks, with heavy duty compact gas filled capacitors with harmonic filters to maintain THD's less than 10% with auto power factor correction panels to be connected with LT panels at load end. This is to reduce the power losses caused by low power factor & Harmonic distortions of power wave form.
- Electrical distribution system will be monitored regularly and energy consumption will have check meter, so that any energy loss will be detected and will be rectified immediately.
- > Insulated Roof to reduce heat gain.
- Common light load requirement in high rise buildings/ street lighting will be met by use of solar if feasible. Energy will be saved 50,000 KWH /year.

# 8. TREE PLANTATION:

R.G. area/ Landscape Area:-	16347.3 SqM
New Trees Plantations:-	504 nos.

#### Criteria For Species Selection:-

- Favorable For The Climatic Condition Native Species.
- Require Low Maintenance.
- Improve Microclimatic Condition Within Site.
- Provide Shade and Create Avenue.
- Act As a Buffer & Control Air & Noise Pollution.

#### LIST OF TREES PROPOSED

SR NO.	VARIETY	C/C DISTANCE	QUANTITY			
1.	KHAYA	5.00M	32			
2.	TERMINILIA CATAPPA	5.00M	30			
3.	MIMOSOPS ELENGI	5.00M	57			
4.	CASSIA FISTULA	5.00M	59			
5.	PARIJATAKA	3.00M	92			
6.	FILLICIUM DECIPENS	4.50M	26			
7.	PLUMERIA ALBA	3.00M	33			
8.	NEDAMAREKIA KADAMBA	5.00M	22			
9.	MICHELIA CHAMPAKA	3.00M	38			
10.	PUTRANJIRA	3.00M	26			
11.	MAHAGONY	5.00M	23			
12.	CYCUS PALM	1.50M	03			
13.	FICUS BENJAMINA	1.50M	12			
14.	CASSIA PINK	5.00M	51			
	TOTAL NO. OF TREES 504 nos.					
	LAWN AREA = 4871.84 Sqmt					

## 9. ENVIRONMENTAL MANAGEMENT PLAN

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
1.	Water	Water contamination	<u>Construction Phase</u> Domestic waste water from workers	Septic tank will be provided and disposed into municipal sewer	No adverse impact
			Surface runoff from site.	Silt traps and diversion ditches will be constructed to control surface run off.	No adverse impact
			<u>Operation phase</u> Discharge of domestic wastewater.	Generated sewage will be transferred to STP for its treatment of 700 m <sup>3</sup> /day capacity.	No adverse impact
			Surface runoff from site	Rain water harvesting – ground water recharging will be done through percolation pits thereby prevent run off and facilitate water percolation.	Positive impact.

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
2.	Air Quality	Dust Emission	<u>Construction Phase</u> Construction activities	<ul> <li>Dust mask will be provided to prevent worker exposure of dust.</li> <li>Barricading the site periphery by tin sheets.</li> <li>Sprinkling of water will be done for dust suppression.</li> </ul>	Temporary & insignificant impact.
		Gaseous emissions of pollutants i.e. SPM, SO <sub>2</sub> , NO <sub>x</sub> and HC	Construction equipments and vehicular movement.	<ul> <li>Periodic maintenance of construction equipments will be done.</li> <li>Heavy vehicle must be checked for PUC certificate.</li> </ul>	Temporary & insignificant impact.
		Gaseous emissions of SPM, SO <sub>2</sub> , NO <sub>x</sub> and HC.	<u>Operation Phase</u> DG Set	Applicable height of stack is given. Also it is operated only during absence of the normal electricity.	No significant impact
			Emissions from vehicular traffic.	<ul> <li>Adequate wide approach road is proposed for smooth vehicular movement.</li> <li>Road side plantation will further act as sink to gaseous emission.</li> </ul>	No significant impact

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
3.	Noise	Increase in noise level.	<u>Construction Phase</u> Operation of construction equipments and vehicular movement.	Use of well-maintained equipment fitted with silencers. Providing noise shields near the heavy construction operations. Noisy operations will be limited to day time only. Ear plug and muffs will be provided to workers.	No significant impact.
			<u>Operation Phase</u> Vehicles movement	Wide road and ample parking space will be provided to reduce vehicular noise	No significant impact
			D.G. sets operations	No significant noise pollution.	No impact.
4.	Land	Land contamination by construction debris	<u>Construction Phase</u> Disposal of construction	• Construction debris will be collected and used for leveling the site.	No significant impact.

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
		and solid waste.	debris & solid waste.	• Solid waste from labours use will be colleted in collection bins and disposed off to approve municipal landfill site.	
			Excavated soil	Top soil will be used for landscaping	No significant impact.
			Metallic waste	Metallic waste will be sold to vendors for reprocessing	No significant Impact.
			<u>Operation Phase</u> Municipal solid waste like	Efficient solid waste collection and storage facility is proposed.	No significant impact
			rubbish, paper, plastic garbage etc.	Segregation of waste as biodegradable and non biodegradable waste will be done.	Compost material will be used as
				Biodegradable waste will be treated by vermin composting while non biodegradable waste will be given to approved vendors for disposal.	manure in landscaping.

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
5.	Ecology	No significant Impact	Construction Phase     Site Development     during construction	• There is a plain terrain	•
			<ul><li><u>Operational Phase</u></li><li>Increase of green cover</li></ul>	• Suitable green belt will be developed as per landscaping plan at site.	•
6.	Traffic Pattern	Increase of vehicular movements	<ul> <li><u>Construction Phase</u></li> <li>Heavy Vehicular movement at site</li> </ul>	• Heavy Vehicular movement will be restricted to daytime only and adequate parking facility will be provided.	
			Operational Phase• Traffic due to commercial once the site is operational	<ul> <li>Vehicular movement will be regulated inside the site with adequate roads and parking.</li> </ul>	

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
7.	Socio-Economic	Increase in Job opportunities	<ul> <li><u>Construction Phase</u></li> <li>Job opportunities for the local residents</li> </ul>		

**Public Notice** 

**English News Paper:** 

PUBLIC NOTICE We, M/S Rathi, Kumar & Beharay brings the kind notice of general Public that Environment Department of Government Of Maharashtra has granted environmental clearance for proposed "Residential Project" situated at S.No.69/58/2, 69/8 & 70/1 to 17A/1, P.No.4. Kothrud, Pune, Maharashtra, vide their letter dated 26th December 2011 bearing file No. SEAC-2010/CR.727/TC.2. The copies of the Clearance letter is available with Maharashtra Pollution Control board and may also be seen on the website of Department of Environment. Government of Maharashtra at http://www.envis.maharashtra.gov.in-M/s. Rathi, Kumar & Beharay

Marathi News Paper:

जाहार स्वना जाम्ही मे.राठी, कुमार आणि बेहेरे यादार सबसाधारण जनतेस कळव की, महाराष्ट्र सरकारच्या पर्यावरण मंडळाने आमच्या गढ ने. इ९/५वी/२ द १/८ आगि ७०/१ ते १७ए/१, पी.नं.४, कोयरुड, पुणे, महाराष्ट्र येथील "बांधकाम" प्रकल्पाला २६ डिसेवर २०११ 27:01 5 SEAC. 2010/CR.727/TC.2. जन्वये प्रयावरण विषयक मजुरी दिली आहे. प्रयावरण विषयक मंजुरीची प्रत महाराष्ट्र प्रदूषण नियंत्रण मंडक यांच्या कार्यालयामध्ये पर्यावरण विभाग, महाराष्ट्र सरकार तरा व TI EZIT http://www.envis.maharashtra.gov.in या सकेतस्यळावर अपलब्ध SHS. मे. राठी, कृतार आणि बेहरे

## PROJECT STATUS REPORT

#### BACKGROUND

EC No.	:	SEAC-2010/CR.727/TC.2 Dated: 26 <sup>th</sup> December, 2011
Project name	:	"Hill View Residency"
Project location	:	S. No 69/5B/2,69/8 and 70/1 to 17A/1 Kothrud, District
		Pune, Maharastra
Developer name	:	M/s. Kumar Beharay
Developers	•••	Kumar Capital, 1 <sup>st</sup> Floor, 2413, east Street Camp, Pune
address		411001. Maharashtra

Status updated on	: <u>12/05/2012</u>
Activity Phase of project	: Phase-I Construction Work is Just Started Now.
Excavation details	: <u>5 % Completed</u>

#### **CONSTRUCTION DETAILS:**

Sr. No	Building Name/ other	Current status of Work
1.	K Building	Work Yet Not Started
2.	L Building	Work Yet Not Started
3	Gardening/Landscape	Work Yet Not Started
4	STP	Work Yet Not Started
5	RWH	Work Yet Not Started
6	Internal Roads	Work Yet Not Started
7	Lighting	Work Yet Not Started

Note:-Excavation is just started on site.

MA	H	ARASHATRA	POLLUT	TION CONTROL BOARD
Phone	:	24020781 / 24010437	MAHARASHTRA	Kalpataru Point, 2 <sup>nd</sup> , 3 <sup>rd</sup> & 4 <sup>th</sup> Floor,
Fax	:	24024068 / 24044532		Opp. Cineplanet, Near Sion Circle.

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

mpcb@vsnl.net

Email

11211

EIC No: PN-13794-12 Infrastructure Project/LSI Consent No. MPCBHQ/ROHQ/Pune/CE/CC/ 523

Date: 23/08/2012

Sion (E), Mumbai-400022.

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 Authorization / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2008

CONSENT is hereby granted to,

M/s. Rathi, Kumar & Beharay S. No: 69/5B/2, 68/8 & 70/1 to 17A/1, Kothrud, Pune, Maharashtra.

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(M&H) Rules and amendments thereto subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

The Consent to Establish is valid up to Commissioning of the Project or 5 years whichever is earlier.

For development of land/ plot as new construction activities for construction of residential cum commercial project named as M/s. Rathi, Kumar & Beharay, S. No: 69/5B/2, 68/8 & 70/1 to 17A/1, Kothrud, Pune, Maharashtra on total plot area of 58,371 sq.mtr, Proposed BUA [As per FSI] of 82,689.61 sq.mtr & Total Construction BUA of 1,07,068.11 sq.mtr including utilities of residential cum commercial project as per construction commencement certificate issued by local body.

# 2. CONDITIONS UNDER WATER ACT:

 The daily quantity of sewage effluent from construction project shall not exceed 498.0 M<sup>3</sup>.

(ii) Sewage Effluent Treatment: The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluence be following standards.

1.

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	Fecal Coliform	Not to exceed	500/100/1 mg/l.
5	Residual Chlorine	Not to exceed	01 mg/l.
6	Detergent	Not to exceed	01 mg/l.
7	Floating matters	Not to exceed	10 mg/l
8	COD	Not to exceed	250 mg/l

(iii) Sewage Effluent Disposal: The treated domestic effluent shall be 80% recycled and reused for flushing, fire fighting and cooling of Air conditioners and remaining shall be discharged to Municipal sewer. In no case, effluent shall find its way to any water body directly/indirectly at any time.

[The project proponent authorities should opt environmental friendly technologies like ozonation, UV treatment etc by replacing chlorination]

(iv)

#### Non-Hazardous Solid Wastes:

Sr.No	Type of Segregated solid waste	Quantity Kg/D	Treatment	Disposal
1.	Wet Garbage	1017.60	X V	Use as
2.	STP Sludge	75	Composting	Manure
2.	Dry Garbage	714	and a lotter	landfill site

#### 3. Other Conditions (during Construction Phase):

- 1. All activities shall be in resonance with the provisions of Indian Forest Act, 1927 (16 of 1927), Forest (Conservation) Act, 1980 (69 of 1980) and Wildlife (Protection) Act, 1972 (53 of 1972), and special notification published for area wherever applicable and all the Environmental Statutes and Instruments.
- 2. This Consent to Establish is issued only for New Construction/Developing Construction Project purposes.
- 3. No quarrying activities shall be commenced in the area unless appropriate permissions are obtained for a limited quarrying material required for construction of local residential housing and traditional road maintenance work, provided that such quarrying is not done on Forest Lands and the material is not exported to the outside area.
- 4. There shall be no felling of trees whether on Forest, Government, Revenue or Private lands except as per prevailing Rules.
  - 5. Extraction of Groundwater for the project shall require prior permission of the State Ground Water Authority or other relevant authorities, as applicable.
- 6. Near the activities that are related to water (like activity of water parks, water sports) and/or in the vicinity of lake, Dissolved Oxygen shall not be less than 5 mg/liter.
  - 7. In order to ensure that the water from this project do not enter into outside environment, the nallas crossing the township/complex premises, shall be lined, covered and made water tight by the applicant within the premises with intermittent inspection of chambers following good engineering practices as per the regulations of local body.
  - 8. The Applicant shall prepare management plan for water harvesting, roofwater reclamation, water/storm water conservation and implement the same before handling over of complex for occupation.
  - 9. Applicant shall provide fixtures for showers, toilet, flushing and drinking should be of low flow either by use of aerators or prosperities ducing devices or sensor based control.

2

- 10. The Applicant shall draw plans for the segregation of solid wastes into biodegradable and non-biodegradable components. The biodegradable material shall be recycled through scientific in-house composting (i.e vermi-composting facility within premises) with the approval of local body. The proper demarked area shall be identified for collection & storage of MSW properly which, shall be finally disposed off at approved Municipal Solid Waste landfill site of local body environmentally acceptable location and method. It is clarified that the term solid waste includes domestic, commercial, and garden wastes, but does not include hazardous and biomedical wastes. The activities of bio-composting and engineered landfill shall be as per the Municipal Solid Waste (M&H) Rules, 2000
- 11. Applicant shall be responsible to take adequate precautionary measures as detailed in this consent.
- 12. The applicant/generator shall be responsible for safe and scientific collection, transportation, treatment and disposal of Bio-Medical Waste as per the provisions made under the Bio-Medical Waste (Management & Handling) Rules, 1998. Any activity as defined under BMW (M & H) Rules has to obtain a separate Authorization from Maharashtra Pollution Control Board.
- 13. For disinfections of waste water ultra violet radiation shall be used in place of chlorination.
- 14. Vehicles hired for construction activities should be operated only during non peak hours.
- 15. Ready mixed concrete used in building construction should apply separately for consent from the Board.
- 16. Applicant, during the construction stage shall provide
  - a. Septic tank and soak pit of adequate capacity for the domestic effluent generated due to workers residing at site.
  - b. Proper loading and unloading of construction material, excavated material and its proper disposal as per MSW (M&H) Rules 2000.
  - c. Cutting of trees is not permitted, however in unavoidable conditions necessary permission from the local body shall be obtained.
  - d. Green belt of 33% of the open space shall be developed.
- 17. E-Waste shall be disposed to authorized re processor.
- . The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and amendment Rules, 2003 there under,

The daily water consumption for the following categories is as under:

<ul><li>(i) Domestic</li><li>(ii) Water gets Polluted &amp;</li></ul>		673.65 CMD
Pollutants are Biodegradal (iii) Water gets Polluted, Pollut		CMD
are not Biodegradable & To (iv) Industrial Cooling, sprayin	oxic	CMD CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

- 5. CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981:
  - (i) The Applicant may install 4-nos of diesel generating sets (DG Sets), of capacity 500 KVA, (250 KVA x 2-Nos), 125 KVA and shall be equipped with comprehensive control system as is warranted with reference to generations of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

(i	) SPM/TPM			ng/Nm3
(i	i) SO2 (DG Set)	Not to exceed		Kg/day
(ii) The	following measure	es shall be taken:		New York
	SUZ, NUX, SPIM, a	nd RSPM.		to control emissions of
b.	Applicant shall ach	nieve following Ambie	ent Air Q	uality standards
1.	SPM Not to Exce	eed (Annual Average)	140	μg/ m3
	Not to Exceed (24	hours)	200	μg/ m3
2.	SO2 Not to Exce	eed (Annual Average)	60	μg/ m3
	Not to Exceed (24	hours)	80	μg/ m3
3.	NOx Not to Exce	ed (Annual Average)	60	μg/ m3
	Not to Exceed (24	hours)	80	μg/ m3
4.	RSPM Not to Exce	ed (Annual Average)	60	μg/ m3
	Not to Exceed (24	hours)	100	μg/ m3

#### (iii) The applicant shall observe the following fuel pattern:-

Sr. No.	Type Of Fuel	Quantity		
1	Diesel	80 Ltrs/Hr		
iv) The ap specific:	plicant shall erect the ations:-	chimney(s) of the following		
Sr. No.	Chimney Attached To	Height above the roof of building in which it is installed		
1. and adapting the address of the	DG Set 500 KVA (250 KVA x 2-Nos) 125 KVA	3.5 mtrs 2.0 mtrs each 1.0 mtrs		

#### (v) Conditions for D.G. Set:

- 1. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- 2. 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.
- 3. 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 75 dB(A) during day time and 70 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
- 4. 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.
- 5. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- 6. 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.
- 7. D.G. Set shall be operated only in case of power failure.
- 8. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

4

#### (vi) Other Conditions:

- a) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- b) Water spraying shall be done on ground to avoid fugitive emissions.
  - c) Construction material shall be carried in enclosed vehicles during construction activities.
- d)

## (vii) Conditions for Utilities like Kitchen, Eating Places etc:

- 1. The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting.
- 2. The toilet shall be provided with exhaust system connected to chimney through ducting.
  - 3. The air conditioner shall be vibration proof and the noise shall not exceed 68 dB (A).
  - 4. The exhaust hot air from A.C. shall be attached to Chimney at least 5 mtrs. higher than the nearest tallest building through ducting and shall discharge into open air in such way that no nuisance is caused to neighbors.
- (viii) The Applicant shall take adequate measures for control of noise levels from its own sources within the complex (residential cum Commercial) in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Daytime is reckoned as between 6 a.m. to 10 p.m. and Nighttime is reckoned between 10 p.m. to 6 a.m.
- (ix) Construction equipments generating noise of less than 65/90 db(A) are permitted.
- (x) No construction work is permitted during nighttime.

# 6. CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES, 2008:

# (i) The applicant shall handle hazardous wastes as specified below.

- 7. The applicant shall certify that the bricks used in construction are manufactured using the ash from Thermal Power stations if it is within a radius of 100 km. from Thermal Power Plant and submit the names of bricks manufacturer. The applicant shall use fly ash based material/products as per the provisions of fly ash Notification of 14.09.1999 and as amended on 27.08.2003.
- 8. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.
- 9. The applicant shall adopt environment friendly technology in development of the project.
- 10. The applicant shall take the proper remediation measures to ensure that the ground water and soil contamination is prevented and follow due diligence at the construction stage.
- 11. Energy conservation measures like installation of solar panels for lighting the area outside the building should be integrated part of the project design.
- The applicant shall use fly ash based material/products as per the provisions of fly ash Notification of 14.09.1999 and as amended on 27.08.2002



- 13. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
- 14. The applicant shall provide Environmental friendly road transportation by adopting mechanical type closed trucks for transportation of minerals & metals / construction debris with effect from 1/04/2012.
- 15. The applicant shall comply with the conditions stipulated in Environment Clearance granted by GOM, vide no: SEAC-2010/CR.727/TC.2, dt: 26/12/2011.
  - 16. The applicant shall comply with the guidelines for High rise building stipulated in office memorandum of MoEF, GOI issued vide no: 21-270/2008-IA.III, dt: 07/02/2012.
  - 17. This is issued pursuant to the decision of Consent Committee of the Board in its meeting held on 8th August 2012 and approval of the Chairperson of the Board.
  - The applicant shall submit Bank Guarantee of Rs. 10.0 Lakhs towards the 18. compliance of consent conditions at Regional Office, MPCB, Pune within 15-days.
  - 19. The Capital investment of the project is Rs. 207.0 Cr.

12:2

(Milind Mhaiskar) Member Secretary

To.

M/s. Rathi, Kumar & Beharay S. No: 69/5B/2, 68/8 & 70/1 to 17A/1, Kothrud, Pune, Maharashtra.

#### Copy to-

- Regional Officer, MPCB, Pune He is directed to obtain necessary Bank 1. Guarantee from the applicant and ensure compliance of consent conditions
- Sub Regional officer, Pune-II, MPCB, 2.
- Chief Accounts Officer, Mumbai, MPCB, 3.

Received consent fee of:-				
and the second	and the second second second	no tomine line	D' Instruction	The str

Sr. No.	Amount	DD. No.	Date	Drawn On
1.	Rs. 4,14,000/-	010731	27/03/2012	ICICI Bank
2.	Rs. 100/-	010732	27/03/2012	ICICI Bank

Cess Branch, MPCB, Mumbai. 5. Master file. 4.

6