MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

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

	Monitoring Report				
	PART – I DATA SHEET				
No.: 02			Date: December,2010		
1.	Project type: River –Valley/ Mining/ Industry/Thermal/Nuclear/other (specify)	:	Construction Project (Residential Complex)		
2.	Name of the project	:	Kumar Prince Town		
3.	Clearance letter (s)/OM no. and date	:	No. 21-221 /2007-IA-III Date: 24 th December, 2007		
4.	Location	:			
	(a) District	:	Pune		
	(b) State	:	Maharashtra		
	(c) Latitude / Longitude	:	Latitude: 18° 31 'N Longitude: 73° 51 'E		
5.	(a) Address for correspondence		M/s. Manikchand Kumar Properties Add.: Kumar Capital, 1 st Floor, 2413 East Street Camp, Pune – 411001		
	(b) Address of Executive Project Engineer/ Manager (with pin code / Fax)	••	Mr. Samir Patil Add.: M/s. Manikchand Kumar Properties Kumar Capital, 1 st Floor, 2413 East Street Camp, Pune – 411 001 Tel.: 08956489487 Fax: 91-20-26353365 Email: <u>samir@kumarworld.com</u>		
6.	Salient Features				
	(a) Of the project	:	Refer Annexure I - Project Details		
	(b) Of Environmental Management Plans	:	Refer Annexure I - 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.	:	Proposed Project is located in Residential zone and the project site was a vacant land. Therefore, no population will be affected or delocalized.
	(a) SC, ST /Adivasis	•	Nil
	(b) Others (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)	•	Nil
9.	Financial details		
	(a) Project cost as originally planned and sub-sequent revised estimates and the year of price reference.	••	Total Project cost is 132.45 Crore
	(b) Allocation made for environmental management plans with item wise and year wise break-up.	•	Yet to finalize.
	(c) Benefit cost ratio/Internal rate of Return and the year of assessment	:	Yet to finalize.
	(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 finalize.
	(f) Actual expenditure incurred on the environmental management plans so far	:	Yet to finalize.
10.	Forest land requirement.	:	Nil
	(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.	:	
	a) Date of commencement (Actual and / or planned)	•	June'2009
	b) Date of completion (Actual and/ or planned)	•	2017, The Project is under construction
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 monitored by the Regional Office on previous occasions, if any	:	Not applicable
	(b) Date of site visit for this monitoring report	:	August'2010 & November'2010 (Env. Monitoring report is attached herewith. Environment Monitoring was carried by M/s. Green Circle, Inc.)
15.	Details of correspondence with project authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits. (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.	•	Letter issued by MoEF: EC No. : No. 21-221/2007-IA-III dated 24 th December, 2007. Consent No.: BO/RO (P&P)/EIC No. PN-4045-09/E/CC-291 dated 07th August, 2009.

FROM : GREEN CIRCLE

Dec. 26 2007 11:38AM Pi

Kind Atm. Mr. Manish fau

By Speed Post

No. 21-221/2007-IA.III Government of India Ministry of Environment and Forests (LA. division)

Paryavaran Bhawan, CGO Complex,Lodhi Road New Delhi 110510 Dated: 24.12.2007

TO,

M/s Manikchand Kumar Properties Kumar Capital, 1st Floor, 2413 East Street, Camp Pune 411001

Subject: Environmental Clearance for Construction of residential complex at Undri, Pune.

Sir.

I am directed to refer to your application seeking prior environmental clearance for the above project under the EA Notification 2006. The above proposal has been appraised as per prescribed procedure on the basis of the mandatory documents enclosed with the application viz. Form 1 & 1 A, and Conceptual plan and the additional clarifications furnished in response to the observations of the Additional Expert Appraisal Committee constituted by the competent authority in its 21st meeting held on 12-14 September, 2007.

2. The project proponent is proposing for Construction of Residential Complex, at S.No.9/1 (pt) Undri, Pune at a cost of Rs.132.45 crore. The proposed development will consists of Residential Complex comprising of 22 residential buildings for 946 flats. The total plot area is 1.01.600 sq. m. The total proposed built up area as indicated is 94,413.45 sq. m. Total water requirement will be 775 cu.m./day including recycled water and total westewater generation from the project will be 620 cu.m./day. The STP (capacity 650 cu.m/d) will be installed at site to treat wastewater generated from the project. The treated waste water will be used for landscape, flushing and non-potable purpose in the premises and unused wastewater will be discharged in to public server. The total solid waste generated will be 1265 kg/day. Vermi-composting of biodegradable waste will be done and Non-biodegradable waste will be handed over to local municipal authority for disposal. Total parking space will be provided for parking of 1050 cars and 950 two-weelers.

3. The documents submitted along with the application predict that there will be minor negative impact on the Air quality during construction as well as operation phase. There will be minor negative impact on ambient noise level inside the premises during construction phase. There will be positive impact on FAX NO. : 011 24370330

Dec. 26 2007 11:39AM P2

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land use pattern due to landscaping and greenbelt development. Plantation of trees and development of recreational area, surrounding area will have positive impact on overall land use.

4. The additional EAC after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations have awarded "Gold" grading and recommended the grant of environmental clearance for the project mentioned above subject to compliance with the EMP and other stipulated conditions Accordingly, the Ministry hereby accords necessary environmental clearance under category 8(a) for the project subject to the strict compliance with the specific and general conditions mentioned below.

PART A- .SPECIFIC CONDITIONS

I. Construction Phase

- i. Consent for establishment shall be obtained from the State Pollution Control Board/Pollution Control Committee under Air and Water Act and a copy of the same shall be submitted to the Ministry before start of any construction work at site.
- For disinfection of waste water ultra violet radiation shall be used in place of chlorination.
- iii. Vehicles hired for construction activities should be operated only during non-peak hours.
- All the top soil excavated during construction activities should be stored for use in horticulture/landscape developments within the project site.
- .v. Ready mixed concrete shall be used in building construction.
- Water demand during construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices.
- vii. Permission to draw ground water shall be obtained from competent authority prior to construction/operation of the project.
- viii. Separation of gray and black water should be done by the use of duel plumbing line. Treatment of 100% gray water by decentralized treatment should be done.
- 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.
- x. Use of glass may be reduced upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- Roof should meet the prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material to fulfill requirement.
- xii. Opaque wall should meet prescriptive requirement as per energy conservation building onde 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 to fulfill requirement.

2

Dec. 26 2007 11:39AM P3

xiii Storm water control and its reuse should be as per Central Ground Water Board and BIS standards for various applications.

- xiii. Necessary approval of competent authority of State Forest Department shall be obtained before starting construction.
- xiv All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- xv. Soil and ground water samples will be tested to ascertain that there is no threat to groundwater quality by leaching of heavy metals and other toxic contaminants.
- xvi A First Aid Room will be provided at the project site both during construction and operation of the project.
- Xvii Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- xviii Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighboring communities and be disposed off taking the necessary precautions for general safety and health aspects of people.
- xix Diesel power generating sets used during construction phase should be of "enclosed type" to prevent noise and should conform to rules made under Environment (Protection) Act 1986, prescribed for air and noise emission standards.
- xx Amblent noise levels should conform to standards both during day and night when measured at boundary wall of the premises. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase.
- xxi. The construction agencies shall use flyash based material/ products as per the provisions of fly ash notification of 14.9.1999 and as amended on 27.8.2003.
- xxii Vehicles hired for bringing construction material at site should be in good condition and should have valid "pollution under check" (PUC) certificate and to conform to applicable air and noise emission standards and should be operated only during non-peaking hours.
- xxiii Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such material must be secured so that they should not leach into the ground water.
- xxiv Any hazardous waste generated during construction phase should be disposed of as per applicable Rules & norms with necessary approvals of the Maharashtra Pollution Control Board.
- xxv 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.
- xxvi 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 had started without obtaining environmental clearance.

3

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II. Operation Phase

to the project is subject to the

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Dec. 26 2007 11:40AM P5

4

FAX NO. : 011 24370330 Diesel power generating sets proposed 30330 lifts and common area illumination should be of "enclosed type" and conform to rules made under Environment (Protection) Act 1986, prescribed for air and noise emission standards as per CPCB guidelines. Exhausts should be nischarged by ctack, raised to 4 meters above the rooftop.

During nightime the nation levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent

regulations. Noise barriers should be provided at appropriate locations so as to ensure iv. that the noise levels do not exceed the prescribed standards.

Weep holes in the compound walls shall be provided to ensure natural ν. drainage of rainwater in the catchment area.

The sewage treatment plant of adequate capacity should be provided to treat sewage generated from the complex and it should be certified by an independent expert for adequacy as well as efficiency and should submit a report in this regard to the Ministry before the project is commissioned for operation. The wastewater should be treated to tertiary level and after treatment reused for flushing and landscaping. Discharge of treated sewage shall conform to the norms & standards prescribed by Maharashtra State Pollution Control Board.

Rainwater harvesting and ground water recharging shall be practiced. Oil vii. & Grease trap shall be provided to remove oil and grease from the surface run offand suspended matter shall be removed in a settling tank before its utilization for rainwater harvesting.

The solid waste generated should be property collected & segregated. VIE, Wet garbage should be composted and dry/inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.

Any hazardous waste including biometrical waste should be disposed of ix as per applicable Rules & norms with necessary approvals of the Maharashtra State Pollution Control Board.

The green belt design along the periphery of the plot shall achieve x attenuation factor conforming to the day and night noise standards pre-scaled for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.

XĪ Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.

xii. The ground water levels and its quality should be monitored regularly in consultation with Central Ground Water Authority.

XIII. A Report on the energy conservation measures should be prepared incorporating details about building materials & technology, R & U Factors etc. and submitted to the Ministry in three months time.

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Dec. 26 2007 11:41PM P6

xiv. The values of R & U for the Commercial building envelope should meet the requirements of the hot & humid climatic location. Details of the building envelope should be worked out and furnished in three months time.

xv. Energy conservation measures like installation of solar panels for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

PART-B. GENERAL CONDITIONS

i) This environmental clearance is subject to Hon'ble Supreme Court's decision regarding siting of project near wildlife sanctuary.

 The environmental saleguards contained in the documents should be implemented in letter and spirit.

iii) Provision should be made for the supply of kerosene or cooking gas and pressure cooker to the laborers during construction phase.

iv) All the laborers to be engaged for construction works should be screened for health and adequately treated before the issue of work permits.

 v) 6 monthly monitoring reports should be submitted to the Ministry and its Regional Office.

5. Officials from the Regional Office of MOEF, Bhopal who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bhopal.

6. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

7. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

3. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department (if required), State Forest Department, Wildlife Act 1972 etc. shall be obtained by project proponents from the competent authorities.

9. A copy of the environmental clearance letter would be marked to the local NGO(s) for their information.

10. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vemacular language informing that the project has been accorded environmental deerance and copies of clearance letters are available with the Maharashtra State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <u>http://www.envior.sic.in</u>. The advertisement should be

5

made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

11. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986 and the Public Liability (Insurance) Act, 1991.

12. The project authority shall enter in to MOU with all buyers of the property to ensure operation and maintenance of the assets of the buildings.

Kelilhar?

(K.C. RATHORE) Additional Director (IA) rathore27@yahoo.com Tele: 24360789

Copy to: -

- 1. The Secretary, Department of Environment, Government of Maharashtra, New Administrative Building, 15th Floor, Opp. Mantralaya, Mumbai.
- 2. The Member Secretary, Maharashtra State Pollution Control Board, Kalptaru Polint, 3rd Floor, Near Sion Circle Opp. Cine Planet Cinema, Sion(E), Mumbai.
- 3. The CCF, Regional Office, Ministry of Environment & Forests, Bhopal.
- 4. IA Division, MOEF, New Delhi 110001.

5. Guard file.

(K. C. RATHORE) Additional Director (IA)

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COMPLIANCE REPORT

EC Letter No.	: 21-221/2007-IA-III Dated: December 24, 200		
Project Name	: Residential Complex – "Kumar Prince Town"		
Project location Developer name	S.No. 9/1 (pt) Undri, Pune. M/s. Manikchand Kumar Properties.		
Developers address	: Kumar Capital, 1 st Floor. 2413 East Street, Camp Pune 411001		

Sr. No.	EC Conditions	Compliance Status
1.	I am directed to refer to your application seeking prior environmental clearance for the above project under the EIA Notification 2006. The above proposal has been appraised as per prescribed procedure on the basis of the mandatory documents enclosed with the application viz., the Form 1&1A and conceptual plan and the additional clarifications furnished in response to the observations of the Additional Expert Appraisal Committee constituted by the competent authority in its 21 st meeting held on 24-12-14 September, 2007.	No comment.
2.	The project proponent is proposing for construction of Residential Complex at S.No. 9/1(pt) Undri, Pune at a cost of Rs 132.45 crore. The proposed development will consist of residential building for 9456 flats. The total plot area is 1.01.600sq. m. The total built up area as indicated is 94,413 sq. m. Total water requirement will be 775 cu. m. /day including recycled water and total waste water generation from the project will be 620 cu. m/day. The STP (capacity 650 cu. m. /day) will be installed at site to treat waste water generated from the project. The treated waste water generated for the project. The treated waste water will be used for landscape, flushing and non-potable purpose in the premises and unused water will be discharged into public sewer. The total solid waste generated will be 1265 kg/day. Vermi-composting of biodegradable solid waste will be done and Non-biodegradable waste will be handed over to local municipal authority for disposal. Total parking space will be provided for parking of 1050 cars and 950 two-wheelers.	Noted.

Sr. No.	EC Conditions	Compliance Status
3.	The Documents submitted along with the application predicts that there will be minor negative impact on air quality during construction as well as operation phase. There will be minor negative impact on Air quality during construction and operation phase. There will be minor impact on ambient noise level inside the premises during construction phase. There will be positive impact on land use pattern due to landscaping and green belt development. Plantation of trees and development of recreational area, surrounding area will have positive impact on overall land use.	Noted.
4.	The additional EAC after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations have awarded "Gold" grading and recommended the grant of environmental clearance for the project mentioned above subject to compliance with the EMP and other stipulated conditions Accordingly, the Ministry hereby accords necessary environmental clearance under category 8(a) for the project subject to the strict compliance with the specific and general conditions mentioned below.	Noted.
	A- SPECIFIC CONDITIONS	
I. Co	nstruction Phase	
1.	Consent for establishment shall be obtained from State Pollution Control Board/Pollution Control Committee under Air and Water Act and a copy of the same shall be submitted to the Ministry before start of any construction work at site.	Copy of consent for establishment is attached herewith.
2.	For disinfection of waste water, ultraviolet radiation shall be used in place of chlorination.	Complied. Adequate measures are provided
3.	Vehicles hired for construction activities should be operated only during non - peak hours.	Complied.
4.	All the top soil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	All the top soil excavated during construction activities should be stored for use in horticulture /landscape development within the project site.
5.	Ready mixed concrete shall be used in building construction.	Complied. Adequate measures are provided

Sr. No.	EC Conditions	Compliance Status
6.	Water demand during construction shall be reduced by use of premixed concrete, curing agents and other best practices.	Complied. Adequate measures are provided
7.	Permission to draw ground water shall be obtained from competent authority prior to construction/operation of the project.	Noted.
8.	Separation of gray and black water should be done by use of duel plumbing line. Treatment of 100% gray water by decentralized treatment should be done.	Complied. Adequate measures are provided
9.	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.	Complied. Adequate measures are provided
10.	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.	Complied. Adequate measures are provided.
11.	Roof should meet the prescriptive requirement as per Energy Conservation Building code by using appropriate thermal insulation material to fulfill requirement.	Complied. Adequate measures are provided
12.	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is aspirational for non-air conditioned spaces by use of appropriate thermal insulation to fulfill requirement.	Complied. Adequate measures are provided
13.	Storm water control and its reuse should be as per Central Ground Water Boards and BIS standards for various applications.	Complied. Adequate measures are provided
14.	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.
15.	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.	Complied. Env. Monitoring report is attached herewith.
16.	A First Aid Room will be provided at the project site both during construction and operation of the project.	Complied. First aid kit is provided at site.

Sr. No.	EC Conditions	Compliance Status
17.	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.	Complied. Proper drinking water & toilet facility is provided at site.
18.	Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighboring communities and be disposed off taking the necessary precautions for general safety and health aspects of people.	Complied. Adequate measures are provided
19.	The diesel power generating sets used during construction phase should be of "enclosed type" to prevent noise and should confirm to rules made under Environmental (Protection) Act 1986, prescribed for air and noise emission standards.	Complied. DG sets are having acoustic enclosure.
20.	Ambient noise levels should confirm to residential standards both during day and night when measured at boundary wall of the premises. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase.	Complied. Env. Monitoring report is attached herewith.
21.	The construction agencies shall use fly ash based material/products as per the provisions of fly ash Notification of 14.9. 1999 and as amended on 27.8 2003	Noted.
22.	Vehicles hired for bringing construction material at site should be in good condition and should have valid "pollution under check" (PUC) certificate and to confirm to applicable air and noise emission standards and should be operated only during non-peaking hours.	Complied. Vehicles are checked for PUC certificate.
23.	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such material must be secured so that they should not leach into the ground water.	Complied. Adequate measures are provided.
24.	Any hazardous waste generated during construction phase should be disposed of as per applicable Rules and norms with necessary approvals of the Maharashtra State Pollution Control Board.	Noted.
25.	Regular supervision of the above and the other measures for monitoring should be in place all through the construction phase so as to avoid disturbance to the surroundings.	Noted.

Sr. No.	EC Conditions	Compliance Status
26.	Under the provision of Environmental (Protection) Act. 1986, legal action shall be initiated against the project proponent if it was found that construction of the project had started without obtaining environmental clearance.	Noted.
II. Op	peration Phase	
1.	Necessary permission of competent authority shall be taken to store diesel in the premises for operation of DG set.	Noted. The project is in construction phase.
2.	Diesel power generating sets proposed as source of back up power for lifts and common area illumination should be of "enclosed type" and confirm to rules made under Environment (Protection) Act 1986, prescribed for air and noise emission standards as per CPCB guidelines. Exhausts should be discharged by stack, raised to 4 meters above the rooftop.	Noted. The project is in construction phase.
3.	During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Noted. The project is in construction phase.
4.	Noise barriers should be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards.	Noted. The project is in construction phase.
5.	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area.	
6.	The Sewage Treatment Plant (STP) of adequate capacity should be provided to treat sewage generated from the complex and it should be certified by an independent expert for adequacy as well as efficiency and should submit a report in this regard to the Ministry before the project is commissioned for operation. Discharge of treated sewage shall confirm to the norms and standards prescribed by of Maharashtra State Pollution Control Board.	Noted. The project is in construction phase.
7.	Rain water harvesting and ground water recharging shall be practiced. Oil & Grease trap shall be provided to remove oil and grease from the surface run off and suspended matter shall be removed in a settling tank before its utilization for rainwater harvesting.	Noted. The project is in construction phase.

No.	
8. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to approve sites for land filling after recovering recyclable material.	The project is in construction phase.
9. Any hazardous waste including biomedical waste should be disposed of as per applicable Rules & norms with necessary approvals of the Maharashtra State Pollution Control Board.	
10. The green belt design along the periphery of the plot shall achieve attenuation factor confirming to the day and night noise standards prescribe for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.	The project is in construction phase.
11. Incremental pollution load on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.	
12. The ground water level and its quality should be monitored regularly in consultation with Central Ground water authority.	
 A Report on energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building material & technology, R & U Factors etc and submitted to Ministry in three months time. 	Refer enclosed annexure-I, Project details
14. The values of R & U for the commercial building envelop should meet the requirements of the hot & humid climatic location. Details of the building envelop should be worked out and furnished in three months time.	Refer enclosed annexure-I,
15. Energy conservation measures like installation of solar panels for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.	The project is in construction
PART - B. GENERAL CONDITIONS	

Sr. No.	EC Conditions	Compliance Status
1.	This environmental clearance is subject to Hon'ble Supreme Court's decision regarding siting of project near wildlife sanctuary.	Noted.
2.	The environmental safeguards contained in the document should be implemented in letter and spirit.	Noted.
3.	Provision should be made for the supply of kerosene or cooking gas and pressure cooker to the laborers during construction phase.	Noted. Local labourers are employed.
4.	All the laborers to be engaged for construction workers should be screened for health and adequately treated before the issue of work permits.	Complied. Medical checkup of workers is ensured before appointing for work.
5.	6 monthly monitoring reports should be submitted to the Ministry and its Regional office, Bangalore.	Complied.
6.	Officials from the Regional Office of MoEF, Bhopal who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MoEF, Bhopal.	Noted.
7.	In case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Noted.
8.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted.
9.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, State Forest Department, Wildlife Act, 1972 etc. shall be obtained, as applicable by the project proponents from the competent authorities.	Noted.
10.	A copy of the environmental clearance letter would be marked to the local NGO(s), if any, for their information.	Noted.

Sr. No.	EC Conditions	Compliance Status
11.	The project proponent should advertise in at least two local Newspapers widely circulated in the region one of which shall be in vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with Karnataka State Pollution Control Board and may also be seen on the website of the Ministry of Environment & Forests at <u>http://www.envfor.nic.in.</u> The advertisement should be made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.	Complied. Copy of News Paper advertisement is attached herewith.
12.	These stipulations would be enforced among others under the provisions of the Water (prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986 and the Public Liability (Insurance) Act, 1991.	Noted.
13.	The project authority will enter in to MOU with all buyers of the property, shops etc. to ensure operation and maintenance of the assets of the building.	Noted.

POST ENVIRONMENT MONITORING REPORT

<u>Project</u> Residential Complex 'KUMAR PRINCE TOWN' Undri, Pune

Period: July, 2010 - September, 2010

DEVELOPER:

M/s. Manikchand Kumar Properties Kumar Capital, 1st Floor, 2413 East Street, Camp, <u>Pune – 411 001</u>

Prepared by:



GREEN CIRCLE, INC. Vadodara

<u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Residential Complex 'KUMAR PRINCE TOWN' Project for *M/s. Manikchand Kumar Properties, Pune* has been carried out by *M/s. Green Circle, Inc., Vadodara during the period of July,2010 – September, 2010.*

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

For: Green Circle, Inc.

Pradeep Joshi Chief Executive Officer

INTRODUCTION:

M/s. Manikchand Kumar Properties is a group of Kumar Properties which is well diversified, Value driven enterprise. M/s. Manikchand Kumar Properties is proposing to construct Residential Complex "Kumar Prince Town" Project on plot No. of S. No 9/1 (PT) Undri, Pune, Maharashtra. The proposed project has received Environmental clearance from Ministry of Environment & Forest, New Delhi under the provision of EIA Notification dtd. 14th September, 2006, Subject to compliance of the conditions as per letter No. 21-221/2007-IA-III dated 24th December, 2007. As per the instruction in the EC letter, periodic Environmental Monitoring has been carried out by Green Circle, Inc. 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 PM10, PM2.5, SO2, & NOx as per the standard methods mentioned in Table 1 & the results are summarized in Table 2.

	Table 1: Standard method of analysis of ambient air quality						
PM10/PM2.5	••	IS: 5182 (Part IV 1999 & Part XXIII:2006)					
SO ₂	:	IS: 5182 (Part II) 2001 Improved West & Gaek method					
NOx	:	IS: 5182 (Part VI) 1998 Jacob & Hochheiser modified method					

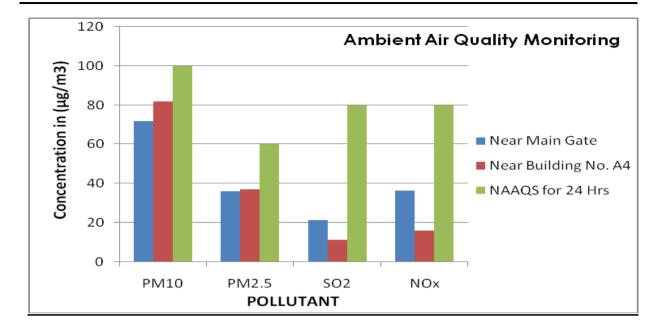
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SO ₂	:	IS: 5182 (Part II) 2001 Improved West & Gaek method						
NOx	:	IS: 5182 (Part VI) 1998 Jacob & Hochheiser modified method						

Sr. No.	Parameter	Units	Result				
	Sampling locations		NAAQS For 24 Hours	Near Main Gate	Nr. Building No. A4	Analytical Methods Used	
1.	Particulate Matter size (PM10)	µg/m³	100	72	82	Gravimetric analysis	
2.	Particulate Matter size (PM _{2.5})	µg/m³	60	36	37	Gravimetric analysis	
3.	Sulphur Dioxide (SO ₂)	µg/m³	80	21.5	11.2	Improved West & Geake Method	
4.	Oxides of Nitrogen (NOx)	µg/m³	80	36.3	16.1	Jacob & Hochheiser Modified Method	

Table 2 : Ambient Air Quality

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, PM_{10} level ranges from 68-72 μ g/m³, $PM_{2.5}$ ranges from 38-40 μ g/m³, SO_2 ranges from 18- 21 μ g/m³, and NOx ranges from 14-16 μ g/m³. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

B. STACK MONITORING:

Stack Monitoring was carried out for one installed DG sets within the project site. Samples were collected and analyzed for PM, SO₂, & NO_x as per the standard methods mentioned in Table 3 & the results also summarized in Table 3.

Sr. No.	Parameters	Parameters Unit Results		Reference Method
			Near Building No. A4	
1.	Particulate Matter (PM)	mg/Nm ³	83.2	IS 11255: Part 1
2.	Sulphur dioxide (SO ₂)	ppm	18.6	IS 11255: Part 2
3.	Oxides of Nitrogen (NOx)	ppm	29.2	IS 11255: Part 7

TABLE 3: ANALYSIS RESULT

C. WATER & SEWAGE QUALITY:

Two water samples were collected from near by Open well to check the quality of the water. Analysis results are compared with IS 10500:1991 as mentioned in following Table 4:

Sr. No.	Parameter	Units		RESULT	
	Sample Identification		Well Water	Tanker Water	Desirable limit as per IS 10500:1991
1	рН		7.1	7.2	6.5-8.5
2	Temperature	NTU	23	24	NS
3	Turbidity	mg/L	2	4	10
4	Conductivity	mg/l	680	753	NS
5	Total Dissolved Solids	mg/l	540	570	2000
6	Total Suspended Solids	mg/l	14	20	NS
7	Total Hardness	mg/l	200	245	600
8	Ca Hardness	mg/l	110	162	NS
9	Total Alkalinity	mg/l	88	115	600
10	Chloride	mg/l	183	225	1000
11	Sulphate	mg/l	20	23.5	400
12	Copper	mg/l	BDL	BDL	1.5
13	Zinc	mg/l	BDL	BDL	15

Table 4: Quality of Water samples

<u>Note:</u>

BDL = Below Detectable Limit

N.S. = Not Specified

Observations:

The quality of Open well water shows that all parameters are well within the prescribed limit.

SEWAGE:

There is no effluent from STP because it is under construction.

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 5.

C		Noise Level in dB (A) Leq. during							
Sr. No.	Sampling locations	Day Ti	me	Night	Night Time				
		Measured	Limit*	Measured	Limit*				
1	Nr. Main Gate	58.9	65	52.7	55				
2	Nr. Building A4	62.1	65	53.5	55				
3	Nr. Building A3	55.4	65	53.3	55				
4	Nr. Building A2	56.9	65	54.5	55				
5	Nr. Building A1	56.8	65	51.8	55				
6	Nr. Club House	56.3	65	53.9	55				

 Table 5: Ambient Noise Quality

Note 1:

* 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 all location is well within the prescribed limit.

ANALYSIS RESULTS

S .		Units	Observed Value		
Sr. No.	Location Name		Results	CPCB Permissible Limit	
1.	Phase-I Near Building No. A 4	dB (A)	71.9	75	

E. SOIL QUALITY ANALYSIS:

Soil samples of B2 building site were collected from site at 20 cm depth. Analysis results are tabulated in the following Table 6.

Sr. No.	Parameters	Unit	RESULT	Reference Method
1	рН	-	7.80	IS 2720 : Part 26 : 1987
2.	Moisture content	%	3.5	IS 2720 : Part 09: 1992
3.	Sulphate	mg/gm	1.15	IS 2720 : Part 27 : 1977
4.	Organic matter	%	2.64	IS 2720 : Part 22 : 1972
5.	Chloride	mg/gm	0.81	APHA 4500-CIB
6.	Copper	mg/gm	BDL	APHA 3500-Cu
7.	Total Kjeldhal Nitrogen	mg/gm	0.95	APHA 4500-Norg
8.	Zinc	mg/gm	0.0013	APHA 3500-Zn

Table 6: Soil Analysis Report

Note: BDL = Below Detectable Limit

Observations:

The quality of soil shows that there is no heavy metal contamination.

POST ENVIRONMENT MONITORING REPORT

<u>Project</u> Residential Complex 'KUMAR PRINCE TOWN' Undri, Pune

Period: October, 2010 - December, 2010

DEVELOPER:

M/s. Manikchand Kumar Properties Kumar Capital, 1st Floor, 2413 East Street, Camp, <u>Pune – 411 001</u>

Prepared by:



GREEN CIRCLE, INC. Vadodara

<u>CERTIFICATE</u>

This is to certify that the post environment monitoring of Residential Complex 'KUMAR PRINCE TOWN' Project for *M/s. Manikchand Kumar Properties, Pune* has been carried out by *M/s. Green Circle, Inc., Vadodara during the period of October, 2010 – December, 2010.*

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

For: Green Circle, Inc.

Pradeep Joshi Chief Executive Officer

INTRODUCTION:

M/s. Manikchand Kumar Properties is a group of Kumar Properties which is well diversified, Value driven enterprise. M/s. Manikchand Kumar Properties is proposing to construct Residential Complex "Kumar Prince Town" Project on plot No. of S. No 9/1 (PT) Undri, Pune, Maharashtra. The proposed project has received Environmental clearance from Ministry of Environment & Forest, New Delhi under the provision of EIA Notification dtd. 14th September, 2006, Subject to compliance of the conditions as per letter No. 21-221/2007-IA-III dated 24th December, 2007. As per the instruction in the EC letter, periodic Environmental Monitoring has been carried out by Green Circle, Inc. and submitting required report to concern division regularly.

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It includes quarterly monitoring of:

- A. Ambient Air Quality
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A. AMBIENT AIR MONITORING:

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T	Table 1: Standard method of analysis of ambient air quality						
PM10/PM2.5	:	IS: 5182 (Part IV 1999 & Part XXIII:2006)					
SO ₂	••	IS: 5182 (Part II) 2001 Improved West & Gaek method					
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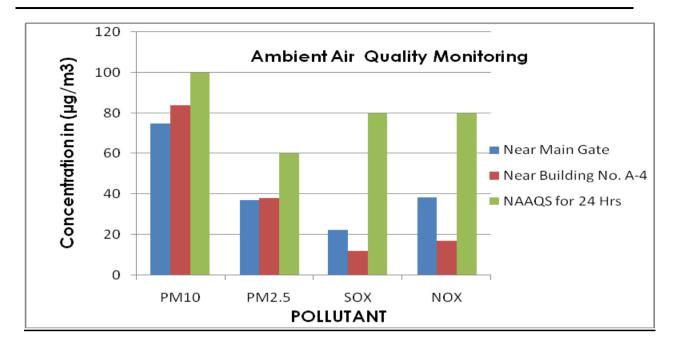
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NOx	:	IS: 5182 (Part VI) 1998 Jacob & Hochheiser modified method				

	Table 2 . Amblem All Quality										
Sr. No.	Parameter	Units			Result						
	Sampling locations		NAAQS For 24 Hours	Nr. Main Gate	Nr. Building No. A-4	Analytical Methods Used					
1.	Particulate Matter size (PM10)	µg/m³	100	75	84	Gravimetric analysis					
2.	Particulate Matter size (PM _{2.5})	µg/m³	60	37	38	Gravimetric analysis					
3.	Sulphur Dioxide (SO ₂)	µg/m³	80	22.5	12.2	Improved West & Geake Method					
4.	Oxides of Nitrogen (NOx)	µg/m³	80	38.3	17.1	Jacob & Hochheiser Modified Method					

Table 2 · Ambient Air Quality

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, PM_{10} level ranges from 66-71 μ g/m³, $PM_{2.5}$ ranges from 40-42 μ g/m³, SO_2 ranges from 17-19 μ g/m³, and NOx ranges from 15-18 μ g/m³. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

B. STACK MONITORING:

Stack Monitoring was carried out for one installed DG sets within the project site. Samples were collected and analyzed for PM, SO₂, & NO_x as per the standard methods mentioned in Table 3 & the results also summarized in Table 3.

Sr. No.	Parameters	Unit	Results	Reference Method		
			Near Building No. A4			
1.	Particulate Matter (PM)	mg/Nm ³	85.2	IS 11255: Part 1		
2.	Sulphur dioxide (SO ₂)	ppm	18.6	IS 11255: Part 2		
3.	Oxides of Nitrogen (NOx)	ppm	29.2	IS 11255: Part 7		

C. WATER & SEWAGE QUALITY:

Two water samples were collected from near by Open well to check the quality of the water. Analysis results are compared with IS 10500:1991 as mentioned in following Table 4:

Sr. No.	Parameters	Unit	Res	ults	Standard Value
			Well Tanker	Tanker Water	
1	рН		7.3	7.5	6.5-8.5
2	Temperature	NTU	24	25	NS
3	Turbidity	mg/L	3	5	10
4	Conductivity	mg/l	684	754	NS
5	Total Dissolved Solids	mg/l	542	585	2000
6	Total Suspended Solids	mg/l	15	24	NS
7	Total Hardness	mg/l	215	265	600
8	Ca Hardness	mg/l	114	162	NS
9	Total Alkalinity	mg/l	90	120	600
10	Chloride	mg/l	184	225	1000
11	Sulphate	mg/l	20	25.5	400
12	Copper	mg/l	BDL	BDL	1.5
13	Zinc	mg/l	BDL	BDL	15

Table 4: Quality of Water samples

Note:

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

Observations:

The quality of Open well water shows that all parameters are well within the prescribed limit.

SEWAGE:

There is no effluent from STP because it is under construction.

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 5.

Sr. No.		Noise Level in dB (A) Leq. during				
	Sampling locations	Day Ti	me	Night Time		
		Measured	Limit*	Measured	Limit*	
1.	Nr. Main Gate	60.9	65	53.7	55	
2.	Nr. Building A4	64.1	65	54.5	55	
3.	Nr. Building A3	57.4	65	53.3	55	
4.	Nr. Building A2	58.9	65	54.8	55	
5.	Nr. Building A1	57.8	65	51.8	55	
6.	Nr. Club House	58.3	65	53.9	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 west end of site due to vehicular movement in near by Undri road.

ANALYSIS RESULTS

S.r.		Units	Observed Value		
Sr. No.	Location Name		Results	CPCB Permissible Limit	
1.	Phase-I Near Building No. A 4	dB (A)	71.9	75	

E. SOIL QUALITY ANALYSIS:

Soil samples of B2 BUILDING site were collected from site at 20 cm depth. Analysis results are tabulated in the following Table 6.

Sr. No.	Parameters	Unit	RESULT	Reference Method
1	рН	-	7.88	IS 2720 : Part 26 : 1987
2.	Moisture content	%	3.9	IS 2720 : Part 09: 1992
3.	Sulphate	mg/gm	1.22	IS 2720 : Part 27 : 1977
4.	Organic matter	%	2.84	IS 2720 : Part 22 : 1972
5.	Chloride	mg/gm	0.91	APHA 4500-CIB
6.	Copper	mg/gm	BDL	APHA 3500-Cu
7.	Total Kjeldhal Nitrogen	mg/gm	1.05	APHA 4500-N _{ORG}
8.	Zinc	mg/gm	0.0013	APHA 3500-Zn

Table 6: Soil Analysis Report

Note: BDL = Below Detectable Limit

Observations:

The quality of soil shows that there is no heavy metal contamination.

ANNEXURE – 1

PROJECT DETAILS

1. Name and Address of the Project Proposed :

Proposed project is the construction of Residential Complex- "Kumar Prince Town" at land bearing S. No. 9/1 (pt) Undri, Pune.

2. Project Proposed:

M/s. Manikchand Kumar Properties has proposed Residential Complex – "Kumar Prince Town" at Undri, Pune. The proponent has tried to take all the steps for care of the environment and the nature. Some recreational facilities like landscape garden, health club, club house, swimming pool, etc., will be developed by M/s. Manikchand Kumar Properties in residential complex.

Sr. No.	Particulars		Area	
1.	Total Gross Plot Area		1,0	01, 600.00 m ²
2.	Total Deduction area			55,989.64 m ²
3.	Net Plot Area (1-2)	45,610.36 m ²		
4.	Total Addition Area(TDR)			36,488.29 m ²
5.	Total Balcony Area			12,314.80 m ²
6.	F.A.R Permissible (with Balcony) (3+4+5)			94413.45 m ²
7.	Total Built Up area			94413.45 m ²
8.	Total No. of Building	22 nos.		
9.	Total No. of Flats	946 nos.		
	Parking Statement	Cars	Scooters	Cycles
10.	Parking Required by DC Rules	946	946	946
11.	Parking Provided	1050	950	950

AREA STATEMENT INCLUDING PARKING STATEMENT:

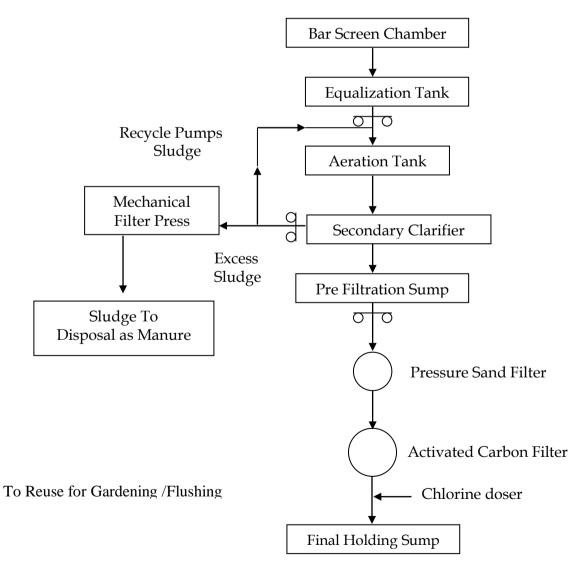
WATER CONSUMPTION:

Total water demand: 775 m³/day

Source of water : Municipal Corporation

SEWAGE GENERATION & TREATMENT PLANT:

- Sewage from the project will be generated at the rate of 620 m³/day
- During functional phase about 620 m³ / day of sewage will generated
- The sewage generated during operational phase will be treated in STP of 650 m³/day capacity
- The STP is designed on the basis of extended aeration principle



SCHEMATIC FLOW DIAGRAM FOR SEWAGE TREATMENT

Excess Water to Municipal Corporation

RAIN WATER HARVESTING DETAILS

For rain water harvesting, no. of bore well will be proposed within building premises. It is proposed rainwater from roof tops and from surrounding area within the complex will be considered for recharging of these bore wells. Open trenches/storm water drain has been considered along the road side and as per topography of the plot.

DETAILS OF STORM WATER

It is proposed to have separate storm water conveyance system for the project. For this purpose rain water from roof tops and from surrounding area within the complex will be considered. Open trenches/storm water drain has been considered along the road side and as per topography of the plot.

SOLID WASTE GENERATION:

QUANTITY OF SOLID WASTES GENERATED:

Solid Waste Generation	: 1,135 kg/day
Sludge generation	: 130 kg/week
From the total waste:	
Non Bio degradable Waste	: 50 %
Bio degradable Waste	: 50 %

SOLID WASTE DISPOSAL METHOD:

Domestic garbage generated from the proposed project is envisaged to be disposed through Trash bins, Trash cover collection system & then through the Municipal Garbage collection Trucks for further disposal. Domestic household garbage would be segregated into Organic and Inorganic wastes and then kept ready for disposal. The volume of garbage produced from the Project is worked out as per the guidelines of IS:6924-1973.

POWER REQUIREMENT:

- The main source of Electricity supply will be from M.S.E.B
- Total requirement of Electrical load will be 20 KW during construction phase.
- During Operational Phase, total requirement of Electrical load will be 2500 KW.
- Total electrical connected load will be 2623 KVA.

It is proposed to install three DG sets each of 125 KVA capacity with Acoustic noise controlled measures. The fuel for DG set will be HSD.

THERMAL EFFICIENCY OF THE BUILDING:

<u>Roof</u>

Sr. No.	Description	Conductivity w /m . k	Length	Resistance R m2. k /w
1	Outside surface	(Ashrae Ao)		0.059
2	Clay tile	0.571	0.012	0.021
3	Brick Bat Coba	0.727	0.1	0.138
4	HD Concrete	1.731	0.15	0.087
5	EPS 16Kg Density	0.035	0.075	2.568
6	Inside surface	(Ashrae Eo)		0.121
		Total Re	sistance	2.994
	Net U Valu	0.334		
	U Value recommended by ECB code (Climate zone warm & humid)			0.409
	Roof meets the requ	irement		

<u>Walls</u>

Sr.		Conductivity		Resistance
No.	Description	-	Length	R
NO.		w /m. k		m2. k /w
1.	Outside surface			0.059
2.	Inside wall	1.731	0.200	0.116
3.	Inside surface			0.121
		Total R Value	•	0.296
	Recommended R Value			0.352

GLASS NORTH

U factor recommended	: 6.922 w/m²·k maximum
With 6mm clear glass	: 5.7 w/m²·k
GLASS - NON NORTH	
U factor recommended	: 3.177 w/m²·k
Glass with double glazing	: 2.8 w/m ^{2·} k

6 - 12 - 6

ENERGY CONSERVATION IN COMMON AREA LIGHTING

Sr.	Area for Lighting-	Connected Load with	Load with CFL Energy
No.	Purpose	conventional light	Efficient lamps(in KW)
		fitting (KW)	
1	for multi level Parking,	55 KW	40.3 KW
	Lobby Stair Case for	(40 W tube lights &	(18 W CFL -Energy Efficient
	Buildings-23Nos	lamps)	Lamps
2	Street Light & Area	13.5(with 150 w street	7.2 (with CFL street light&
	Lighting	light fitting-90nos)	HM fittings)
3	Gardens, Gate and	24 (estimated	16 (with CFL – energy
	Club house- Pool, 2 nos.	conventional Lighting)	efficient Lamp-Fittings)
	Total =	92.5 KW	63.5 KW

Hence, reduction in lighting load and energy consumption in common area is around 31.35%.

TREE PLANTATION:

About 635 trees are proposed to plant in the R. G. (6,544.43 m²) Area.

Sr. No.	Common Name	Botanical Name	Height	Canopy (dia.)	No. of Trees
01.	Jawa Willow	Ficus Benjamina	18 to 20 m	9 to 11 m	49
02.	Devil's Tree	Alistonea Scholaris	12 to 15 m	10 to12 m	96
03.	Hongkong Orchid Tree	Bauhinia Blackeana	7 to 8 m	5 to 6 m	42
04.	Lagerstroemia	Lagerstroemia Flosregia	12 to 15 m	8 to 9 m	43
05.	Peltophorum	Peltophorum	Up to 10 m	8 to 9 m	44
06.	Chafa	Plumeria Alba	6 to 8 m	Up to 4 m	44
07.	Pangara	Erythrina verigated	8 to 12 m	6 to 8 m	46
08.	Golden Shower	Cassia Fistula	8 to 10 m	Up to 5 m	31
09.	Fish Tail Palm	Alphanes Erosa	12 to 15 m	4 to 5 m	142
10.	Scarlet Bell Tree	Spathodia	12 to 15 m	12 to 13m	61
11.	Bottle Palm	Bottle Palm	12 to 15 m	3to 4 m	37

ENVIRONMENT MANAGEMENT PLAN

Environment	Potential Impact	Expected Source of Potential Impact	Mitigation Measures	Remark
Air Environment	Dust & Gaseous Emission	 Construction Phase Excavation of construction material Due to the operation of construction equipments. Operational Phase Due to operation of DG set. 	 Water Sprinkling will be done to settle the dust No dust as RMC will be brought Tin sheet will be erected all around Periodic maintenance of construction equipments DG set installed with acoustic measures Generator exhaust will be taken above top level of building as 	to short duration
Water Environment	Ground Water & Storm Water	 Construction Phase Waste water generated from labor Operational Phase Discharge of sewage Discharge of storm water 	 Sewage will be treated in Soak Pit / septic tank. Sewage will be disposed in STP. Rainwater Harvesting will be 	 Impact will be temporary Recycled water will be used for recirculation to flushing cisterns.
	Air Environment Water	EnvironmentImpactAir EnvironmentDust & Gaseous EmissionWater EnvironmentGround Water & Storm	EnvironmentImpactImpactImpactImpactConstruction PhaseAir EnvironmentDust & Gaseous Emission- Excavation of construction material • Due to the operation of construction equipments.Air Environment& & B	Environment Impact Impact Mitigation Measures Impact Impact Construction Phase Excavation of construction Material Due to the operation of construction equipments. Dust Dust Gaseous Emission Operational Phase Due to operation of DG set. Dest installed with acoustic measures Generator exhaust will be taken above top level of building as per CPCB norms. Water Storm Water Storm Water Discharge of sewage Discharge of storm water Sewage will be disposed in STP. Rainwater Harvesting will be disposed in STP. Storm water Discharge of storm water Storm water Harvesting will be disposed in STP. Discharge of storm water Storm water Harvesting will be disposed in STP. Discharge of storm water Storm water Harvesting will be disposed in STP. Discharge of storm water Storm water Harvesting will be disposed in STP. Discharge of storm water Storm water Harvesting will be disposed in STP. Discharge of storm water Storm water Harvesting will be disposed in STP. Discharge of storm water Storm water Harvesting will be disposed in STP.

Sr. No.	Environment	Potential Impact	Expected Source of Potential Impact	Mitigation Measures	Remark
3.	Noise Environment	Noise Emission	Construction Phase Operation of construction equipments and vehicle movement during site development	 Use of well maintained equipment fitted with acoustic measures Ear plugs/muffs for the working staffs 	 Temporary Impact Heavy construction activities are limited to daytime only.
			 Operation phase Vehicles movement Operation of DG sets 	 Individual acoustic enclosures will be provided for DG sets 	 No impact.
4.	Solid Waste	Soil	 <u>Construction Phase</u> Disposal of construction debris 	 Construction debris will be collected and suitability used on site as per construction waste management plan 	• No impact.
			 Operation Phase The paper and the plastic used at the individual level. Canteen waste in the form of garbage and rubbish. 	 Reuse of the paper and plastic waste. 	 Solid Waste will be disposed as per guidelines of Municipal Corporation
5.	Ecology	No significant Impact	Construction Phase Site Development during construction	• There is a plain terrain	 No impact.

Sr. No.	Environment	Potential Impact	Expected Source of Potential Impact	Mitigation Measures	Remark	
			Operational PhaseIncrease of green cover	 Suitable green belt will be developed as per landscaping plan at site. 	•	
6.	Traffic Pattern	Increase of vehicular	 <u>Construction Phase</u> Heavy Vehicular movement at site 	• Heavy Vehicular movement will be restricted to daytime only and adequate parking facility will be provided.		
0.		movements		 Operational Phase Traffic due to commercial once the site is operational 	 Vehicular movement will be regulated inside the site with adequate roads and parking. 	
7.	Socio- Economic	Increase in Job opportunities	Construction Phase • Job opportunities for the local residents		Positive Impact Project will provide direct and indirect employment opportunities to local people in terms of labor during construction and service personnel during operational	

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THE MAHARASHTRA HERALD-20.01.08

PUBLIC NOTICE

We, Manikchand Kumar Properties, hereby bring in to notice of general public that the Ministry of Environment & Forests, New Delhi, has granted Environment Clearance for our proposed residential project 'PRINCETOWN', located at S.No. 9 (P) Undri, Pune, Maharashtra On Date 24 Dec. 2007.

sd/-

Managing Director Manikchand Kumar Properties

MAHARASHTRA POLLUTION CONTROL BOARD

Tel : 2402 0781 / 2401 0437 Fax : 2402 4068 Visit us at : Website : http://mpcb.mah.nic.in E-mail : mpcb@vsnl.net



Kalpataru Point, 2nd , 3rd & 4th floor, Opp. Cineplanet, Near Sion Circle, Sion (E). Mumbai - 400 022.

Infrastructure Project/LSI. Consent No. BO/RO (P&P)/EIC No. PN-4045-09/E/CC- 오륏 Date: 0구 /08/2009

Consent to Establish is granted to M/s Manikchand Kumar Properties

(Residential Complex)

Site S. No. 9/1(pt), Undri, Pune

located in the area declared under the provisions of Water Act (P&CP) 1974. Air Act (P&CP), 1981 and Authorization under the provisions of H.W (M & H) Rules and amendments thereto subject to the provisions of the Acts and the Rules and the Orders that may be made further and subject to the following terms and conditions

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

For development of land/plot as new construction activities for construction of Residential project named as M/s Manikchand Kumar Properties, (Residential Complex), Site S No 9/1(pt), Undri, Pune, on total plot area of 101600 Sq mtrs & total Built up area 94413.45 Sq. mtrs including utilities for development of Residential project and services such as per construction commencement certificate issued by local body.

- 2. CONDITIONS UNDERT WATER (Prevention & Control of Pollution) ACT, 1974: -
- (i) The quantity of sewage effluent from above construction project shall not exceed 620 M³/Day.
- (ii) Sewage Effluent Treatment: The Applicant shall provide a comprehensive sewage treatment plant and treatment as is warranted with reference to influent quality and corresponding mode of disposal and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards. -

(1)	pН	Not to exceed	65:090	
(2)	Suspended Solids	Not to exceed	100	mg/i
(3)	BOD 3 days 27 CC	Not to exceed	100	mg/i
(4)	Fecal Collform	Not to exceed	500/100/	ml.
(7)	Residual Chlorine	Not to exceed	01	mg/i
(8)	Detergent	Not to exceed	01	mg/l
(9)	Floating matters	Not to exceed	10	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 used on own land for gardening/PMC sewer. In no case, effluent shall find its way to any water body directly/indirectly at any time.

Project proponent shall operate STP for five years from the date of obtaining Occupation Certificate.



(IV) Non-Hazardous Solid Waste: -

The total quantity shall be segregated and treated as follows: -

Sr	Type of Segregated solid waste	Quantity	Treatment	Disposal
1	Wet Garbage	1265 Kg/Day	Composting	Own Site/ MSW site of PMC

3. Other Conditions (During Construction Phase): -

- 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.
- 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.
- There shall be no felling of trees whether on Forest, Government, Revenue or Private lands except as per prevailing Rules
- 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 take, 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.
- The Applicant shall prepare management plan for water harvesting, roof-water reclamation, water/storm water conservation and implement the same before handling over of complex for occupation.
- Applicant shall provide 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.
- 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 bio-medical wastes. The activities of bio-composting and engineered landfill shall be as per the Municipal Solid Waste (M&H) Rules, 2000.
- 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



Ready mixed concrete used in building construction should apply separately for consent from the Board

The applicant, during the construction stage shall provide

Septic tank and soak pit of adequate capacity for the domestic effluent generated due to workers residing at site.

Proper loading and unloading of construction material, excavated material and its proper disposal as per MSW (M&H) Rules 2000.

-) Cutting of trees is not permitted, however in unavoidable conditions necessary permission from the local body shall be obtained.
- Green belt of 33% of the open space shall be developed.

 The Applicant shall comply with all the provisions of, the Water (Prevention and Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules as Amended. 2003 and Rules there under: -

The daily water consumption for the following categories shall not exceed, as under

(i) Domestic

a)	Doniestic	(In CMD) 426
b)	Cooling	
C)	Swimming & Club House	45
d)	Flushing	282
e)	Agriculture/Gardening	20

- 5. CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981: -
- (I) The Applicant may install 06 no of diesel generating sets (DG Sets), of capacity 06 x 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: -

Standards for emissions of air Pollutants

i) SPM/TPM	Not to Exceed	150	mg/Nm3
ii) SO2 (DG set)	Not to Exceed	20	Kg/day

(ii) The following measure shall be taken.

- Adequate mitigation measures shall be taken to control emissions of SO2, NOx. SPM, RSPM
 - Applicant shall achieve following Ambient Air Quality standards.

1	SPM	Not to Exceed (Annual Average)	140	µg/ m ³
		Not to Exceed (24 hours)	200	µg/ m ³
2	SO ₂	Not to Exceed (Annual Average)	60	µg/ m³
		Not to Exceed (24 hours)	80	µg/ m ³
3	NO,	Not to Exceed (Annual Average)	60	µg/m ³
		Not to Exceed (24 hours)	80	µg/ m ³
4	RSPM	Not to Exceed (Annual Average)	60	µg/m³
		Not to Exceed (24 hours)	100	ug/ m3

(III) The Applicant shall observe the following fuel patterns

No.	Type of Fuel	Quantity
01	HSD	40 Lit/Hr

(IV) The Applicant shall erect the Chimney (s) of the following specifications

No.	Chimney attached to DG	Height above roof of Bidg
1	DG set 06 x 125 KVA	3.0 mtrs each



(V) Conditions for DG Sets: -

- 1 Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
- 2 Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall 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 shall be done at different points at 0.5 meters from acoustic enclosure/ room and then average.
- 3 The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures
- Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer:
- A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
- 6. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
- The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
- 8 In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.

(VI) Other Conditions:

- a) The Applicant shall provide ports in the chimney 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 chimneys shall be numbered, 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
- Construction material shall be carried in enclosed vehicles during constriction activities.

(VII) Conditions for Utilities like Kitchen, Eating Places etc: -

- The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting.
- The toilet shall be provided with exhaust system connected to chimney through ducting.
- The air conditioner shall be vibration proof and the noise shall not exceed 68 dB (A).
- 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 hoise of less than 65/90 db(A) are permitted.
- (X) No construction work is permitted during nighttime
- CONDITIONS UNDER HW (M & H) & AMENDMENT RULES 2003 The applicant shall not generate Hazardous Waste:



- 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.
- 12. The applicant should comply with the conditions Environmental Clearance granted by MoEF, GOI vide No. 21-221/2007-IA.III, dated 24.12.2007.
- 13. This consent is issued pursuant to the decision of Consent Committee Meeting held on 30.07.2009.
- 14. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant;
- 15. The capital investment of the project is Rs. 132.450/- Crores

To M/s Manikchand Kumar Properties (Residential Complex) Site S. No. 9/1(pt), Undri, Pune For and on behalf of the Maharashtra Pollution Control Board

(Mahesh Pathak)

Member Secretary

- Copy forwarded with compliments to The Collector, Pune Copy to
- Regional Officer, Pune, MPCB.
- Sub Regional officer, Pune-I, MPCB.
- Chief Accounts Officer, Mumbai, MPCB,

Received consent fee of

Amount	OD No.	Date	Drawn on
Rs 132450/-	029790	19.05.2009	HDFC Bank Ltd

Cess Branch, MPCB. Mumbai.

5 Master file.

PROJECT STATUS REPORT

BACKGROUND

EC No.	:	21-221/2007-IA-III Dated: December 24, 2007
Project Name	:	Residential Complex- Kumar Princetown
Project Location	:	S. No 9/1 (pt), Undri, Pune, Maharashtra
Developer Name	:	M/s. Manikchand Kumar Properties
Devlopers Address	:	Kumar Capital, 1 st Floor, 2413 East Street Camp, Pune – 411001

CURRENT STATUS OF THE PROJECT

Status updated on	: <u>22/11/2010</u>
Activity Phase of project	: Phase I Work is going on

Excavation details	:	25 % Completed
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CONSTRUCTION DETAILS:- Phase-I

Sr. No	Building Name/ other	Current status of Work for Phase-II
1.	A1	100 % Work Completed OC Granted
2.	A2	70 % Work Completed
3	A3	90 % Work Completed
4	A4	75 % Work Completed
5	Gardening/Landscape	50% Work Completed
6	STP	90% Work Completed
7	RWH	30 % Work Completed
8	Internal Roads	20 % Work Completed
9	Lighting	Work Yet Not Started
10	Plumbing	Work Yet Not Started

Sr. No	Building Name/ other	Current status of Work for Phase-II
1.	B1	Work Yet Not Started
2.	B2	Work Yet Not Started
3	B3	Work Yet Not Started
4	B4	Work Yet Not Started
5	В5	Work Yet Not Started
6	B6	Work Yet Not Started
7	Gardening/Landscape	Work Yet Not Started
8	STP	Work Yet Not Started
9	RWH	Work Yet Not Started
10	Internal Roads	Work Yet Not Started
11	Lighting	Work Yet Not Started