

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

MINISTRY OF ENVIRONMENT & FORESTS

Regional Office (W), Bhopal

Monitoring Report

**PART – I
DATA SHEET**

No.: 02		Date: June,2012
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: samir@kumarworld.com
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	:	February'2012 & May'2012 <i>(Env. Monitoring report is attached herewith. Environment Monitoring was carried by M/s. Green Circle, Inc.)</i>
15.	<p>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.</p> <p>(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.</p>	:	<p>Letter issued by MoEF: EC No. : No. 21-221/2007-IA-III dated 24th December, 2007.</p> <p>Consent No.: BO/RO (P&P)/EIC No. PN-4045-09/E/CC-291 dated 07th August, 2009.</p>

Kindly Advise Mr. Manish Jain

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 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. 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 wastewater 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 sewer. 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-wheelers.

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

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.
- ii. 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.
- iv. 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.
- vi. 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 dual plumbing line. Treatment of 100% gray water by decentralized treatment should be done.
- ix. 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.
- xi. 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 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.

- 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 Ambient 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-peak 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.

II. Operation Phase

.....mandated to the project is subject to the

FROM : GREEN CIRCLE

FAX NO. : 011 24370330

Dec. 26 2007 11:40AM P5

- ii. Diesel power generating sets proposed for 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 discharged by stack, raised to 4 meters above the rooftop.
- iii. 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.
- iv. Noise barriers should be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards.
- v. Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area.
- vi. 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.
- vii. Rainwater 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.
- viii. The solid waste generated should be properly collected & segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.
- ix. 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.
- x. The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.
- xi. 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.

- 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.
- ii) The environmental safeguards 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.

8. 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 vernacular language informing that the project has been accorded environmental clearance 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 <http://www.envfor.nic.in>. 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.

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.

K. Rathore

(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 Point, 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)

COMPLIANCE REPORT

EC Letter No. : 21-221/2007-IA-III Dated: December 24, 2007

Project Name : Residential Complex – “Kumar Prince Town”

Project location : S.No. 9/1(pt) Undri, Pune.

Developer name : M/s. Manikchand Kumar Properties.

Developers address : Kumar Capital, 1st 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 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.

PART A- SPECIFIC CONDITIONS

I. Construction 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 dual 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 conform 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 conform 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 conform to applicable air and noise emission standards and should be operated only during non-peak 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. Operation 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.	Noted. The project is in construction phase.
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 conform 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.

Sr. No.	EC Conditions	Compliance Status
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.	Noted. 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.	Noted. The project is in construction phase.
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.	Noted. 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.	Noted. The project is in construction phase.
12.	The ground water level and its quality should be monitored regularly in consultation with Central Ground water authority.	Noted. The project is in construction phase.
13.	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.	Complied. 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.	Complied. Refer enclosed annexure-I, Project details.
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.	Noted. The project is in construction phase.
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.	<p>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 http://www.envfor.nic.in. 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.</p>	<p>Complied. Copy of News Paper advertisement is attached herewith.</p>
12.	<p>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.</p>	<p>Noted.</p>
13.	<p>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.</p>	<p>Noted.</p>

POST ENVIRONMENT MONITORING REPORT

Project

Residential Complex
'KUMAR PRINCE TOWN'
Undri, Pune

Period: January, 2012 – March, 2012

DEVELOPER:

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

Prepared by:



GREEN CIRCLE, INC.

Vadodara

CERTIFICATE

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 January, 2012 – March, 2012.

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, PM_{2.5}, SO₂, & NO_x 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

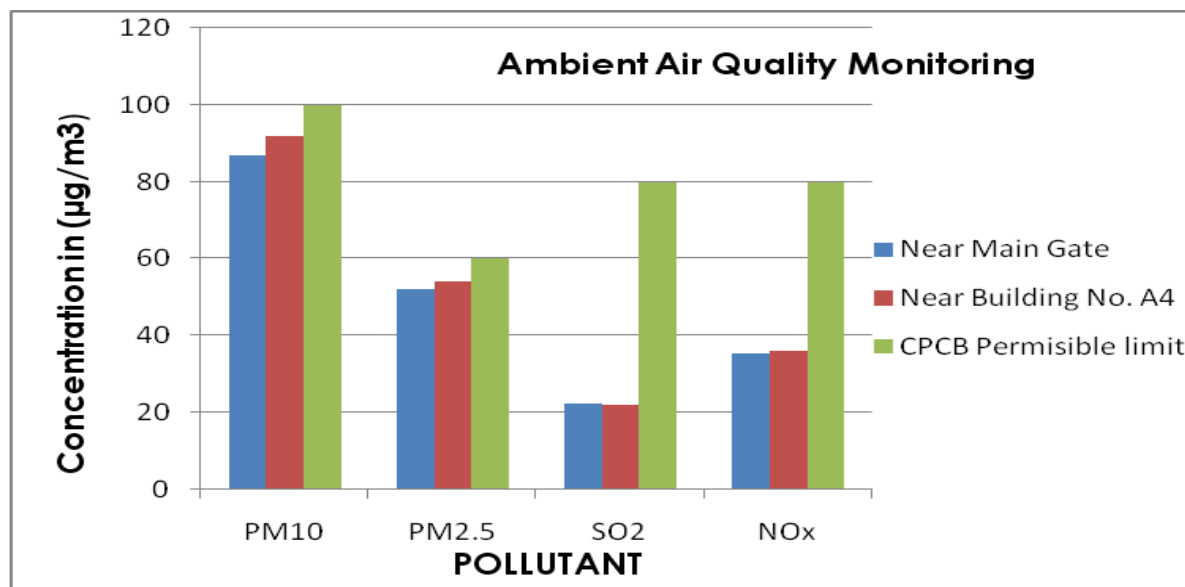
PM ₁₀ /PM _{2.5}	:	IS: 5182 (Part IV 1999 & Part XXIII:2006)
SO ₂	:	IS: 5182 (Part II) 2001 Improved West & Gaek method
NO _x	:	IS: 5182 (Part VI) 1998 Jacob & Hochheiser modified method

Table 2 : Ambient Air Quality

Sr. No.	Parameters	Unit	Results		CPCB Permissible Limit	Reference Method
			Near Main Gate	Nr. Building No. A4		
1.	Particulate Matter (PM ₁₀)	µg/m ³	87	92	100	IS 5182 : Part 23 : 2006
2.	Particulate Matter (PM _{2.5})	µg/m ³	52	54	60	NAAQS Monitoring & Analysis Guidelines Volume- I by CPCB
3.	Sulfur Dioxide (SO ₂)	µg/m ³	22.5	22.2	80	IS 5182 : Part 2 : 2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	35.4	36.1	80	IS 5182 : Part 6 : 1975

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 68-72 µg/m³, PM_{2.5} ranges from 38-40 µg/m³, SO₂ ranges from 18- 21 µg/m³, and NO_x ranges from 14-16 µg/m³. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

B. STACK MONITORING:

Stack Monitoring was carried out for three 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.

Table 3: Analysis Report

Sr. No.	Parameters	Unit	Results			Reference Method
			In Phase I	Near B1 Building	Near RMC Plant	
1.	Particulate Matter (PM)	mg/NM ³	84.2	71.2	78.5	IS 11255: Part 1
2.	Sulphur dioxide (SO ₂)	ppm	17.6	20	22.2	IS 11255: Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	28.2	31.2	30	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:

Table 4: Quality of Water samples

Sr. No.	Parameters	Unit	Results		Permissible limit as per IS-10500-1992 for Drinking Water	Reference Method
			Well Water	Tanker Water		
1.	pH	-	7.6	7.25	6.5-8.5	APHA 4500
2.	Temperature	°C	27	27.5	NS	APHA 2550
3.	Turbidity	NTU	8	6	10	APHA 2130
4.	Conductivity	µs/cm	684	658	NS	APHA 2510
5.	Total Dissolved Solids	mg/l	524	541	2000	APHA 2540 C
6.	Total Suspended Solids	mg/l	13	12	NS	APHA 2540 D
7.	Total Hardness	mg/l	210	212	600	APHA 2340
8.	Ca Hardness	mg/l	115	120	NS	APHA 3500 Ca
9.	Total Alkalinity	mg/l	95	115	600	APHA 2320
10.	Chloride	mg/l	120	135	1000	APHA 4500 Cl
11.	Sulphate	mg/l	15	15.8	400	APHA 4500 SO ₄
12.	Copper	mg/l	BDL	BDL	1.5	APHA 3500 Cu
13.	Zinc	mg/l	BDL	BDL	15	APHA 3500 Zn

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.

Analysis Report of STP outlet

Sr. No.	Parameters	Unit	Results	Limit as per EPA,1986 (Discharge on Inland Surface)	Reference Method
1.	pH	-	7.4	5.5 – 9.0	APHA 4500
2.	Temperature	°C	27	-	APHA 2550
3.	Total Dissolved Solids	mg/l	1540	-	APHA 2540 C
4.	Total Suspended Solids	mg/l	35	100	APHA 2540 D
5.	Chemical Oxygen Demand	mg/l	120	250	APHA 5220
6.	Biochemical Oxygen Demand	mg/l	15	30	APHA 5210
7.	Oil & Grease	mg/l	BDL	10	APHA 5520

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.

Table 5: Ambient Noise Quality

Sr. No.	Location Name	Units	Day Time		Night Time	
			Results	CPCB Permissible Limit	Results	CPCB Permissible Limit
1.	Near Main Gate Phase-I	dB (A)	54.6	65	52.7	55
2.	Near Building A4	dB (A)	56.5	65	54.5	55
3.	Near STP	dB (A)	57.3	65	53.3	55
4.	Near Building A2	dB (A)	59.1	65	54.8	55
5.	Near Building A1	dB (A)	57.7	65	50.1	55
6.	RMC Plant	dB (A)	64.8	65	54.6	55

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 all location is well within the prescribed limit.

Analysis Result

Sr. No.	Location Name	Units	Observed Value	
			Results	CPCB Permissible Limit
1.	Phase-I Near Building No A 4	dB (A)	72.9	75
2.	Phase-II Near Building No B 1	dB (A)	70.4	75
3.	Near RMC Plant	dB (A)	73.6	75

E. SOIL QUALITY ANALYSIS:

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

Table 6: Soil Analysis Report

Sr. No.	Parameters	Unit	Results		Reference Method
			Near Building B2	Near RMC Plant	
1.	pH	-	7.75	8.2	IS 2720 : Part 26 : 1987
2.	Moisture Content	%	3.5	3.8	IS 2720 : Part 09: 1992
3.	Sulphate	mg/gm	1.24	1.28	IS 2720 : Part 27 : 1977
4.	Organic Matter	%	2.80	2.34	IS 2720 : Part 22 : 1972
5.	Chloride	mg/gm	0.90	0.94	APHA 4500-Cl-B
6.	Copper	mg/gm	BDL	BDL	APHA 3500-Cu
7.	Total Kjeldhal Nitrogen	mg/gm	1.04	1.11	APHA 4500-N _{ORG}
8.	Zinc	mg/gm	0.0014	0.0012	APHA 3500-Zn

Note: BDL = Below Detectable Limit

Observations:

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

POST ENVIRONMENT MONITORING REPORT

Project

Residential Complex
'KUMAR PRINCE TOWN'
Undri, Pune

Period: April, 2012 – June, 2012

DEVELOPER:

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

Prepared by:



GREEN CIRCLE, INC.

Vadodara

CERTIFICATE

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 April, 2012 – June, 2012.

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, PM_{2.5}, SO₂, & NO_x 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

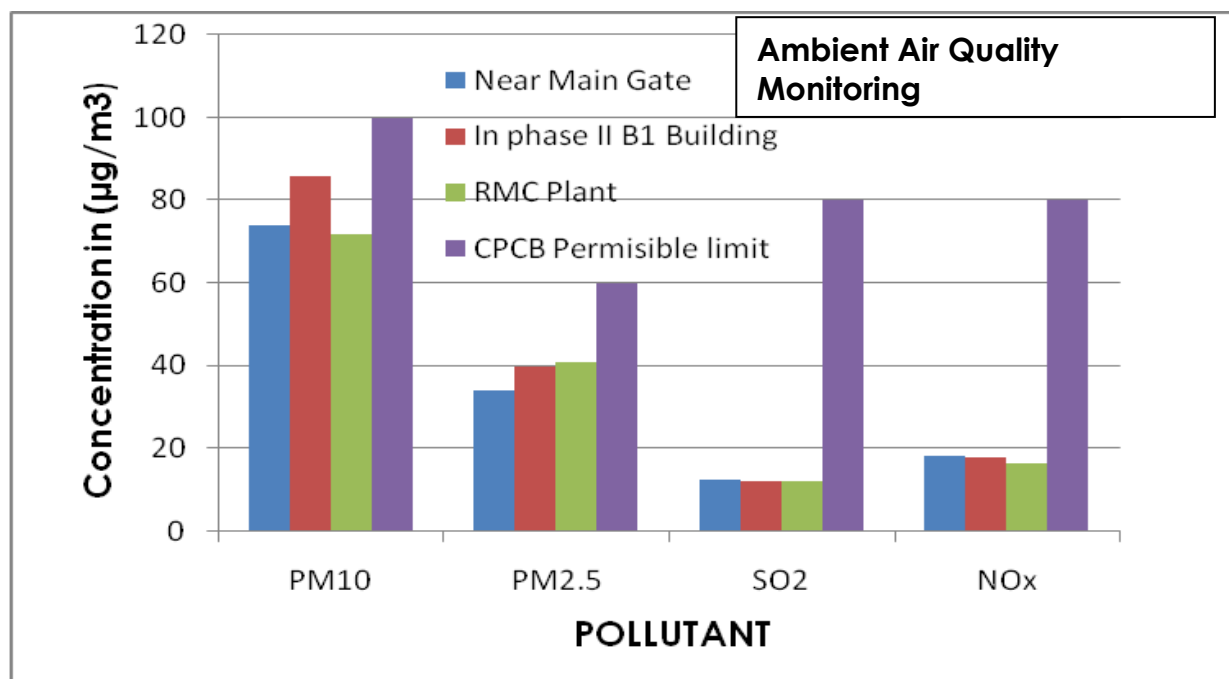
PM ₁₀ /PM _{2.5}	:	IS: 5182 (Part IV 1999 & Part XXIII:2006)
SO ₂	:	IS: 5182 (Part II) 2001 Improved West & Gaek method
NO _x	:	IS: 5182 (Part VI) 1998 Jacob & Hochheiser modified method

Table 2 : Ambient Air Quality

Sr. No.	Parameters	Unit	Results			CPCB Permissible Limit	Reference Method
			Near Main Gate	In Phase II B1 Building	RMC Plant		
1	Particulate Matter (PM ₁₀)	µg/m ³	74	86	72	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	34	40	41	60	NAAQS Monitoring & Analysis Guidelines Volume- I by CPCB
3	Sulfur Dioxide (SO ₂)	µg/m ³	12.6	12.2	12.1	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	18.2	18.1	16.7	80	IS 5182 : Part 6 : 1975

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 66-71 µg/m³, PM_{2.5} ranges from 40-42 µg/m³, SO₂ ranges from 17-19 µg/m³, and NO_x ranges from 15-18 µg/m³. The Observed results clearly indicate, all the parameters are well within the NAAQS limits.

B. STACK MONITORING:

Stack Monitoring was carried out for three 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.

Table 3 : ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results			Reference Method
			In Phase I	Near B1 Building	Near RMC Plant	
1.	Particulate Matter (PM)	mg/Nm ³	86.2	73.2	80.5	IS 11255: Part 1
2.	Sulphur dioxide (SO ₂)	ppm	19.6	22	24.2	IS 11255: Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	30.2	33.2	32	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:

Table 4: Quality of Ground Water samples

Sr. No.	Parameters	Unit	Results	Reference Method	Permissible limit as per IS-10500-1992 for Drinking Water
1.	pH	-	7.4	APHA 4500	6.5-8.5
2.	Temperature	°C	32	APHA 2550	NS
3.	Turbidity	NTU	8	APHA 2130	10
4.	Conductivity	µs/cm	885	APHA 2510	NS
5.	Total Dissolved Solids	mg/l	655	APHA 2540 C	2000
6.	Total Suspended Solids	mg/l	16	APHA 2540 D	NS
7.	Total Hardness	mg/l	226	APHA 2340	600
8.	Ca Hardness	mg/l	98	APHA 3500 Ca	NS
9.	Total Alkalinity	mg/l	90	APHA 2320	600
10.	Chloride	mg/l	94	APHA 4500 Cl	1000
11.	Sulphate	mg/l	24	APHA 4500 SO ₄	400
12.	Copper	mg/l	BDL	APHA 3500 Cu	1.5
13.	Zinc	mg/l	BDL	APHA 3500 Zn	15

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:

Construction of STP is completed. Water samples were collected from STP Inlet & Outlet to check the quality of the Waste water. Analysis results are compared with APHA 1060 as mentioned in following Table 5.

Table 5: Quality of WasteWater samples

STP Inlet

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH	-	7.8	APHA 4500
2.	Temperature	°C	33	APHA 2550
3.	Total Dissolved Solids	mg/l	2822	APHA 2540 C
4.	Total Suspended Solids	mg/l	62	APHA 2540 D
5.	Chemical Oxygen Demand	mg/l	540	APHA 5220
6.	Biochemical Oxygen Demand	mg/l	165	APHA 5210
7.	Oil & Grease	mg/l	7	APHA 5520

STP Outlet

Sr. No.	Parameters	Unit	Results	Limit as per EPA,1986 (Discharge on Inland Surface)	Reference Method
1.	pH	-	7.6	5.5 – 9.0	APHA 4500
2.	Temperature	°C	30	-	APHA 2550
3.	Total Dissolved Solids	mg/l	1925	-	APHA 2540 C
4.	Total Suspended Solids	mg/l	16	100	APHA 2540 D
5.	Chemical Oxygen Demand	mg/l	100	250	APHA 5220
6.	Biochemical Oxygen Demand	mg/l	16	30	APHA 5210
7.	Oil & Grease	mg/l	BDL	10	APHA 5520

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 6.

Table 6: Ambient Noise Quality

Sr. No.	Location Name	Units	Day Time		Night Time	
			Results	CPCB Permissible Limit	Results	CPCB Permissible Limit
1.	Near Main Gate Phase-I	dB (A)	53.6	65	52.7	55
2.	Near STP	dB (A)	55.5	65	54.2	55
3.	Material Entry Gate	dB (A)	58.3	65	53.3	55
4.	Building B1	dB (A)	60.1	65	54.4	55
5.	Building No B3	dB (A)	59.7	65	50.1	55
6.	RMC Plant	dB (A)	64.8	65	54.0	55

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

Sr. No.	Location Name	Units	Observed Value	
			Results	CPCB Permissible Limit
1.	Near DG -I In Phase -I	dB (A)	70.9	75
2.	Near DG-II B1 Building	dB (A)	74.6	75
3.	RMC Plant DG-III	dB (A)	73.6	75

E. SOIL QUALITY ANALYSIS:

Soil samples of B2 building & near RMC plant of site were collected from site at 20 cm depth. Analysis results are tabulated in the following Table 7.

Table 7: Soil Analysis Report

Sr. No.	Parameters	Unit	Results		Reference Method
			B2 Building	Near RMC	
1.	pH	-	7.7	8.4	IS 2720 : Part 26 : 1987
2.	Moisture content	%	3.6	3.0	IS 2720 : Part 09: 1992
3.	Sulphate	mg/gm	1.20	1.20	IS 2720 : Part 27 : 1977
4.	Organic matter	%	2.80	2.18	IS 2720 : Part 22 : 1972
5.	Chloride	mg/gm	0.90	0.98	APHA 4500-Cl ⁻ -B
6.	Copper	mg/gm	BDL	BDL	APHA 3500-Cu
7.	Total Kjeldhal Nitrogen	mg/gm	1.02	1.15	APHA 4500-N _{ORG}
8.	Zinc	mg/gm	0.0012	0.0015	APHA 3500-Zn

Note: BDL = Below Detectable Limit

Observations:

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

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.

AREA STATEMENT INCLUDING PARKING STATEMENT:

Sr. No.	Particulars	Area		
1.	Total Gross Plot Area	1,01, 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

WATER CONSUMPTION:

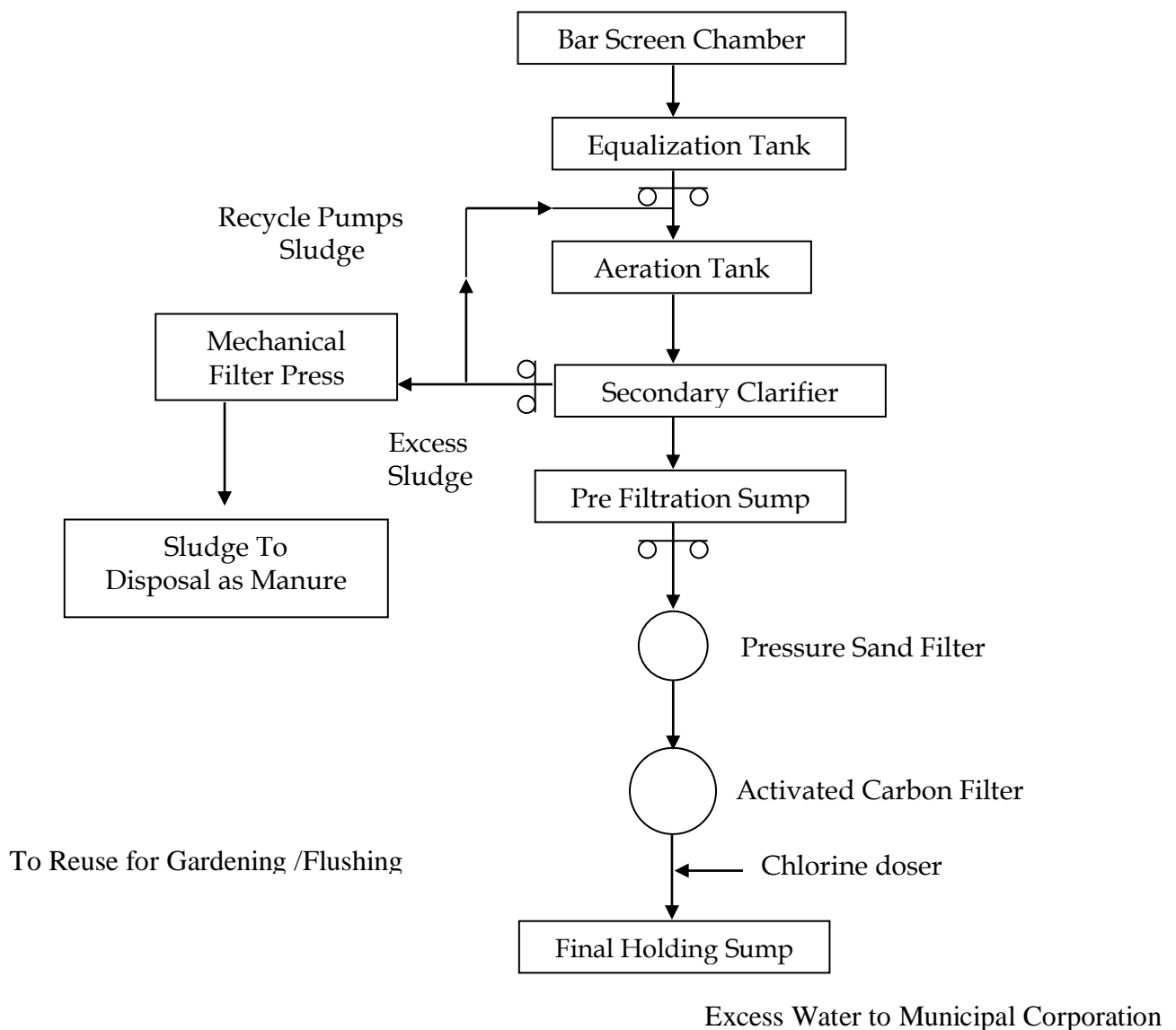
Total water demand: 775 m³/day

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



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:

Roof

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 Resistance		2.994
	Net U Value $1 / 2.994$		=	0.334
	U Value recommended by ECB code (Climate zone warm & humid)			0.409
	Roof meets the requirement			

Walls

Sr. No.	Description	Conductivity w /m. k	Length	Resistance R 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/m²·k

6 – 12 – 6

ENERGY CONSERVATION IN COMMON AREA LIGHTING

Sr. No.	Area for Lighting- Purpose	Connected Load with conventional light fitting (KW)	Load with CFL Energy Efficient lamps(in KW)
1	for multi level Parking, Lobby Stair Case for Buildings–23Nos	55 KW (40 W tube lights & lamps)	40.3 KW (18 W CFL -Energy Efficient Lamps)
2	Street Light & Area Lighting	13.5(with 150 w street light fitting-90nos)	7.2 (with CFL street light & HM fittings)
3	Gardens, Gate and Club house- Pool, 2 nos.	24 (estimated conventional Lighting)	16 (with CFL – energy 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 to 12 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

Sr. No.	Environment	Potential Impact	Expected Source of Potential Impact	Mitigation Measures	Remark
1.	Air Environment	Dust & Gaseous Emission	<u>Construction Phase</u> <ul style="list-style-type: none"> • Excavation of construction material • Due to the operation of construction equipments. 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Impact will be confined to short duration
			<u>Operational Phase</u> <ul style="list-style-type: none"> • Due to operation of DG set. 	<ul style="list-style-type: none"> • DG set installed with acoustic measures • Generator exhaust will be taken above top level of building as per CPCB norms. 	<ul style="list-style-type: none"> • Not significant as DG set would be used as emergency power back up.
2.	Water Environment	Ground Water & Storm Water	<u>Construction Phase</u> <ul style="list-style-type: none"> • Waste water generated from labor 	<ul style="list-style-type: none"> • Sewage will be treated in Soak Pit / septic tank. 	<ul style="list-style-type: none"> • Impact will be temporary
			<u>Operational Phase</u> <ul style="list-style-type: none"> • Discharge of sewage • Discharge of storm water 	<ul style="list-style-type: none"> • Sewage will be disposed in STP. Rainwater Harvesting will be done for ground water recharging. 	<ul style="list-style-type: none"> • Recycled water will be used for recirculation to flushing cisterns.

Sr. No.	Environment	Potential Impact	Expected Source of Potential Impact	Mitigation Measures	Remark
3.	Noise Environment	Noise Emission	<u>Construction Phase</u> <ul style="list-style-type: none"> Operation of construction equipments and vehicle movement during site development 	<ul style="list-style-type: none"> Use of well maintained equipment fitted with acoustic measures Ear plugs/muffs for the working staffs 	<ul style="list-style-type: none"> Temporary Impact Heavy construction activities are limited to daytime only.
			<u>Operation phase</u> <ul style="list-style-type: none"> Vehicles movement Operation of DG sets 	<ul style="list-style-type: none"> Individual acoustic enclosures will be provided for DG sets 	<ul style="list-style-type: none"> No impact.
4.	Solid Waste	Soil	<u>Construction Phase</u> <ul style="list-style-type: none"> Disposal of construction debris 	<ul style="list-style-type: none"> Construction debris will be collected and suitably used on site as per construction waste management plan 	<ul style="list-style-type: none"> No impact.
			<u>Operation Phase</u> <ul style="list-style-type: none"> The paper and the plastic used at the individual level. Canteen waste in the form of garbage and rubbish. 	<ul style="list-style-type: none"> Reuse of the paper and plastic waste. Planned system for waste collection, segregation, and disposal. 	<ul style="list-style-type: none"> Solid Waste will be disposed as per guidelines of Municipal Corporation
5.	Ecology	No significant Impact	<u>Construction Phase</u> <ul style="list-style-type: none"> Site Development during construction 	<ul style="list-style-type: none"> There is a plain terrain 	<ul style="list-style-type: none"> No impact.

Sr. No.	Environment	Potential Impact	Expected Source of Potential Impact	Mitigation Measures	Remark
			<u>Operational Phase</u> <ul style="list-style-type: none"> Increase of green cover 	<ul style="list-style-type: none"> Suitable green belt will be developed as per landscaping plan at site. 	<ul style="list-style-type: none">
6.	Traffic Pattern	Increase of vehicular movements	<u>Construction Phase</u> <ul style="list-style-type: none"> Heavy Vehicular movement at site 	<ul style="list-style-type: none"> Heavy Vehicular movement will be restricted to daytime only and adequate parking facility will be provided. 	--
			<u>Operational Phase</u> <ul style="list-style-type: none"> Traffic due to commercial once the site is operational 	<ul style="list-style-type: none"> Vehicular movement will be regulated inside the site with adequate roads and parking. 	
7.	Socio-Economic	Increase in Job opportunities	<u>Construction Phase</u> <ul style="list-style-type: none"> 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

Copy of News Paper Advertisement

PUDHARI-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

Copy of News Paper Advertisement

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-291 Date: 07/08/2009

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)	pH	Not to exceed	6.5 to 9.0	
(2)	Suspended Solids	Not to exceed	100	mg/l
(3)	BOD 3 days 27 CC	Not to exceed	100	mg/l
(4)	Fecal Coliform	Not to exceed	500/100/l	ml
(7)	Residual Chlorine	Not to exceed	0.1	mg/l
(8)	Detergent	Not to exceed	0.1	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): -**

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, roof-water reclamation, water/storm water conservation and implement the same before handing 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 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.
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, 1988. 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

(In CMD)

a) Domestic	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: -

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/Nm ³
ii)	SO ₂ (DG set)	Not to Exceed	20	Kg/day

The following measure shall be taken.

Adequate mitigation measures shall be taken to control emissions of SO₂, NO_x, 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/ m ³
		Not to Exceed (24 hours)	80	µg/ m ³
3	NO _x	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/ m ³
		Not to Exceed (24 hours)	100	µg/ m ³

The Applicant shall observe the following fuel patterns

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

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

No.	Chimney attached to DG	Height above roof of Bldg
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.
- 4 Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer.
- 5 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.
- 7 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.
- c) Construction material shall be carried in enclosed vehicles during construction activities.

(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).
1. 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.

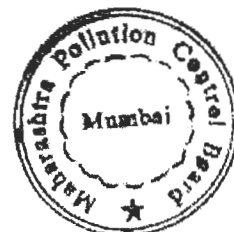
(VIII) The Applicant shall take adequate measures for control of noise levels from its own sources within the complex (residential cum Commercial) in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Daytime is reckoned as between 6 a.m. to 10 p.m. and Nighttime 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 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

(Signature)
 (Mahesh Pathak)
 Member Secretary

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



Received consent fee of

Amount	DD No.	Date	Drawn on
Rs 132450/-	029790	19.06.2009	HDFC Bank Ltd

4. 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

Developers Address : Kumar Capital, 1st Floor, 2413
East Street Camp, Pune – 411001

CURRENT STATUS OF THE PROJECT

Status updated on : 17/05/2012

Activity Phase of project : Phase I Work is going on

Excavation details : 45 % Completed

CONSTRUCTION DETAILS:- Phase-I

Sr. No	Building Name/ other	Current status of Work for Phase-II
1.	A1	100 % Work is Completed (O.C. Granted)
2.	A2	100 % Work is Completed (O.C. Granted)
3	A3	100 % Work is Completed (O.C. Granted)
4	A4	100 % Work is Completed (O.C. Granted)
5	Gardening/Landscape	80% Work is Completed
6	STP	100 % Work is Completed
7	RWH	100 % Work is Completed
8	Internal Roads	100 % Work is Completed
9	Lighting	100 % Work Yet Not Started
10	Plumbing	100 % Work Yet Not Started

CONSTRUCTION DETAILS:- Phase-II

Sr. No	Building Name/ other	Current status of Work for Phase-II
1.	B1	II nd Floor RCC Work is Completed
2.	B2	Work Yet Not Started
3	B3	Work Yet Not Started
4	B4	Work Yet Not Started
5	B5	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