## State Level Environment Impact Assessment Authority, Uttar Pradesh

#### Directorate of Environment, U.P.

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To,

Mr. Amit Kohli, Royal Home Town Planners Pvt. Ltd., Ground Floor, Tapasya Corporate Towers, Tower-B, Sector-126, Noida, U.P.

Ref. No. 2021 / Praya/SEAC/1664/2012/AD(Sub)

Date: | Q October, 2013

Sub: Environmental Clearance for Proposed Group Housing Project "Beetle Lap"at Plot No. GH-G2, Sector-25, Jaypee Greens Sports City SDZ, Yamuna Expressway Industrial Development Authority Area, Gautam Budha Nagar, U.P. -Regards.

Dear Sir,

Please refer to your application/letter dated 05/08/2013 & 07/09/2013 addressed to the Secretary, SEAC & Director, Directorate of Environment, Lucknow. The case was presented by the representative of the project proponent along with the project consultant Eco Pro Engineers Pvt. Ltd. in the State Level Expert Appraisal Committee (SEAC) meeting held on 07/09/2013

The proposal has been appraised as per prescribed procedure in the lights of provisions under the EIA Notification, 2006 as amended on the basis of the mandatory documents enclosed with the application viz. Form-1 & 1A, Layout plans. In addition clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) during presentation. The Project proponent, through documents (submitted to SEAC) and presentation made, has informed to the SEAC that:-

- 1. The environmental clearance is sought for Group Housing Project "Beetle Lap" at Plot No-GH-G2, Sector-25, Jaypee Greens Sports City SEZ, Yamuna Expressway IDA area, G.B.Nagar, NOIDA, U.P.
- 2. The salient features of the project is as follows:

S. No.	Project Features	Description
	Total Plot Area	13582.869 m
	Built up area	69361.609 m (including 42097.394 m of 2–level basement)
	FAR	40747.359 m
	Permissible ground coverage	4754.004 m <sup>2</sup> (35%)
	Proposed Ground Coverage	3574.621 m (26.32%)
	Greenbelt /Soft Landscape	5706.217 m (42% of plot area)
	No. of Floors	2B + G + 16 Floors
	Parking	Provided for 702 cars in basements
	Total Expected Population	2160
	Total Water Requirement	226 KLD (205 KLD domestic + 6 KLD irrigation

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		+ 10 KLD Filter Backwash + 5 KLD for cooling)
	Source of Water	Borewells/Piped water supply
	Total Sewage Generation	185 KLD
	STP	220 KLD
	Total Power Demand	3000 kW
	Source of Power	Grid supply
	Power Backup	DG Sets
	•	2500 KVA
	Amount of solid waste generation	Approx. 1070 Kg/Day

- 3. Excavated soil management is as follows:
- Total Excavated Soil  $11000 \times 8 = 88000 \text{ m}^3$
- Top Soil 27000 m<sup>3</sup> (to be stored for future use in horticulture and landscaping
- Road Development/Contouring/Leveling of Plot 45000 m<sup>3</sup>
- External Development 16000 m<sup>3</sup>
- No soil would be transported further away from plot.
- Stockpile slope of top soil would not exceed 1:2 (vertical to horizontal) and height of the pile be restricted to 2 m.
- To retain soil and to allow percolation of water at the edges of pile, silt fencing would be provided.
- 4. The total water requirement is proposed as 226 KLD. Fresh water requirement is 137 KLD which shall be sourced from Municipal supply.
- 5. The total waste water generation is proposed as 185 KLD to be treated in STP of 220 KLD capacity. Treated waste water shall be used for flushing (68 KLD), Horticulture (06 KLD), Backwash (10 KLD), other uses (87 KLD).
- 6. 04 no. of Rain Water Harvesting Pits is proposed.
- 7. The Project proposal falls under category 8"a" of EIA Notification, 2006 (as amended).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting held on 07/09/2013 the State Level Environment Impact Assessment Authority in its Meeting held on 03/10/2013 has decided to grant the Environmental Clearance to the project subject to the effective implementation of the following general and specific conditions:-

#### **General Conditions:**

- 1. It shall be ensured that all standards related to ambient environmental quality and the emission/effluent standards as prescribed by the MoEF are strictly complied with.
- 2. It shall be ensured that obtain the no objection certificate from the U P pollution control board before start of construction.
- 3. It shall be ensured that no construction work or preparation of land by the project management except for securing the land is started on the project or the activity without the prior environmental clearance.
- 4. The proposed land use shall be in accordance to the prescribed land use. A land use certificate issued by the competent Authority shall be obtained in this regards.
- 5. All trees felling in the project area shall be as permitted by the forest department under the prescribed rules. Suitable clearance in this regard shall be obtained from the competent Authority.
- 6. Impact of drainage pattern on environment should be provided.

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- 7. Surface hydrology and water regime of the project area within 10 km should be provided.
- 8. A suitable plan for providing shelter, light and fuel, water and waste disposal for construction labour during the construction phase shall be provided along with the number of proposed workers.
- 9. Measures shall be undertaken to recycle and reuse treated effluents for horticulture and plantation. A suitable plan for waste water recycling shall be submitted.
- 10. Obtain proper permission from competent authorities regarding enhanced traffic during and due to construction and operation of project.
- 11. Obtain necessary clearances from the competent Authority on the abstraction and use of ground water during the construction and operation phases.
- 12. Hazardous/inflammable/Explosive materials likely to be stored during the construction and operation phases shall be as per standard procedure as prescribed under law, Necessary clearances in this regards shall be obtained.
- 13. Solid wastes shall be suitably segregated and disposed. A separate and isolated municipal waste collection center should be provided. Necessary plans should be submitted in this regards.
- 14. Suitable rainwater harvesting systems as per designs of groundwater department shall be installed. Complete proposals in this regard should be submitted.
- 15. The emissions and effluents etc. from machines, Instruments and transport during construction and operation phases should be according to the prescribed standards. Necessary plans in this regard shall be submitted.
- 16. Water sprinklers and other dust control measures should be undertaken to take care of dust generated during the construction and operation phases. Necessary plans in this regard shall be submitted.
- 17. Suitable noise abatement measures shall be adopted during the construction and operation phases in order to ensure that the noise emissions do not violate the prescribed ambient noise standards. Necessary plans in this regard shall be submitted.
- 18. Separate stock piles shall be maintained for excavated top soil and the top soil should be utilized for preparation of green belt.
- 19. Sewage effluents shall be kept separate from rain water collection and storage system and separately disposed. Other effluents should not be allowed to mix with domestic effluents.
- 20. Hazardous/Solid wastes generated during construction and operation phases should be disposed off as prescribed under law. Necessary clearances in this regard shall be obtained.
- 21. Alternate technologies for solid waste disposals (like vermin-culture etc.) should be used in consultation with expert organizations.
- 22. No wetland should be infringed during construction and operation phases. Any wetland coming in the project area should be suitably rejuvenated and conserved.
- 23. Pavements shall be so constructed as to allow infiltration of surface run-off of rain water. Fully impermeable pavements shall not be constructed. Construction of pavements around trees shall be as per scientifically accepted principles in order to provide suitable watering, aeration and nutrition to the tree.
- 24. The Green building Concept suggested by Indian Green Building Council, which is a part of CII-Godrej GBC, shall be studied and followed as for as possible.
- 25. Compliance with the safety procedures, norms and guidelines as outlined in National Building Code 2005 shall be compulsorily ensured.
- 26. Ensure usage of dual flush systems for flush cisterns and explore options to use sensor based fixtures, waterless urinals and other water saving techniques.

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- 27. Explore options for use of dual pipe plumbing for use of water with different qualities such as municipal supply, recycled water, ground water etc.
- 28. Ensure use of measures for reducing water demand for landscaping and using xeriscaping, efficient irrigation equipments & controlled watering systems.
- 29. Make suitable provisions for using solar energy as alternative source of energy. Solar energy application should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. Present a detailed report showing how much percentage of backup power for institution can be provided through solar energy so that use and polluting effects of DG sets can be minimized.
- 30. Make separate provision for segregation, collection, transport and disposal of e-waste.
- 31. Educate citizens and other stake-holders by putting up hoardings at different places to create environmental awareness.
- 32. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- 33. Prepare and present disaster management plan.
- 34. A report on the energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy efficiency should be prepared incorporating details about building materials and technology, R & U Factors etc.
- 35. Fly ash should be used as building material in the construction as per the provision of fly ash notification of September, 1999 and amended as on August, 2003 (The above condition is applicable only if the project lies within 100 km of Thermal Power Station).
- 36. The DG sets to be used during construction phase should use low sulphur diesel type and should conform to E.P. rules prescribed for air and noise emission standards.
- 37. Alternate technologies to Chlorination (for disinfection of waste water) including methods like Ultra Violet radiation, Ozonation etc. shall be examined and a report submitted with justification for selected technology.
- 38. 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.
- 39. The construction of the building and the consequent increased traffic load should be such that the micro climate of the area is not adversely affected.
- 40. The building should be designed so as to take sufficient safeguards regarding seismic zone sensitivity.
- 41. High rise buildings should obtain clearance from aviation department of concerned authority.
- 42. Suitable measures shall be taken to restrain the development of small commercial activities or slums in the vicinity of the complex. All commercial activities should be restricted to special areas earmarked for the purpose.
- 43. It is suggested that literacy program for weaker sections of society/women/adults (including domestic help) and under privileged children could be provided in a formal way.
- 44. The use of Compact Fluorescent lamps should be encouraged. A management plan for the safe disposal of used/damaged CFLs should be submitted.
- 45. It shall be ensured that all Street and park lighting is solar powered. 50% of the same may be provided with dual (solar/electrical) alternatives.

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- 46. Solar water heater shall be installed to the maximum possible capacity. Plans may be drawn up accordingly ad submitted with justification.
- 47. Treated effluents shall be maximally reused to aim for zero discharge. Where ever not possible, a detailed management plan for disposal should be provided with quantities and quality of waste water.
- 48. The treated effluents should normally not be discharged into public sewers with terminal treatment facilities as they adversely affect the hydraulic capacity of STP. If unable, necessary permission from authorities should be taken.
- 49. Construction activities including movements of vehicles should be so managed so that no disturbance is caused to nearby residents.
- 50. All necessary statutory clearances should be obtained and submitted before start of any construction activity and if this condition is violated the clearance, if and when given, shall be automatically deemed to have been cancelled.
- 51. Parking areas should be in accordance with the norms of MOEF, Government of India. Plans may be drawn up accordingly and submitted.
- 52. The location of the STP should be such that it is away from human habilitation and does not cause problem of odor. Odorless technology options should be examined and a report submitted.
- 53. The Environment Management plan should also include the break up costs on various activities and the management issues also so that the residents also participate in the implementation of the environment management plan.
- 54. Detailed plans for safe disposal of STP sludge shall be provided along with ultimate disposal location, quantitative estimates and measures proposed.
- 55. Status of the project as on date shall be submitted along with photographs from North, South, West and East side facing camera and adjoining areas should be provided.
- 56. Specific location along with dimensions with reference to STP, Parking, Open areas and Green belt etc. should be provided on the layout plan.
- 57. The DG sets shall be so installed so as to conform to prescribed stack heights and regulations and also to the noise standards as prescribed. Details should be submitted.
- 58. E-Waste Management should be done as per MoEF guidelines.
- 59. Electrical waste should be segregated and disposed suitably as not to impose Environmental Risk.
- 60. The use of suitably processed plastic waste in the construction of roads should be considered.
- 61. Displaced persons shall be suitably rehabilitated as per prescribed norms.
- 62. Dispensary for first aid shall be provided.
- 63. Safe disposal arrangement of used toiletries items in Hotels should be ensured. Toiletries items could be given complementary to guests, adopting suitable measures.
- 64. Diesel generating set stacks should be monitored for CO and HC.
- 65. Ground Water downstream of Rain Water Harvesting pit nearest to STP should be monitored for bacterial contamination. Necessary Hand Pumps should be provided for sampling. The monitoring is to be done both in pre and post monsoon, seasons.
- 66. The green belt shall consist of 50% trees, 25% shrubs and 25% grass as per MoEF norms.
- 67. A Separate electric meter shall be provided to monitor consumption of energy for the operation of sewage/effluent treatment in tanks.
- 68. An energy audit should be annually carried out during the operational phase and submitted to the authority.
- 69. Project proponents shall endeavor to obtain ISO: 14001certification. All general and specific conditions mentioned under this environmental clearance should be included

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in the environmental manual to be prepared for the certification purposes and compliance.

70. Appropriate safety measures should be made for accidental fire.

71. Smoke meters should be installed as warning measures for accidental fires.

72. Project falling with in 10 Km. area of Wild Life Sanctuary is to obtain a clearance from National Board Wild Life (NBWL) even if the eco-sensitive zone is not earmarked.

#### b. Specific Conditions:

- 1. Digging of basement shall be undertaken in view of structural safety of adjacent buildings under information/consultation with District Administration/Mining Department.
- 2. During the construction phase, a wheel wash arrangement shall be provided at all exit points of the site.

3. LIG & EWS housing to be provided as per Ghaziabad Development Authority Norms

- 4. 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 area. The open spaces inside the plot should be landscaped and covered with grass and shrubs.
- 5. Green belt should be developed as per CPCB norms. 50% Evergreen Tree (that remains green for most part of the year and sheds leave slowly throughout the year having height more than 2.0 m, with a well distinguished trunk) should be part of the green belt.
- 6. The minimum height of plantation of sapling should be 3.6 m at the time of occupancy.
- 7. Pavements shall be so constructed as to allow infiltration of surface run-off of rain water. Construction of pavements around trees should be able to facilitate suitable watering, aeration and nutrition to the tree.
- 8. Ready Mix Concrete and Sprinkler to be used for curing and quenching during construction phase.
- 9. Environmental Corporate Responsibility (ECR) plan along with budgetary provision amounting to 2% of total project cost shall be submitted (within three month) on need base assessment study in the study area. Income generating measures which can help in up-liftment of weaker section of society consistent with the traditional skills of the people identified. The program me can include activities such as old age homes, rain water harvesting provisions in nearby areas, development of fodder farm, fruit bearing orchards, vocational training etc. In addition, vocational training for individuals shall be imparted so that poor section of society can take up self employment and jobs. Separate budget for community development activities and income generating programmers shall be specified.
- 10. 100 % provision of Rain Water Harvesting is to be made as per CGWB designs. Initially RWH shall be done only from the roof top. RWH from green and other open areas shall be done only after permission from CGWB.
- 11. Dedicated guest parking at surface/stilt should be provided.
- 12. Manure generated from STP/organic waste converter shall be used in-house and plan for management of surplus be submitted within three (3) months.
- 13. Use of LEDs should be ensured in place of CFL. Solar light is to be provided in the common areas with 50% of them may be with dual power.
- 14. Motion sensor based lights to be provided in parking areas, corridors, passages, aisles, stairways.
- 15. Photoelectric lighting should be provided on all the open areas/roads.
- 16. All internal and peripheral roads should be minimum 9 m. wide and all entry & exit should be bell mouth shaped.
- 17. ECS as to be provided as per NOIDA bye-laws @ 1 ECS/80 m<sup>2</sup>.

- 18. Swimming pool to be maintained as per WHO norms in terms of make up water, COC for water and disinfection.
- 19. STP to be constructed during construction phase. 100% waste water is to be treated in STP confirming to prescribe standards of receiving body or designated use. Monitoring of STP to be done weekly till its stabilizations then monthly. The excess treated waste water after in-house use may be given to nearby builders for construction or discharge into public drainage system/drains after permission from the competent authority.
- 20. Stack Height should be calculated based on combined Gen-sets capacity and shall be higher than the tallest building in the project.
- 21. The top soil generated during basement construction will be properly preserved and used for plantation and green area development.
- 22. The total excavated soil will be completely utilized at project site for leveling and back filling or landscaping. In case of surplus excavated soil its management in eco-friendly manner be drawn and submitted within three (3) months.
- 23. Crèche to be provided during the construction and operation phase.
- 24. Provision of separate dedicated room to be made for senior citizen commensurate with proper amenities (TV, music system, indoor games etc.) for end user in and around the club house.
- 25. Bio-medical waste to be managed as per Bio medical Rules and effluent from nursing home/hospital to under go primary treatment separately.
- 26. E-waste shall be managed as per e-waste Management and Handling Rules 2011. Temporary storage at secure place is made till it is given to recycler approved by CPCB.
- 27. A temporary separate and isolated MSW storage and transfer room should be provided at least for two days in a manner to avoid generation of foul smell.
- 28. Ground water should not be extracted for the purpose of construction or otherwise. In case of default the Environmental Clearance will deem to be cancelled.
- 29. Post project monitoring for air, water (surface+ground), Stack (including CO and HC) noise, and STP to be carried out as CPCB Guidelines.
- 30. Adequate Ventilation arrangement for the basement shall be provided along with installation of CO Monitors.
- 31. The basement should be constructed in consultation with CGWB to avoid infringement of water table.
- 32. Project falling with in 10 Km. area of Wild Life Sanctuary is to obtain a clearance from National Board Wild Life (NBWL) even if the eco-sensitive zone is not earmarked.
- 33. The project proponent to ensure that buffer zone of no activity/development as declared /identified under any law does not fall around the project boundary.
- 34. No wetland should be infringed during construction and operation phases. Any Wetlands/Ponds within the project area as per revenue records if any should be protected and brought to the notice of forest department / SEIAA for directions.
- 35. Project proponent should procure all the regulatory clearances and completion certificate form the development authority before handing over the possession of dwellings to residents.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for G.B. Nagar. In case of violation, it would not be effective and would automatically be stand cancelled.

You are also directed to ensure that the proposed site is not a part of any nodevelopment zone as required/prescribed/identified under law. In case of violation, this permission shall automatically deem to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this clearance shall automatically deemed to be cancelled. The project proponent will have to submit approved plans and proposals incorporating the conditions specified in the Environmental Clearance within 03 months of issue of the clearance. The SEIAA/MoEF reserves the right to revoke the environmental clearance, if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF. SEIAA may impose additional environmental conditions or modify the existing ones, if necessary. Necessary statutory clearances should be obtained and submitted before start of any construction activity.

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

This is to request you to take further necessary action in the matter as per provision of Gazette Notification No. S.O. 1533(E) dated 14.9.2006, as amended and send regular compliance reports to the authority as prescribed in the aforesaid notification.

(J. S. Yadav) Member Secretary, SEIAA

No.2.D.2./...../Parya/SEAC/1664/2013/AD(Sub)

Dated: As above

Copy with enclosure for Information and necessary action to:

- 1. The Principal Secretary, Department of Environment, Govt. of Uttar Pradesh, Lucknow.
- 2. Advisor, IA Division, Ministry of Environment & Forests, Govt. of India, Paryavaran Bhayan, CGO Complex, Lodhi Road, New Delhi.
- 3. Chief Conservator, Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aligani, Lucknow.
- 4. District Magistrate, G.B.Nagar, U.P.
- 5. The Member Secretary, U.P. Pollution Control Board, PICUP Bhawan, Gomti Nagar, Lucknow.
- 6. Deputy Director, Regional office, Meerut, Directorate of Environment.
- 7. Copy to Web Master/ guard file.

(O. P. Varma)
Secretary, SEAC/
Director (I/C), Environment