

State Level Environment Impact Assessment Authority, Ajabpur Kala, Mothorowala Road,
Dehradun , Uttarakhand.

(Constituted by Ministry of Environment and Forests Government of India.)

No 550 8(28)/2014
Dated 30 August, 2014

To,

M/s G.R. Realcon Pvt Ltd.
C-60, Chankyapuri, New Delhi,

Ref.: Your letter dated 16.10.2013, 10.02.2014, 13.02.2014, 28.03.2014 18.04.2014, site visit dated 8.04.2014 & your letter dated 15.05.2014.

Sub: Regarding Environmental Clearance for Group housing Project "Sikka Kimaya Greens" at IIE, Shastradhara Road, Dehradun.

Sir,

The above is a proposal seeking environmental clearance for construction of group housing for residential purpose. The project site is located in I.I.E Sahastradhara Road and is not present in the near vicinity of reserve forest or within 10 KM radial distance from National Park/Sanctuary. The above proposal was considered for appraisal on 22nd February, 2014 & 12th July 2014. The site visit was carried out by SEAC on 8th April, 2014. Based on the observations during site visit and project appraisal, the proponent has submitted detailed information/data in form 1/1A, conceptual plan, site lay out plan and drainage plan. It has also submitted structural safety certificate. The total plot area of the project site is 8,211 m² and the total built up area of the proposed site is 42,846.37 m². This project falls under Schedule 8(a) of E.I.A Notification dated 14.09.2006 and the project site is located within territorial limits of Doon Valley Notification, 1989. It is placed in B-2 category. It was observed that the project proponent proposes to construct high rise building units with height as 24 M. But due to the vulnerability of the site as it is located in seismic zone IV and proximity of site to the tectonic thrust and also the site being located in the watershed of natural drainage, it was observed that height of the building can't exceed 21 m as laid down in the bylaws of MDDA (Housing Department, State Government Order No – 2009/V-2011-55/2006 T.C. dated 17th Nov, 2011). The proponent has accordingly submitted revised building plan with height of the building as 21 M. The floor plan is G+5 and total population at project site on completion will be 1723. The project details are as follows –

- The project proponent proposes to use conventional construction materials e.g. Steel, Cement, Stone Aggregates. Temporary storage units would be erected in the construction site and transportation of construction materials would be restricted to non-peak hours. The dust pollution shall be suppressed by regular water sprinkling.
- Noise will be emitted mostly during construction phase due to construction machinery like batching plant, concrete pumps, tower cranes, pile drivers, DG sets, and air compressors. The construction machineries and DG sets would comply with desired acoustic standards of CPCB guidelines to negate effects of noise pollution and air emission. Noise emission due to vehicular movement within the site will be controlled by establishing green belt.
- The excavated surplus earth will be used for backfilling in the project site and also used for development of green belt/landscaping. The construction work would not damage local flora and fauna. There would be no felling of trees during the construction phase.
- Total power requirement for the project would be 2150 KVA and would be meted out from regular supply by UPCL. DG sets of 1500 KVA capacity (250 KVA, 500 KVA AND 750 KVA) would be installed as backup power supply. DG sets would have acoustic enclosures and have adequate stack height complying with CPCB norms.
- Water required during construction phase of the project would be met from private tankers. Total domestic water requirement would be 122 KLD, of which fresh water requirement is 92 KLD and remaining water requirement shall be met from treated wastewater from STP. Waste water generated will be 114 KLD.
- STP of capacity 100 KLD would be installed for treating wastewater. Treated water would be used for flushing, green belt development, road washing, DG cooling and other miscellaneous purposes. 114

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KLD treated waste water would be discharged to the sewerage system. Water efficient fixtures and fittings will be used to optimize water use.

- Rain Water Harvesting measures and Storm Water Management Plan have been designed as per guidelines of CGWA to recharge the ground water at site. The project site would have well-designed and adequate drainage system to avoid any kind of flooding. All building roof water would be brought down through rain water pipes. Three rainwater storage tanks/pits have been proposed within the site premises for conserving the rainwater. The storm water from paved surface and road areas will be collected to rain water harvesting pits through desilting chamber and oil & grease trap.
- Waste generated during construction phase would be in the form of construction debris, which would be disposed off through authorized recyclers and also used in land development/land levelling. Guidelines of Municipal Solid Waste (Management & Handling) Rules, 2000 (as amended from time to time) would be followed for disposal of municipal solid waste. Two-bin collection system for biodegradable and non-biodegradable waste would be adopted. Further two bin collection system for non biodegradable waste for segregating recyclable and non recyclable waste would be adopted. Biodegradable waste would be sent to composting pit and non-biodegradable waste disposed off through authorized recyclers/government approved agencies. The used oil from DG sets will be stored in HDPE drums and sold to authorized vendors. The disposal of e waste will follow guidelines of e waste (management & handling) rules, 2011. STP sludge would be dried and used as organic manure.
- To achieve energy conservation, passive solar techniques would be followed for maximizing the use of sunlight. The use glazed windows, thermal storage wall, passive cooling system would be adopted. CFL lamps and solar lighting would be ensured in the common areas.
- The building material would be so chosen to achieve energy efficiency. The use of fly ash based light weight aerated concrete blocks, perforated bricks, steel manufactured from recycled content, saw dust based doors/window frame, pre cast thin lintels would be ensured.
- The fire alarm/fire detection system would be ensured as per NBC norms. Static storage tanks for fire fighting, hydrant system, automatic sprinkler system and fire pumping system will be installed at project site. Fire safety certificated for the building has been obtained from designated authority.
- The project would provide direct employment to local people. Safety measures and health screening of workforce at site would be ensured

It was observed that construction site is adjacent to the natural drainage area of the I.I.E, which may lead to scouring of the foundation of proposed housing complex. But as the proponent has laid down suitable detailed storm water management plan, hence further the proponent should submit to the Authority a detailed note/plan on final connection of drainage points within the project site to external drainage provided by I.I.E. It was further observed that at least one third area should be under green belt comprising of tree cover of local species suiting to the site conditions. The entire lay out/landscape of the site should have proper signages especially garbage collection points and danger areas. Further it was also observed that backup power of DG set above 500 KVA should not be allowed.

Based on the information submitted by proponent & recommendation of SEAC, the State Environment Impact Assessment Authority (SEIAA) after thorough deliberation and examining all aspects of environmental safeguards as indicated by the SEAC, your proposal is hereby accorded Environmental Clearance subject to fulfilment/compliance of the following conditions –

1- Construction Phase

1.1. The Environmental Clearance is being granted for the purpose of construction of group housing and related infrastructural facilities by "Sikka Kimaya Greens" in IT Park Dehradun, as per plan approved by MDDA/Related Other Agencies. No further deviation in the approved plan and also land use change shall be done without prior approval of SEIAA

1.2. Consent to Establish shall be obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central Air Act and Central Water Act before starting up of any construction activity at the site

1.3. The Site Lay out plan and Building plan should have been approved by the concerned Department/Agency of the State Government before work start up at the construction site. The structural design and other aspects of the building shall comply with guidelines of National Building Code. This shall be ensured by concerned Department of State Government/Accredited Agencies



- 1.4. The building plan and structural design shall comply with requirements of Seismic Zone – IV as outlined in National Building Code. The height of the building shall not exceed 21 Mts. The construction of the building shall be G+6
- 1.5. The topsoil excavated during construction work shall be used for backfilling/landscape development/green belt development. The same shall not be disposed off outside the boundaries of project site without approval of Competent Authority
- 1.6. The onsite levelling and dressing should ensure minimal vegetation clearing and soil erosion. If necessary organic mulching should be done to avoid soil erosion. There shall not be any felling of green trees for the purpose of this project
- 1.7. The disposal of muck should adhere to standards of general safety and health concerns of local people and also it should have no adverse effect on the neighbouring community. The muck shall not be disposed off in adjoining forest areas without meeting requirements of Forest (Conservation) Act, 1980.
- 1.8. Temporary storage units should be erected in the construction site and transportation of construction materials shall be restricted to non peak hours. The dust pollution shall be suppressed by regular water sprinkling
- 1.9. The use of ready mixed concrete/premixed concrete, curing agents and other such practices shall be adopted to minimize use of water on site
- 1.10. All stacking and loading areas should be provided with proper garland drains equipped with baffles to prevent runoff from the site to enter any adjoining water body. Construction spoils including bituminous materials must not be allowed to contaminate watercourse and dumpsites as such materials leach into ground water.
- 1.11. The water requirement during construction phase shall be met from regular water supply/private tankers. The use of groundwater from tube wells shall be restricted to emergency purposes / additional requirement as approved by Central Ground Water Board. Construction work requiring water shall not be carried out during 30th April to 15th June in the year
- 1.12. The soil and groundwater samples shall be tested from accredited agencies and it shall be ensured that they comply with CPCB standards so as to ensure that there is no threat to groundwater quality by leaching of heavy metals and toxic contaminants.
- 1.13. DG Sets shall be used only as backup power. The capacity of DG sets shall not exceed 500 KVA and it should have stack height complying with CPCB norms.
- 1.14. Fixtures of showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices/sensor based control. Dual plumbing system shall be installed separately for fresh water and waste water.
- 1.15. The use of glass may be reduced by upto 40 percent to reduce the electricity consumption and load on air conditioning. If necessary then use of high quality double glass may be encouraged with special reflective coating in windows.
- 1.16. The use of CFL and such other power saving devices shall be maximized. Common areas and landscape areas shall be illuminated with solar lighting system. At least 10 percent of the total power requirement after completion of construction unit shall be met from solar energy. This shall be increased to 33% in next five year.
- 1.17. Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, 2006 which is proposed to be mandatory for all air-conditioned spaces while non air-conditioned spaces should have appropriate thermal insulation materials. The U values of the roof, external wall and fenestration shall also meet specifications of ECBC, 2006.
- 1.18. Rainwater harvesting for roof top and surface run off should be ensured as per the plan submitted. Before recharging the surface run off, pre treatment must be done to remove suspended matter, oil and other particles. The bore well for rain water recharging should be kept at 5 metres above the highest ground water table.

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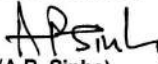
- 1.19. One third of the total project site area shall be converted into green belt. The green belt shall not include kitchen garden, flower pots and grasses/herbs in the area. It shall comprise of tree stand of aesthetic/fruit/timber value. Quality planting material has to be used during plantation as per standards of State Forest Department.
- 1.20. Acoustic enclosures shall be provided with all construction machineries and DG sets on site complying with Noise Levels of CPCB standards. The ambient air quality and noise levels as per CPCB norms shall be ensured through a monitoring system as approved by UEPPCB.
- 1.21. The construction debris may be used for land fill or disposed through authorized vendors. The Hazardous substances generated during construction activity shall be disposed off as required by Hazardous Waste (Management, Handling) Rules, 1989 (as amended from time to time). Efforts shall be maximized for use of low toxicity substitutes and low VOC materials.
- 1.22. The construction work shall be restricted to Sunrise to Sunset period in a day. Any construction activity beyond this period shall be subject to approval of Competent/Designated Authority from time to time.
- 1.23. The vehicles used at the construction site should comply with emission norms and noise level standards of CPCB and State Transport Department. They should be operated only during non peak hours.
- 1.24. All necessary efforts shall be made to ensure safety and hygiene of workforce. First Aid facility shall be established and trained manpower to deal with emergency cases shall be engaged. The labour force engaged on site shall be screened for health from time to time.
- 1.25. Adequate drinking water and sanitation facility has to be provided on site for the workforce. Provision should be made for supply of domestic fuel to the workforce so that they do not remain dependent on adjoining forest areas for fuel wood.
- 1.26. The use of plastics during construction activity shall be bare minimum and efforts to use timber substitute materials should be maximized.
- 1.27. The fire safety arrangements and emergency exit plan should be as per the norms of the concerned regulatory authority/agency.
- 1.28. Watershed of natural drainage of the IT Park should not be disturbed. The entire site after construction activities should carry signages of danger zone, garbage collection points, environment awareness etc.

2 – Operation Phase

- 2.1 STP of capacity 100 KLD should be installed for treating waste water upto tertiary level. Sewage Treatment Plant shall be complying with parameters of CPCB/UEPPCB guidelines. Treated water should be used for flushing, green belt development, road washing, DG cooling and other miscellaneous purposes.
- 2.2 The installation of sewage treatment plant should be certified by an independent expert and a report in this regard should be submitted to the UEPPCB. Necessary measures should be made to mitigate the odour problem from STP.
- 2.3 Guidelines of Municipal Solid Waste (Management & Handling) Rules, 2000 (as amended from time to time) should be followed for disposal of solid waste. Two bin collection system for bio degradable and non bio degradable waste should be adopted. Bio degradable waste shall be sent to composting pit and non biodegradable/inert waste disposed off through authorized recyclers. STP sludge shall be dried and used as organic manure
- 2.4 Energy consumption measures like installation of CFLS/TFLS for the external lighting area should be ensured. The disposal of used CFLS/TFLS should be properly collected and disposed off as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- 2.5 DG sets shall be used only in emergency purpose. The use of solar energy and inverter shall be ensured and maximized as backup power.
- 2.6 A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- 2.7 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 in the office of SEIAA, Uttarakhand. The advertisement should be made within 7 days from the day of issue of the clearance letter.
- 2.8 The SEIAA Uttarakhand reserves the right to withdraw the Environmental Clearance subject to any change in the Government policy by the Central Government or State Government of Uttarakhand, as may be applicable to this project.

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2.9 If this Environmental Clearance is transferred then fresh Environment Clearance is to be obtained under EIA notification dated 14.09.2006. However, no activity shall be undertaken till the Environment Clearance is transferred in his name and he is lawfully bound to Comply with the conditions of the Environmental Clearance.

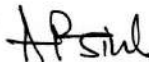

(A.R. Sinha)

Member Secretary

No. ^{SSo}8(28)/2013 dated- as above

Copy for information and necessary action to-

- 1) Secretary, Environment, Forests and Environment, CGO complex, New Delhi.
- 2) Principal Secretary, Environment and Forests, Government of Uttarakhand, Dehradun.
- 3) Director, Regional office (Central) MOEF, 5th floor, Kendriya Bhawan, Sector-H Aliganj, Lucknow.
- 4) **Member Secretary, UEPPCB, Dehradun.**
- 5) Divisional Forest Officer, Dehradun.
- 6) Guard File.


(A.R. Sinha)

Member Secretary