

State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.

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Ref.: 918/Parya/SEAC/2069/2013/JDCA(S)

Date: 31 July, 2014

To,

Sri Rakesh Garg (Director)
M/s Uppal Chaddha Hi-tech Developers Pvt. Ltd.
33, Community Centre, New Friends Colony,
New Delhi-110065

Sub: Regarding Environment Clearance for the proposed revision in "Wave Hi Tech Township", (Expansion) at Vill-Mehraul, Shahpur Bamheta, duriyai, Dasna, Sadiqpur/Qazipur, Bayana, aiphal & Expansion in Vill-Arifpur, Sadat Nagar Iqia & Inayatpur, Talabpur, Kachhehra, Warisabad, Dujana & Girdharpur, Ghaziabad, U.P.

Dear Sir,

Please refer to undated letter received in this office on 01/10/2013 addressed to the Secretary SEAC, Directorate of Environment, Lucknow. The SEAC considered the matter in its meeting held on 03/10/2013. The case was presented by the consultant M/s Perfect Enviro Solution Pvt. Ltd. along with the project proponent. The proponent, through the documents submitted and presentation made, informed the SEAC that:-

1. The revision in environment clearance is sought for Wave Hi Tech Township at village Mehraul, Shahpur Bamheta, Duriyai, Dasna, Sadiqpur/Qazipur, Bayana, Naiphal and Expansion in villages – Arifpur, Sadat Nagar Iqia & Inayatpur, Talabpur, Kachhehra, Warisabad, Dujana & Girdharpur Ghaziabad, Uttar Pradesh.
2. The built up area as 51578130.39 sqmt, the total land area as 4494.31 Ha have been proposed.
3. Provision for plots, EWS/LIG plots, Group housing, Industrial area, Commercial complex, Educational, Medical, Community and other Recreational activities have been proposed. The revised project details are as below:
4. The Plot area of Residential plots will be 2236174 sqm & Built up area will be 10733635.2 sqm.
5. The Plot area of EWS/LIG will be 54107.51 sq m and Built up area will be 292180.554 sq m.
6. The Plot area of Residential group housing will be 4516257 sqm and Built up area will be 24387787.8 sq m.
7. The Plot area of Public and Semi Public areas will be 1694410.796 sq m and Built up area will be 4913791.31 sq m.
8. The Plot area of Commercial and Office areas will be 1719704.134 sq m and Built up area will be 9286402.323 sq m.
9. The Plot area of Industrial area will be 1091296.222 sq m and Built up area will be 1309555.467 sq m.
10. The Plot area of Recreational area will be 545648.1112 sq m and Built up area will be 654777.7335 sq m.
11. The total water requirement as 92144 KLD and fresh water requirement as 59581 KLD which will be sourced from Ghaziabad Development Authority.
12. 73249 KLD waste water to be generated which will be treated in 60 number of STP capacity of 88 MLD has been proposed.

13. The 354 MTPD municipal waste, 4 liter/day used oil and 8 Kg per day E-waste is estimated to be generated.
14. The energy requirement 822 MW is estimated which will be met through the UPPCL. The backup power will be provided by 17 DG Sets (14 x 400 KVA, 2 x 750 KVA, 1 x 1500 KVA).
15. Parking norms as Ghaziabad Development Authority shall be followed.
16. 143053 Cum volume of water for RWH during peak hours and 4494 no of rain water harvesting pits shall be proposed.
17. Project is covered under category 8(b) of EIA Notification 2006 as amended.

Based on the recommendation of the SEAC meeting dated 03/10/2013 the SEIAA in its meeting dated 10/10/2013 has agreed to grant the Environment Clearance to the proposed project subject to the effective implementation of the following general and specific conditions.

a. 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.
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 & 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 far 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.
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. The project proponents shall ensure that no construction activity is undertaken without obtaining pre-environmental clearance.
35. A report on the energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy efficiency should be prepared incorporating details about building materials and technology, R & U Factors etc.
36. 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).
37. 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.
38. 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.
39. The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day & night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped & covered with vegetation of indigenous variety.

40. 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.
41. The building should be designed so as to take sufficient safeguards regarding seismic zone sensitivity.
42. High rise buildings should obtain clearance from aviation department or concerned authority.
43. 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.
44. 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.
45. The use of Compact Fluorescent lamps should be encouraged. A management plan for the safe disposal of used/damaged CFLs should be submitted.
46. 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.
47. Solar water heater shall be installed to the maximum possible capacity. Plans may be drawn up accordingly and submitted with justification.
48. 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.
49. 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.
50. Construction activities including movements of vehicles should be so managed so that no disturbance is caused to nearby residents.
51. 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.
52. Parking areas should be in accordance with the norms of MOEF, Government of India. Plans may be drawn up accordingly and submitted.
53. The location of the STP should be such that it is away from human habitation & does not cause problem of odor. Odorless technology options should be examined & a report submitted.
54. 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.
55. Detailed plans for safe disposal of STP sludge shall be provided along with ultimate disposal location, quantitative estimates and measures proposed.
56. 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.
57. Specific location along with dimensions with reference to STP, Parking, Open areas and Green belt etc. should be provided on the layout plan.
58. 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.
59. E-Waste Management should be done as per MoEF guidelines.
60. Electrical waste should be segregated & disposed suitably as not to impose Environmental Risk.
61. The use of suitably processed plastic waste in the construction of roads should be considered.
62. Displaced persons shall be suitably rehabilitated as per prescribed norms.
63. Dispensary for first aid shall be provided.
64. Safe disposal arrangement of used toiletries items in Hotels should be ensured. Toiletries items could be given complementary to guests, adopting suitable measures.
65. Diesel generating set stacks should be monitored for CO and HC.

66. 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.
67. The green belt shall consist of 50% trees, 25% shrubs and 25% grass as per MoEF norms.
68. A Separate electric meter shall be provided to monitor consumption of energy for the operation of sewage/effluent treatment in tanks.
69. An energy audit should be annually carried out during the operational phase and submitted to the authority.
70. Project proponents shall endeavor to obtain ISO: 14001 certification. All general and specific conditions mentioned under this environmental clearance should be included in the environmental manual to be prepared for the certification purposes and compliance.
71. Environmental Corporate Responsibility (ECR) plan along with budgetary provision amounting to 2% of total project cost shall be submitted (within the month) on need base assessment study in the study area. Income generating measures which can help in upliftment 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. Revised ECR plan is to be submitted within 3 month. Failing which, the environmental Clearance shall be deemed to be cancelled.
72. Appropriate safety measures should be made for accidental fire.
73. Smoke meters should be installed as warning measures for accidental fires.
74. Plan for safe disposal of R.O reject is to be submitted.
75. 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.
76. The environmental safeguards contained in EIA Report should be implemented in letter & spirit.
77. Provision should be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.
78. Six monthly monitoring reports should be submitted to DoEn, U.P./UPSEB/ MoEF Regional Office, Lucknow.
79. Officials from DoEn, U.P./UPSEB/ MoEF Regional Office, Lucknow 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.
80. In the case of any change(s) in the scope of the project, the project would require a fresh EC.
81. The SEIAA, UP 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 Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound manner.
82. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
83. 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.
84. Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

b. Specific Conditions:

Construction Phase

- (i) Consent for Establishment shall be obtained from Uttar Pradesh Pollution Control Board under Air and Water Act and a copy shall be submitted to SEIAA,UP before start of any construction work at the site.
- (ii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (iii) A First Aid Room will be provided in the project both during construction and operation of the project.
- (iv) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- (v) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- (vi) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (vii) The approach road to OSR shall be ensured.
- (viii) 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.
- (ix) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- (x) Any hazardous waste generated during construction phase, should be disposed off as per applicable rules & norms with necessary approvals of the Uttar Pradesh Pollution Control Board.
- (xi) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- (xii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- (xiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- (xiv) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/UPPCB.
- (xv) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).
- (xvi) Ready mixed concrete must be used in building construction.
- (xvii) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xviii) Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices referred.
- (xix) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xx) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.

- (xxi) 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.
- (xxii) Use of glass may be reduced by up to 40% to reduce the electricity consumption & load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- (xxiii) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- (xxiv) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xxv) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- (xxvi) 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.
- (xxvii) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

Operation Phase

- i) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the SEIAA before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Uttar Pradesh Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- ii) 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 the approved sites for land filling after recovering recyclable material.
- iii) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Uttar Pradesh Pollution Control Board.
- iv) Noise should be controlled to ensure that it does not exceed the prescribed standards. 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.
- v) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- vi) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- vii) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
- viii) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- ix) 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.

- x) A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.
- xi) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
- xii) Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.
- xiii) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.


You are also directed to ensure that the proposed site is not a part of any no-development zone as required/prescribed/identified under law. In case of violation, this permission shall automatically deem to be invalid and cancelled. Also, in the event of any dispute on ownership of the proposed site, this permission shall automatically deem to be invalid and cancelled.

The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Courts of Law relating to the subject matter.

The project proponent will have to submit approved plans and proposals incorporating the conditions specified in the Environmental Clearance within 03 months of issuance of this 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.

This is to request you to take further necessary action in matter as per provision of Gazette Notification No. S.O. 1533(E) dated 14-09-2006, as amended and send regular compliance reports to the authority as prescribed in the aforesaid notification.


(J. S. Yadav)


Member Secretary, SEIAA

No. /Parya/SEAC/2069/2013/JDCA(S)

as above

Copy for information and necessary action to:

1. The Principal Secretary, Environment, U.P. Govt., Lucknow.
2. Dr. P.L. Ahuja Rai, Advisor, IA Division, Ministry of Environment & Forests, Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi.
3. Chief Conservator, Ministry of Environment & Forests, Regional Office (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
4. The Member Secretary, U.P. Pollution Control Board, PICUP Bhawan, Gomti Nagar, Lucknow.
5. District Magistrate, Ghaziabad, U.P.
6. Assitt. Director, Directorate of Environment, U.P., Vineet Khand-1, Gomti Nagar, Lucknow.
7. Copy for Web Master/Guard File


(Dr. R.K. Sardana)

Director (I/C)/Secretary SEAC,
Directorate of Environment, U.P.