## State Level Environment Impact Assessment Authority, Uttar Pradesh

### Directorate of Environment, U.P.

Vineet Khand-1, Gomti Nagar, Lucknow - 226 010 Phone: 91-522-2300 541, Fax: 91-522-2300 543

E-mail:doeupiko@yahoo.com Website:www.seiaaup.in

To,

Shri Rajeev Aggarwal, Director, M/s Alpine Infraprojects Pvt.Ltd, Flat no-1-103, Plot no- GC-02, GH-01, Gaur City-1, GR- Noida (West), Greater Noida-201308

Ref. No. ....325 ...../Parya/SEAC/4257/2018

Date: 20 August, 2018

Sub: Environmental Clearance for Proposed Group Housing Project at Plot No.-GH-16 D, Sector-01, Greater Noida, District- Gautam Budh Nagar, U.P., by M/s Alpine Infra projects Pvt. Ltd, Regarding.

Dear Sir,

Please refer to your application/letters 21-04-2018, 03-05-2018 & 22-06-2018 addressed to the Secretary, State Level Expert Appraisal Committee (SEAC) and Director, Directorate of Environment Govt. of UP on the subject as above. The State Level Expert Appraisal Committee considered the matter in its meetings held on dated 03-07-2018.

A presentation was made by the project proponent along with their consultant M/s Globus Environment Engineering Services. The proponent, through the documents submitted and the presentation made, informed the committee that:-

- 1- The environmental clearance is sought for Proposed Group Housing Project at Plot No.-GH-16 D, Sector-01, Greater Noida, District- Gautam Budh Nagar, U.P., by M/s Alpine Infra projects Pvt. Ltd.
- 2- The Project involves development of residential dwelling units, Community Centre and commercial shops. Project involves development of 7 towers including a dedicated building for convenient shops. Total number of dwelling units will be 616.

3- Salient feature details as submitted by the project proponent::

Description	Proposed	
Plot Area	13,800.00 m <sup>2</sup>	
Built-up Area	80,474.64 m <sup>2</sup>	
Green Area	4,720.256 m <sup>2</sup> @ 34.20% of Total Plot Area	
Total Water Requirement	280 KLD	
Fresh Water Requirement	177 KLD	
Wastewater Generation	218 KLD	
Capacity of STP	360 KLD	
Solid Waste Generation	1,463 kg/day	
Parking Required & Provided	645 ECS & 649 ECS	
Power Demand & Source	3,000 kVA (by Noida Power Company Limited )	
Back up	1,000 kVA (2 x500 kVA)	
RWH Pits	4 pits	

4- Area details of the project:

S. No.	Particulars	AREA (m²)
1.	Plot Area	13,800.00
2.	Permissible Ground Coverage@35% of Plot Area	4,830.00
3.	Proposed Ground Coverage@32.50 of Plot Area	4,485.84
4.	Total Permissible F.A.R  Permissible F.A.R. as per 2.75  Purchasable F.A.R. as per 0.7425  -10,246.60	50,532.05

	Green Building F.A.R. @ 5% - 2,409.83 Commercial F.A.R. @ 1% of 2.75 F.A.R - 379.50	
5.	Total Proposed F.A.R Residential F.A.R. Area -50,072.68 Commercial F.A.R. Area -482.95	50,555.63
6.	Total Non F.A.R  Stilt Area - 1,594.43  Upper Basement Area - 10,855.84  Lower Basement Area - 10,808.36	23,258.63
7.	Ancillary Area for Towers (Including Community Centre)	7,396.06
8,	Total Built-Up Area (5+6+7)	80,474.64
9.	Open Area (@ 67.50% of Plot Area)	9,314.16
10.	Landscape Area(@ 34.20% of Plot Area)	4,720.256
11.	No. of Permissible Dwelling Units	644
12.	No. of Proposed Dwelling Units	616
13.	Maximum Height of the Building(m)	63.0

### 5- Build up area details:

Total Proposed F.A.R		50,555.63
Residential F.A.R. Area	- 50,072.68	
Commercial F.A.R. Area	- 482.95	
Total Non F.A.R		23,258.63
Stilt Area	- 1,594.43	
Upper Basement Area	- 10,855.84	
Lower Basement Area	- 10,808.36	
Ancillary Area for Towers (Includ	ing Community Centre)	7,396.06
Total Built-Up Area	The state of the s	80,474.64

#### 6- Population details:

Category	Units/Area	Person per unit	Population
A. Residential Population			
Residential	616	4.5	2,772
Maintenance Staff	at 5% of residential population		139
Visitors/Floating	at 10% of reside	ntial population	278
B. Convenient Shops Staff	507.06	3 m <sup>2</sup> per person	169
Grand Total			3,358

### 7- Water requirement details:

S. No.	Description	Total Area (m²)	Total Occupancy	Rate of water demand (lpcd)	Total Water Requirement (KLD)
Α.	Domestic Water				10.3.3.7.7.7.7.
(a)	Residential Water Requirement	nt		71-	
	Residents		2,772	86	238.392
	Maintenance Staff		139	30	4.17
	Visitor/Floating		278	15	4.17
(b)	Convenient shop Staffs		169	30	5.07
	Total Domestic Water Deman	d			251.802 Say 252 KLD
B.	Horticulture	4,720.256		6 lt./m <sup>2</sup> /day	28.32
Total W	/ater Requirement (A + B )				280.32 say 280 KLD

### 8- Waste water details:

Domestic Water Requirement	Lea Impact &	252 KLD
Total Fresh Water Requirement	(1)	177 KLD

(@ 70 % of domestic)		
Flushing (@ 30 % of domestic)	76 KLD	
Wastewater Generated	141.6+76 = 217.6 say	
(@ 80% fresh domestic water + 100% flushing)	218 KLD	

9- Solid waste generation details:

S. No.	Category	kg per capita per day	Waste generated (kg/day)
1.	Residents	2,772 @ 0.5 kg/day	1,386
2,	Maintenance Staff (Maintenance+ Convenient Shops+ Community Centre)	139 @ 0.25 kg/day	34.75
3.	Visitors	278 @ 0.15 kg/day	41.7
4.	Landscape waste (1.16 acres)	@ 0.2 kg/acre/day	0.232
	TOTAL SOLID WASTE GENERATED		1,463 kg/day

10- Parking details:

S. No.	Types of Parking	Total Parking
1,	Open Parking @ 20 m <sup>2</sup> /ECS	46 ECS
2.	Stilt Parking @ 28 m <sup>2</sup> /ECS	53 ECS
3.	Upper Basement Parking @ 30 m²/ECS	269 ECS
4.	Lower Basement Parking  @ 30 m <sup>2</sup> /ECS	281 ECS
TOT	TAL	649 ECS

11- 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 (SEAC) held on 03-07-2018 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held on 26-07-2018 decided to grant the Environmental Clearance for proposed project along with subject to the effective implementation of the following general and specific conditions:-

#### General Conditions:

- 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.
- It shall be ensured that obtain the no objection certificate from the U P pollution control board before start of construction.
- 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.
- 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.
- 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.
- Surface hydrology and water regime of the project area within 10 km should be provided.
- 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.
- Measures shall be undertaken to recycle and reuse treated effluents for horticulture and plantation. A suitable plan for waste water recycling shall be submitted.
- Obtain proper permission from competent authorities regarding enhanced traffic during and due to construction and operation of project.
- Obtain necessary clearances from the competent Authority on the abstraction and use of ground water during the construction and operation phases.
- 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.

- 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.
- Suitable rainwater harvesting systems as per designs of groundwater department shall be installed.
   Complete proposals in this regard should be submitted.
- 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.
- 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.
- 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.
- Separate stock piles shall be maintained for excavated top soil and the top soil should be utilized for preparation of green belt.
- 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.
- 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.
- Alternate technologies for solid waste disposals (like vermin-culture etc.) should be used in consultation with expert organizations.
- 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.
- 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.
- Compliance with the safety procedures, norms and guidelines as outlined in National Building Code 2005 shall be compulsorily ensured.
- Ensure usage of dual flush systems for flush cisterns and explore options to use sensor based fixtures, waterless urinals and other water saving techniques.
- Explore options for use of dual pipe plumbing for use of water with different qualities such as municipal supply, recycled water, ground water etc.
- 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.
- Make separate provision for segregation, collection, transport and disposal of e-waste.
- Educate citizens and other stake-holders by putting up hoardings at different places to create environmental awareness.
- 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.
- The project proponents shall ensure that no construction activity is undertaken without obtaining preenvironmental clearance.
- 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.
- 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).

- 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.
- 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 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.
- 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.
- 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.
- The use of Compact Fluorescent lamps should be encouraged. A management plan for the safe disposal of used/damaged CFLs should be submitted.
- 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.
- Solar water heater shall be installed to the maximum possible capacity. Plans may be drawn up accordingly ad submitted with justification.
- 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.
- Construction activities including movements of vehicles should be so managed so that no disturbance is caused to nearby residents.
- 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.
- Parking areas should be in accordance with the norms of MOEF, Government of India. Plans may be drawn up accordingly and submitted.
- 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.
- 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.
- Detailed plans for safe disposal of STP sludge shall be provided along with ultimate disposal location, quantitative estimates and measures proposed.
- 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.
- Specific location along with dimensions with reference to STP, Parking, Open areas and Green belt etc. should be provided on the layout plan.
- 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.
- The use of suitably processed plastic waste in the construction of roads should be considered.
- Displaced persons shall be suitably rehabilitated as per-prescribed norms.
- 63. Dispensary for first aid shall be provided.



- 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.
- 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 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. 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.
- Plan for safe disposal of R.O reject is to be submitted.

#### Specific Conditions

- 1- The project proponent shall submit within the next 3 months the details of solar power plant and solar electrification details within the project.
- 2- The project proponent shall ensure to plant broad leave trees and their maintenance. The CPCB guidelines in this regard shall be followed.
- 3- The project proponent shall submit within the next 3 months the details on quantification of year wise CER activities along with cost and other details. CER activities must not be less 2% of the project cost. The CER activities should be related to mitigation of Environmental Pollution and awareness for the same.
- 4- The project proponent shall submit within the next 3 months the details of estimated construction waste generated during the construction period and its management plan.
- 5- The project proponent shall submit within the next 3 months the details of segregation plan of MSW.
- 6- The project proponent shall ensure that waste water is properly treated in STP and maximum reused for gardening, flushing system etc. For reuse of water for irrigation sprinkler and drip irrigation system shall be installed and maintained for proper function.
- 7- The project proponent will ensure that proper dust control arrangements are made during construction and proper display board is installed at the site to inform the public the steps taken to control air pollution as per the Construction and Demolition Waste Management Rules.
- 8- The project proponent shall install micro solar power plants, toilets in nearby villages, public place or school from CER fund of the project for which E.C is granted in addition to and water harvesting pits and carbon sequestration parks / designed ecosystems.
- 9- Solar energy to be used alternatives on the road and common places for illumination to save conventional energy.
- 10- 15% area of the total plot area shall be compulsorily made available for the green belt development including the peripheral green belt. Plantation of trees should be of indigenous species and may be as per the consultation of local district Forest Officer.
- 11- The waste water generated should be treated properly in scientific manner i.e. domestic waste water to be treated in STP and effluent such as RO rejects with high TDS and other chemical bearing effluent shall be treated separately.
- 12- The height, Construction built up area of proposed construction shall be in accordance with the existing FAR

norms of the competent authority & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.

- 13- "Consent for Establishment" shall be obtained from UP Pollution Control Board.
- 14- All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- 15- Municipal solid waste shall be disposed/managed as per Municipal Solid Waste (Management and Handling) Rules, 20016. Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings.
- 16- Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche and First Aid Room etc.
- 17- 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.
- 18- The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- Bio medical waste management shall be followed as per the Bio-Medical Waste (Management and Handling) Rules, 2016.
- 20- Necessary permissions should be sought for use and safe disposal of radioactive materials. Procedural protocol prescribed by competent authority should be followed for the same.
- 21- Corporate Environmental Responsibility (CER) phase wise plan along with budgetary provision amounting to 2% of the total project cost shall be prepared and approved by Board of Directors of the company. A copy of resolution as above shall be submitted to the authority. A list of beneficiaries with their mobile nos./address should be submitted along with six monthly compliance reports.
- 22- No parking shall be allowed outside the project boundary.
- 23- Digging of basement shall be undertaken in view of structural safety of adjacent buildings under information/consultation with District Administration/Mining Department. All the topsoil excavated during construction activities should be stored for use in horticulture /landscape development within the project site. Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- 24- Surface rain water has to be collected in kacchha pond for ground water recharging and irrigation of horticulture and peripheral plantation.
- 25- For any extraction of ground water, prior permission from CGWB shall be taken.
- 26- The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquake, adequacy of fire fighting equipments etc. as per National Building Code including measures from lighting.
- 27- Disposal of muck during construction phase should not create any adverse effect on the neighboring 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.
- 28- Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the UP Pollution Control Board.
- 29- The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- 30- 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.
- 31- 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. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- 32- The building should have adequate distance between them to allow movement of fresh air and passage of

natural light, air and ventilation.

- 33- 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.
- 34- Ready Mix Concrete and Sprinkler to be used for curing and quenching during construction phase.
- 35- RWH to be done only from root top. Arrangement shall be made that waste water and storm water do not get mixed.
- 36- All the internal drains are to be covered till the disposal point.
- 37- This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any.

No construction/operation is to be started without obtaining Prior Environmental Clearance. Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

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.

The project proponent has to ensure that the proposed site in not a part of any no-development zone as required/prescribed/indentified under law. In case of the violation this permission shall automatically deemed 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 has to mandatorily submit the compliance of specific conditions no- 1, 3, 4 & 5 given in E.C. letter within 3 months, falling which the Clearance shall automatically deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

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.

(Ashish-Tiwari) Member Secretary, SEIAA

#### No...../Parya/SEAC/4257/2017

Dated: As above

#### Copy with enclosure for Information and necessary action to:

- 1. The Principal Secretary, Department of Environment, Govt. of Uttar Pradesh, Lucknow.
- Advisor, IA Division, Ministry of Environment, Forests & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi.
- Additional Director, Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
- 4. District Magistrate, G.B. Nagar.
- The Member Secretary, U.P. Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow.
- 6. Copy to Web Master/ guard file.

(Ashish Tiwari) Member Secretary, SEIAA