

**Minutes of the 212<sup>th</sup> Meeting of the State Expert Appraisal Committee (SEAC), Haryana constituted for considering Environmental Clearance of Projects (B Category) under Government of India Notification dated 14.09.2006 held on 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> March, 2021 under the Chairmanship of Sh. V. K. Gupta, Chairman, SEAC, through Video Conferencing (VC).**

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At the outset the Chairman, SEAC welcomed the Members of the SEAC and advised the Secretary to give brief background of this meeting. The minutes of the 211<sup>th</sup> Meeting were discussed and approved without any modification. In the meeting 45 numbers of projects, received from SEIAA, were taken up for scoping, appraisal and grading as per Agenda circulated.

In the wake of recent crises of COVID-19, lockdown situation, Committee took a decision to scope and appraises the EC cases as per the guidelines issued by MoEF&CC from time to time by video conferencing. It was decided that before the commencement of online video conferencing the agenda is required to be mailed beforehand. Accordingly the Agenda of the present meeting was e-mailed to SEAC members in advance and a video conference meeting was organized in this regard, on 25.03.2021, 26.03.2021 and 27.03.2021.

The 212<sup>th</sup> meeting of SEAC Haryana was held online by video conferencing on 25.03.2021, 26.03.2021 and 27.03.2021 the following members joined the meeting:

Sr. No.	Name	Designation
1.	Shri Prabhakar Verma	Member
2.	Dr. S. N. Mishra	Member
3.	Shri Raj Kumar Sapra	Member
4.	Dr. Surinder Kumar Mehta	Member
5.	Ar. Hitender Singh	Member
6.	Dr. Vivek Saxena	Member
7.	Dr. Mehar Chand	Member
8.	Shri Anil Kumar Mehta	Member
9.	Dr. R. K. Chauhan, Joint Director, Environment & Climate Change Department, Haryana	Secretary

**212.01 EC for Revision & Expansion of Group Housing Project “Aagman” located at Revenue Estate of Village Mujeri, Sector-70, Faridabad, Haryana by M/s Agrasain Spaces LLP.**

**Project Proponent :Not Present**  
**Consultant :Ind Tech House Consultant Pvt. Ltd.**

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/137579/2020 on dated 29.01.2020 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

The case was taken up in 196<sup>th</sup> meeting of SEAC, Haryana held on 11.02.2020. The committee discussed that the compliance report of the project for earlier EC granted vide letter no.

**212.25 EC for Affordable Residential Plotted Colony under (Deen Dayal Jan Awas Yojna located at Sector 35, Karnal, Haryana by M/s Kind Building Solutions Pvt. Ltd.**

**Project Proponent:** Shri Ashish Chutani  
**Consultant:** M/s Grass Root Research & Creation India (P) Ltd.

The project was submitted to the SEIAA, Haryana vide online proposal no. SIA/HR/NCP/201978/2020 on 08.03.2021 as per check list approved by the SEIAA/SEAC, for obtaining for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

Thereafter, the case was taken up in 212<sup>th</sup> meeting of SEAC held on 26.03.2021. The discussion was held on Traffic study, Geo-technical studies, incremental load etc and certain observations were raised as following:-

- The PP shall submit the traffic study with incremental load analysis with current status of connecting roads.
- The PP shall submit the Geo-technical studies of the project area.
- The PP shall submit the key plan of sampling locations , wind rose diagram, primary micromet data, output DAT file, isopleths of PM10 and PM2.5 vis a vis wind rose
- The PP shall submit the details of STP along with its components.
- The PP shall submit the details of land along with ownership.
- The PP shall submit the details of existing infrastructure in the surrounding of the project.
- The PP shall submit the Forest Clearance from the Competent Authority as per license and collaboration agreement
- The PP shall submit the approved building plan from the Competent Authority.
- The PP shall submit the details of existing trees with type and girth.
- The PP shall submit the revised EMP.
- The PP shall submit the revised Green Plan.
- The PP shall submit the revised population details and revised water calculations.
- The PP shall submit the permission of sewer from the Competent Authority.
- The PP shall submit the adoption of ECBC code 2017 instead of ASHRAE 90.1-2010.

The PP shall submit the required information as detailed above within 30 days and it was also made clear to the PP that his project will be considered as received only after the receipt of complete information. In case of non-receipt of information in time; the case shall be recommended for rejection/ filing.

**212.26 EC for Affordable Group Housing Colony project located at Sector 106, Gurugram, Haryana by M/s K.N. Infracon Pvt. Ltd.**

**Project Proponent** Shri Ashok Kumar  
**Consultant** M/s Grass Root Research & Creation India (P) Ltd.

The project was submitted to the SEIAA, Haryana vide online proposal no. SIA/HR/NCP/201676/2020 on 05.03.2021 as per check list approved by the SEIAA/SEAC, for obtaining for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

Thereafter, the case was taken up in 212<sup>th</sup> meeting of SEAC held on 26.02.2021. The PP presented the case before the committee

- The Affordable Group Housing Colony is to be developed by K.N. Infracon Private Limited. The project site is located at Sector-106, Gurugram, Haryana on a land measuring 10 acres. The company will construct Residential & Commercial projects.
- The project is appraised on the concept basis as building plans are not approved from the competent authority.
- The current land use of the project is as per the master plan of Gurugram Manesar Urban Complex, 2021.
- The license has been granted by Town and Country Planning Department, Haryana to K.N. Infracon Pvt. Ltd. Letter vide no. 43 of 2020.
- Sultanpur National Park 11 km WSW from the project site Rajokri PF 12 km E from the project site
- Najafgarh Drain 0.9 Km NW of project site.
- Pre-monsoon depth to water level = 1.53 m to 19.25 m bgl. Post-monsoon depth to water level (0.43 m to 18.3 m bgl).
- The site falls under the zone IV as per the Seismic Zone Map of India and is thus prone to high damage risk zone. The project will be earthquake resistant taking into account the latest provisions of Indian Standards Codes.
- No wildlife sanctuary falls within 10kms from the project site.

The details of the project, as per the documents submitted by the project proponent, and also as informed during the presentation in the meeting are as under:-

**Table 1: Basic Details**

<b>Name of the Project: Affordable Group Housing colony Project located at Sector 106, Village Babupur, Gurugram Manesar Urban Complex, Haryana by K. N. Infracon Pvt. Ltd.</b>		
<b>Sr. No.</b>	<b>Particulars</b>	
1.	Online Proposal Number	SIA/HR/MIS/201676/2021
2.	Latitude	28°30'30.05"N
3.	Longitude	76°59'57.50"E
4.	Plot Area	40,468.500 m <sup>2</sup>
5.	Net Plot Area	38,726.331 m <sup>2</sup>
6.	Proposed Ground Coverage	12,137.175 m <sup>2</sup>
7.	Proposed FAR	91,120.612 m <sup>2</sup>
8.	Non FAR Area	30,862.21 m <sup>2</sup>
9.	Total Built Up area	1,21,982.82 m <sup>2</sup>
10.	Total Green Area with %	7745.26 m <sup>2</sup> (@20% of the net plot area)
11.	Rain Water Harvesting Pits (with size)	10
12.	STP Capacity	655 KLD
13.	Total Parking	675 ECS
14.	Organic Waste Converter	1
15.	Maximum Height of the Building (m)	79.35 m
16.	Power Requirement	5439 kVA (DHBVN)
17.	Power Backup	3 DG sets of total capacity (2*320 kVA & 1*500 kVA) 1,140 KVA
18.	Total Water Requirement	658 KLD
19.	Domestic Water Requirement	634 KLD
20.	Fresh Water Requirement	459 KLD

21.	Treated Water		489 KLD	
22.	Waste Water Generated		543 KLD	
23.	Solid Waste Generated		3897 kg/day	
24.	Biodegradable Waste		2338.2 kg/day	
25.	Number of Towers		Residential – 12 Commercial -1 Community - 1	
26.	Dwelling Units/ EWS		1334 nos.	
27.	Basement		1	
28.	Community Center		3561.62 m <sup>2</sup>	
29.	Stories		G+26	
30.	R+U Value of Material used (Glass)		2.518 (W/m <sup>2</sup> deg C)	
31.	Total Cost of the project:	Land Cost	150 Crores	
		Construction Cost		
32.	EMP Budget ( <b>per year</b> )	Capital Cost	300 Lakhs	
		Recurring Cost	40.085 Lakhs	
33.	Incremental Load in respect of:		PM 2.5	0.069 µg/m3
			PM 10	0.069 µg/m3
			SO <sub>2</sub>	0.145 µg/m3
			NO <sub>2</sub>	1.25 µg/m3
			CO	0.481 µg/m3
34.	Construction Phase:	Power Back-up		100 kVA
		Water Requirement & Source		244 ML (Private Water Tanker)
		STP (Modular)		1
		Anti-Smoke Gun		1

**Table 2: EMP Details**

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	65.5	16.375
Rain Water Harvesting System	15	5
Solid Waste Management	7.79	2.59
Environmental Monitoring	9	9
Green Area Development	4.64	1.54
Others (Energy saving devices, miscellaneous)	10.0	3.33
Socio Economic		-
• Providing laptops to students of nearby Govt. schools	39.09	
• Providing Water Coolers in local Govt. School	41.56	
• Setting up solar lighting facilities in nearby villages	98.42	
<b>TOTAL</b>	<b>300</b>	<b>40.085</b>

The discussion was held on License, Mozaic plan, traffic study, forest NOC, wildlife distance, Green plan, revised EMP, Aravalli NOC, Building plan, zoning plan, concept, isopleths, STP details, RWH, Geotechnical studies, Traffic study, sewage outflow and certain observations were raised which were replied by PP vide letter dated 27.03.2021. The PP submitted the undertaking that they will install the Modular STP of MBR technology. The reply was placed before the committee and committee after discussion considered the reply. The PP and consultant requested the committee that they have applied for Aravalli NOC from DC but due to covid -19 the NOC is getting delayed and will be obtained in a week time and will submit the same before the meeting of SEIAA. The committee deliberated and agreed to send the case to SEIAA subject to the condition that PP shall submit the NOC Aravali from competent authority before the meeting of SEIAA.

After deliberations the Committee rated this project with **"Gold Rating"** and was of the unanimous view that this case for **granting Environmental Clearance** under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be **recommended to the SEIAA** with the following specific and general stipulations:

**Specific Conditions:-**

- i. The PP shall submit the Aravalli NOC from the competent Authority before the SEIAA meeting along with copy to SEAC as submitted the copy of SDO for the same.
- ii. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration to achieve standards ordered by NGT. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling and Gardening
- iii. The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
- iv. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project and EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
- v. The PP shall not carry out any construct above and below through the project and ensure that permission of the competent authority shall be obtained before carry out any construction above or below the revenue rasta. The PP shall put notice board on the revenue rasta for the passerbyes.
- vi. The project proponent shall upload the status of compliance of the basic details (given in above tables), stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- vii. The Project Proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- viii. Separate wet and dry bins must be provided in each unit and at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
- ix. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure

that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05 kms radius of the site in different scenarios of space and time

- x. The PP shall submit the documents for final approval of 12% extra FAR from the concerned authority before the start of the project, to the SEIAA
- xi. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 7745.26 m<sup>2</sup> (@20% of the net plot area) shall be provided for Green Area development for whole project.
- xii. The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- xiii. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
- xiv. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightening etc.
- xv. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- xvi. The PP shall install the Eco Friendly Green Transformer based on ester oil to reduce the carbon footprint. The PP shall shift to gas based generator set when the gas is available. The PP shall install APCM for the DG set. The PP shall reduce the So2 load by 30% if HSD is used. The DG sets will be operated for maximum 04 hours during power failure through Executing Agency
- xvii. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- xviii. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- xix. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
- xx. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- xxi. 10Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- xxii. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 10RWH pits.
- xxiii. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction & operational phase and shall use the treated water, if feasible.
- xxiv. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- xxv. The PP shall provide the mechanical ladder for use in case of emergency.
- xxvi. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

## **B. Statutory Compliance:**

- [1] The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in

- accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- [2] The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.
  - [3] The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
  - [4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
  - [5] The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Haryana State Pollution Control Board.
  - [6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.
  - [7] A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
  - [8] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
  - [9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.
  - [10] The project proponent shall follow the ECBC Act/ECBC-Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

## **I Air Quality Monitoring and Preservation**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power 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 of ultra lowsulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra lowsulphur

- diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Ultra low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
  - xii. For indoor air quality the ventilation provisions as per National Building Code of India.

## **II Water Quality Monitoring and Preservation**

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain Water Harvesting pits shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent.



- The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
  - xviii. No sewage or untreated effluent water would be discharged through storm water drains.
  - xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
  - xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
  - xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

### **III Noise Monitoring and Prevention**

- i. Ambient noise levels shall conform to residential area/commercial area both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

### **IV Energy Conservation Measures**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency as per ECBC Act, 2017 read with ECBC Rules, 2018 shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC also which is in no case should be less than 25% as prescribed.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof R & U-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as

- far as possible.
- vii. The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

## **V Waste Management**

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall 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.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. 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 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- x. Used 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.

## **VI Green Cover**

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree (5' tall) for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VII Transport**

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a) Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b) Traffic calming measures.
  - c) Proper design of entry and exit points.
  - d) Parking norms as per local regulation.
- ii. 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 be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

## **VIII Human Health Issues**

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. 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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

## **IX Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions of CER, as applicable.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/ or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of

implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

## **X Miscellaneous**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.
- x. Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.