Minutes of the 209th 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 29.01.2021 & 30.01.2021 under the Chairmanship of Sh. V. K. Gupta, Chairman, SEAC, through Video Conferencing (VC).

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Agenda Item	Minuting			inuting Correction/To be read as					
No.									
208.05	Bulle	t Point No.3							
	The ToR has been granted to the						Omitte	d	
	project by SEIAA on 29.01.2020								
	Table 2: Basic details Point no.33								
	Sr.	Particulars	Total	Sr.	Particula	irs	Existing	Propo-sed	Total
	No		(in Cr.)	No.			as per	(in Cr.)	(in Cr.)
	33	Cost of the project	131.56				EC		
							(in Cr.)		
	L	1		33	Cost	of	131.56	+4	135.56
					project				

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 208th Meeting were discussed and approved without any modification. In the meeting 18 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 mailed to SEAC members in advance and a video conference meeting was organized in this regard on 29.01.2021 & 30.01.2021.

The 209th meeting of SEAC Haryana was held online by video conferencing on 29.01.2021 & 30.01.2021 and following members joined the meeting:

Sr. No.	Name	Designation
1.	Dr. Surinder Kumar Mehta	Member
2.	Shri Anil Kumar Mehta	Member
3.	Shri Raj Kumar Sapra	Member
4.	Dr. Mehar Chand	Member
5	Dr. S. N. Mishra	Member
6	Ar. Hitender Singh	Member

7.	Shri Prabhakar Verma	Member
8.	Dr. Vivek Saxena	Member
9.	Sh. R. S. Thakran (Attended mining case on 29.01.2021)	Mining Expert
10.	Dr. R. K. Chauhan, Joint Director, Environment & Climate Change Department, Haryana	Secretary

209.01 EC for Proposed Affordable Group Housing Colony situated in the Revenue Estate of Village Nawada Fatehpur, Sector-81, Gurugram, Haryana on land measuring 5.6625 acres by Smt. Geeta Yadav W/o Sh. Suman Kumar and others in collaboration with M/s GLS Infracon Pvt. Ltd.

Project Proponent	: Sh. Ashish Drall
Consultant	: Vardan EnviroNet

The project was submitted to the SEIAA, Haryana vide online proposal no. SIA/HR/MIS/189952/2020 on 11.01.2021 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under category 8(a) of EIA Notification dated 14.09.2006.

The case was taken up in 209th meeting of SEAC Haryana held on 30.01.2021. The PP

presented the case before the committee.

- The proposed project is for EC for Proposed Affordable Group Housing Colony situated in the Revenue Estate of Village Nawada Fatehpur, Sector-81, Gurugram, Haryana on land measuring 5.6625 acres by Smt. Geeta Yadav W/o Sh. Suman Kumar and others in collaboration with M/s GLS Infracon Pvt. Ltd.
- The zoning plan has been approved in the name of Smt. Geeta Yadav W/o Sh.Suman Kumar and others in collaboration with M/s GLS Infracon Pvt. Ltd for the project for an area measuring 5.6625 acres vide letter no.7588 dated 30.11.2020.
- The Building plan has been approved vide letter no.13888 dated 16.12.2020 from HSVP
- The license no. 34 of 2020 has been granted to the project in the name Smt. Geeta Yadav W/o Sh.Suman Kumar and others in collaboration with M/s GLS Infracon Pvt. Ltd which is valid upto 29/10/2025.
- Sultanpur National Park lies within 8.6 km from the project site.
- The project falls under Gurugram Manesar Master Plan 2031.

Table1:

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:-

Name of the Project: Proposed Affordable Group Housing Colony at Village Nawada Fatehpur, Sector-81,Gurugram, Haryana by Smt.Geeta Yadav W/o Sh.Suman Kumar and others in collaboration with M/s GLS Infracon Pvt. Ltd.						
Sr. No.	Particulars					
1.	Online Proposal Number	SIA/HR/MIS/189952/2020				
2.	Latitude	28º 23' 28.2" N				
3.	Longitude	76º 56' 38.0" E				
4.	Plot Area	22,915.288 m ² / 5.6625 Acres				
5.	Proposed Ground Coverage	7,564.392 m ² (33.01 %)				
6.	Proposed FAR	53,848.250 m ²				

7.	Non FAR Area					26,139.913 m ²		
8.	Total Built Up ar	ea				79,988.163 m ²		
9.	Total Green Area			4,630.458m ² (20.21%)				
10.	Rain Water Harv		s (with a					
11.	STP Capacity	Coung i n		51207		6 Pits (Dia. 5m & Dep. 4 m) 430 KLD		
12.	Total Parking							
13.	Organic Waste C	onvortor				824Nos-Two-Wheelers		
15.	Organic waste C	onverter				2 nos. of capacity 1,750 Kg/day (1×1250+1×500 Kg/day)		
14.	Maximum Heigh	t of the B	uilding	(m)		69.95 m		
15.	Power Requirem	ient				3500 KW.		
16.	Power Backup					500 KVA (2 x 250 KVA)		
17.	Water Requirem	ent				419 KLD		
18.	Domestic Water	Requirem	nent			288 KLD		
19.	Fresh Water Rec	luirement				288 KLD		
20.	Treated Water					131 KLD		
21.	Waste Water Ge	nerated				338 KLD		
22.	Solid Waste Gen	erated				2,326 Kg/day		
23.	Biodegradable V	Vaste				1,396 Kg/day		
24.	Number of Towe	ers		5 Nos				
25.	Dwelling Units/ I	EWS				820 Nos		
26.	Community Cent	-				1 (195.250 m ²)		
27.	Stories					S+20; S+P+20		
28.	R+U Value of Ma	aterial use	d (Glass	5)		U Value: 5.5 w/sqm k SHGC: 0.9		
29.	Total Cost of the	project:			tion Cost	Total Cost of Project: 188.75 Cr.		
30.	EMP Budget					EMP Budget: 943.75 Lakhs (5% of Total Project Cost) Capital Cost: 377.75 Lakhs (2%) Recurring Cost: 566.25 Lakhs (3%)		
31.	Incremental Loa	d in respe	ct of:	i)	PM 2.5	0.0235 μg/m ³		
				ii)	PM 10	0.0627 μg/m ³		
				iii)	SO ₂	0.1363 μg/m ³		
				iv)	NO ₂	0.08517 µg/m ³		
				v)	CO	0.0000011 μg/m ³		
32.	Construction Phase:	i) Po	wer Bac			Temporary electrical connection of 19 KW & 01 DG of 125 KVA		
	Filase.	•	ater R urce	equire	ment &	Fresh water–10 KLD for drinking & sanitation. Treated wastewater 30 KLD for construction Source: Fresh water – GMDA Construction Water – HSVP		
		iii) STI	P (Modu	ular)		one (5 KLD)		
		iv) An	ti-Smok	e Gun		01 Nos of Anti-smoke gun		

During Cons	truction Phase		Duri	ng Operat	tion Phase
Description	Capital Cost (In Lakhs)	Recurring Cost (In Lakhs for 5 Year)	Description	Capital Cost (in Lakhs)	Recurring Cost (In Lakhs for 10Year)
Sanitation and Wastewater Management (Modular STP)	10.00	20.00	Waste Water Management (Sewage Treatment Plant)	105.00	194.00
Garbage & Debris disposal	0.00	10.00	Solid Waste Management (Dust bins & OWC)	50.00	80.00
Green Belt Development	20.00	15.00	Green Belt Development	90.00	90.25
Air, Noise, Soil, Water Monitoring	0.00	5.00	Monitoring for Air, Water, Noise & Soil	00.00	20.00
Rainwater harvesting system (6 pits)	15.00	6.00	Rainwater harvesting system	00.00	30.00
Dust Mitigation Measures Including site barricading, water sprinkling and anti- smog gun)	10.00	15.00	DG Sets including stack height and acoustics	20.00	10.00
PPE for workers& Health Care	10.00	30.00	Energy Saving (Solar Panel system)	29.50	6.00
Medical cum First Aid facility (providing medical room & Doctor	5.00	30.00	Providing 40 nos of Desktop in the nearby existing village.	10.00	0.00
Storm Water Management (temporary drains and sedimentation basin)	3.00	5.00			
Total	73 Lakhs	136 Lakhs	Total	304.5 Lakhs	430.25 Lakhs

Table2:EMP Details

The Discussion was held on Building plan, wildlife distance from the project site, dual plumbing plan, extra FAR, Revised EMP, Soil testing reports, Mosaic Plan, revised Green plan, Parking Plan, Aravali NOC and Water assurance and certain observations were raised which were replied by PP vide letter dated 30.01.2021. The documents were placed before the committee and committee after discussion approved the reply. The PP submitted that Rs.5 Lakhs will be spent on various wildlife conservation activities like artificial nests on the trees, digging of ponds and construction of feeding platforms through Environment Management Plan. The PP also submitted the undertaking that

- There are 9 no. of trees present at the site. These trees will be cut for the development activities and they will take prior permission from the concerned department to cut the tree
- There are 10 no. of bushes having girth less than 30 cm at the site
- That the demolition work has been carried out to demolish the existing building at the project site and debris are disposed of as per Demolition and construction Waste Management Rules, 2016

After detailed 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 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific conditions:-

- 1. 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
- 2. 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.
- 3. 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 & 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.
- 4. The PP shall comply the Wildlife Conservation Management plan and spent Rs.5 Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds, construction of feeding platforms through Environment Management Plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Warden.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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 05kms radius of the site in different scenarios of space and time
- 9. 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
- 10. 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 4,630.458m²(20.21%) shall be provided for Green Area development for whole project.
- 11. 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.
- 12. 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.
- 13. 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.

- 14. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 15. 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.
- 16. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 17. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 18. 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.
- 19. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- 20. 6 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- 21. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 6 RWH pits.
- 22. 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.
- 23. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 24. The PP shall provide the mechanical ladder for use in case of emergency.
- 25. 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 Rules2001 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 low sulphur 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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.
- 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.
- 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 MoEFCC/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.
- 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-abinitio 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 Ministry/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.

209.02 EC for Revision & Expansion of Group Housing Colony "Esfera" project located at Village Basai, Sector 37 C, Gurugram, Haryana by M/s Imperia Structures limited

Project Proponent	: Brig. Didar Singh Gill
Consultant	: OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd

The project was submitted to the SEIAA, Haryana vide online proposal no SIA/HR/MIS/169777/2020 dated 03.11.2020 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

Then, the case was taken up in 206th meeting of SEAC Haryana held on 26.11.2020 but the PP and the consultant requested in writing to defer the case.

Thereafter the case was taken up in 208th meeting held on 07.01.2021 but the PP and the consultant requested vide letter dated 06.01.2020 for deferment of the case which was considered and acceded by the SEAC.

Then the case was taken up in 209th meeting of SEAC held on 30.01.2021. The PP presented the case before the committee

• The proposed project is for EC for Revision & Expansion of Group Housing Colony "Esfera" project located at Village Basai, Sector 37 C, Gurugram, Haryana by M/s Imperia Structures limited

- The Project is on concept basis as the CLU and building plan are not approved by Competent Authority.
- The license no. 64 of 2011 has been granted to the project in the name of M/s Phonex Datatech Services Pvt. Ltd, M/s Prime Infoways Pvt. Ltd. and M/s Prime IT Solutions Pvt. Ltd. for an area measuring 17 acres from Town and Country Planning Department which is valid upto 15.07.2016.
- The renewed license no. 64 of 2011 has been granted to the project in the name of M/s Imperia Structures limited for an area measuring 17 acres from Town and Country Planning Department which is valid upto 15.07.2019.
- Earlier EC has been granted to the project vide letter no. SEIAA/HR/2014/597 dated 15.04.2014 for the total area of 44717.41sqm and total built up area 102908.89 sqm.
- The PP submitted the copy of transfer of EC in the name of M/s Imperia Structures limited vide letter dated 08.11.2017.
- CTE was also obtained vide letter no. HSPCB/Concent-2821214-GUSOCTE-1012825 Dated 10.06.2014.
- The PP submitted the certified copy of compliance report from RO MoEF &CC vide letter dated 25.11.2020.
- As of now, the construction undertaken till date is in accordance with the earlier granted EC. There is revision and expansion in the built up area of the project. The Total Built up area has been revised and increased from 10908.89 sqm to 115794.72
- Sultanpur National park lies with 8.58 km from the project site
- Najafgarh Jheel Bird Sanctuary lies within the 6.67 kms approx from the project site
- The project falls under Gurugram Manesar Master Plan 2031AD

Sr. No.	Tower No.	Construction Status			
1.	Tower-A	Slab and work wall completed			
2.	Tower-B	-do-			
3.	Tower-C	-do-			
4.	Tower-D	-do-			
5.	Tower-E	-do-			
6.	Tower-F	Construction not started yet			
7.	Tower-G	Operational			
8.	Tower-H	-do-			
9.	Tower-I	-do-			
10.	EWS	-do-			

Table1: <u>Construction Status</u>

Table 2:

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:-

	f the Project: Revision & Expansion of ector-37 C, District- Gurugram, Haryan	-	ing Complex "Est	era" Located at village-
Sr. No.	Particulars	Existing	Expansion	Total
Online F	roject Proposal Number	SIA/HR/MI	S/169777/2020	
1	Latitude	Particular	Latitude	Longitude
2	Longitude	A	28°26'58.60"N	76°59'7.00"E
		В	28°26'57.70"N	76°59'8.10"E
		С	28°26'52.69"N	76°59'3.56"E
		D	28°26'51.00"N	76°59'6.60"E
		E	28°26'56.50"N	76°59'13.10"E
		F	28°26'54.40"N	76°59'15.70"E
		G	28°26'50.00"N	76°59'11.30"E
		Н	28°26'49.50"N	76°59'11.40"E
		I	28°26'48.80"N	76°59'13.30"E
		J	28°26'46.30"N	76°59'13.30"E
		К	28°26'46.30"N	76°59'12.80"E
		L	28°26'44.70"N	76°59'12.80"E
		М	28°26'44.70"N	76°59'6.90"E
		N	28°26'49.60"N	76°59'7.20"E
		0	28°26'49.90"N	76°59'6.40"E
		Р	28°26'48.80"N	76°59'6.40"E
		Q	28°26'48.80"N	76°59'5.51"E
		R	28°26'49.90"N	76°59'5.40"E
		S	28°26'50.70"N	76°59'3.70"E
		Т	28°26'53.00"N	76°59'1.97"E
		U	28°26'55.20"N	76°59'4.00"E
		V	28°26'55.80	"N76°59'3.40"E
3	Plot Area (sqm)	44717.41	Nil	44717.41
4	Proposed Ground Coverage (sqm)	5601.297	Nil	5601.297
5	Proposed FAR (sqm)	78240.493	Nil	78240.493
6	Non FAR Area (sqm)	24668.43	18691.44	43359.87
7	Total Built Up area (sqm)	102908.89	18691.44	121600.33
8	Total Green Area with Percentage (sqm)	14873.01 (33.25% of Total Plot Area)	Nil	14873.01
9	Rain Water Harvesting Pits (No's)	11	Nil	11
10	STP Capacity (KLD)	400	Nil	400
11	Total Parking (ECS)	-	-	1069
12	Organic Waste Converter (No's)	01	Nil	01

13	Maximum Height of the Building (m)		78	Nil	78
14	Power Requireme	nt (kW)	3644 (DHBVN)	Nil	3644
15	Power Backup (KV	4 No's of DG sets (1X320 +1X250 KVA+2x 500)	Nil	1570	
16	Total Water Requi	rement (KLD)	473	Nil	473
17	Fresh Water Requ	irement (KLD)	261	Nil	261
18	Treated Water (KL	D)	259	Nil	259
19	Waste Water Gen	erated (KLD)	324	Nil	324
20	Solid Waste Gener	rated (Kg/day)	1537	Nil	1537
21	Biodegradable Wa	iste (Kg/day)	919.09	Nil	919.09
22	Number of Towers	09 +EWS	Nil	09+EWS	
23	Dwelling Units/ EV	VS (No's)	698	Nil	698
24	Basement (No's)		04	Nil	04
25	Community Cente	01	Nil	01	
26	Stories		G+23	Nil	G+23
27	R+U Value of Mate W/sq.m K	erial used (Glass)	5.6	Nil	5.6
28	Total Cost of the project:	i) Land Cost ii) Construction Cost (Cr.)	217	03	220
29	EMP Budget	i) Capital Cost (Lakhs)	264	6.5	270.5
		ii) Recurring Cost (Lakhs)	41.95	0.65	42.6
30	Incremental Load in respect of: i) PM 2.5	-	-	46.86	
	ii) PM 10 (µg/m ³)		-	-	89.61
	iii) SO ₂ (µ	ug/m³)	-	-	16.94
	iv) NO ₂ (µ	ug/m³)	-	-	35.76
	v) CO (µį	g/m³)	-	-	0.86

Table 3: EMP Details

	During Cons	truction Phase	During Operation Phase				
<u>Description</u>	<u>Capital Cost</u> (Lakhs)	<u>Recurring Cost</u> (Lakhs/Year)	<u>Capital Co</u> (Lakhs	<u>Recurring Cost</u> (Lakhs/Year)			
Water for Dust suppression	1.50	2.00	Air Pollution & Noise Control	50.0	5.00		
Waste Water Management	1.00	1.00	Sewage Treatment Plant (STP)	70.0	12.00		
Anti Smog Gun & Barricading	6.50	0.65	Rainwater Harvesting Pits	40.0	6.00		

	313.10				
Sub Total	Rs 37.0	Rs. 11.25		Rs. 233.5	Rs. 31.35
conservation- Wildlife Activity Plan	-		-	10.0	1.00
Others (Wildlife		-			
Solid Waste Management	2.00	0.50	Solid Waste Management	20.0	2.00
Occupational Health & Safety	25.0	6.00	Occupational Health & Safety	30.0	3.00
Green Belt Development	1.00	0.10	Green Belt Development	13.50	1.35
Air, Noise, Soil, Water Monitoring	0.00	1.00	Monitoring for Air, Water, Noise & Soil	0.00	1.00

The discussion was held on Occupation certificate, wildlife distance from the project site CTO, STP details, revised EMP, CER, status of construction etc. and certain observations were raised which were replied by the PP vide letter dated 30.01.2021. The documents were placed before the committee and committee after discussion approved the reply. The PP submitted that Rs.10 Lakhs will be spent on various wildlife conservation activities like artificial nests on the trees, digging of ponds and construction of feeding platforms through Environment Management Plan.

After detailed 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 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific conditions:-

- 1) 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
- 2) 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.
- 3) 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 & 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.
- 4) The PP shall comply the Wildlife Activity plan and spent Rs 10 Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds, construction of feeding platforms through Environment Management Plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Wardan.
- 5) 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.
- 6) 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.

- 7) 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.
- 8) 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
- 9) 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 14873.01(33.25% of Total Plot Area) shall be provided for Green Area development for whole project.
- 10) 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.
- 11) 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.
- 12) 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.
- 13) The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 14) 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
- 15) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 16) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 17) 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.
- 18) The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- 19) 11Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- 20) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 11 RWH pits.
- 21) 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.
- 22) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 23) The PP shall provide the mechanical ladder for use in case of emergency.
- 24) 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 Rules2001 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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

- 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/ deviation/ violation of the environmental/ forest/ 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 MoEFCC/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-abinitio 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 Ministry/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.

209.03 EC of Warehouse /Industrial Storage/ Logistics/Assembling Park at Village Luhari, Post Office Luhari, MDR-132, Pataudi Kulana Road, Tehsil Jhajjar, District Jhajjar, Haryana by M/s ILP 3 India 8 Private Limited.

Project Proponent: Sh. Nitin Gawali, Sh. Mahender Wagule and Sh. Rahul TiwariConsultant: Aplinka Solutions & Technologies Pvt. Ltd
(Representatives Sh.Darpan Bajaj & Sh.Ashish Rana)

The project was submitted to the SEIAA, Haryana vide online proposal no SIA/HR/MIS/183360/2020 dated 28.12.2020 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.

The case was taken up in 209th meeting of SEAC held 30.01.2021. The PP presented the

case before the committee.

- The proposed project is for EC of Warehouse /Industrial Storage/ Logistics/Assembling Park at Village Luhari, Post Office Luhari, MDR-132, Pataudi Kulana Road, Tehsil Jhajjar, District Jhajjar, Haryana by M/s ILP 3 India 8 Private Limited.
- The Project is on concept basis as the CLU and building plan are not approved by Competent Authority.
- No wildlife sanctuary falls within 10km from the project site.

Table 1:

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:-

Name of the Project: Warehouse/Industrial Storage/Logistics/Assembling Park at Village Luhari, post office- Luhari, MDR-132, PataudiKulana Road, Tehsil-Jhajjar, District Jhajjar, Haryana by M/s ILP 3 India 8 Private Limited

Sr. No.	Particulars				
	Online Project Proposal Number	SIA/HR/MIS/183360/2020			
1.	Latitude	28°22'41.77"N			
2.	Longitude	76°41'20.91"E			
3.	Net Plot Area	2,21,540.29 sqm			
4.	Proposed Ground Coverage	1,13,800.00 sqm			
5.	Proposed FAR	1,40,122.00 sqm			
6.	Non FAR Area	2,917.00 sqm			
7.	Total Built Up area	143,039.00 sqm			
8.	Total Green Area with Percentage	45,147.00 sqm (@20.38% of plot area)			
9.	Rain Water Harvesting Pits	1 number of RWH pond and 29 number of RWH pits			
10.	STP Capacity	2x100 KLD			
11.	Total Parking	33,260.00 sqm (@15.01% of plot area)			
12.	Organic Waste Converter	1			
13.	Maximum Height of the Building	18 m			
14.	Power Requirement	3200 kW Source : Uttar Haryana BijliVitran Nigam			
15.	Power Backup	1 x 62.5 kVA, 4 x 125 kVA, 4x250 kVA, 2 x 315 kVA and 3x500 kVA DG sets			
16.	Total Water Requirement	325 KLD			
17.	Domestic Water Requirement	123 KLD			
18.	Fresh Water Requirement	123 KLD			
19.	Treated Water	202 KLD			

20.	Waste Water Generated		166 KLD
21.	Solid Waste Gener	ated	1115.85 kg/day
22.	Biodegradable Wa	ste	669.51 kg/day
23.	Number of Blocks		7 Blocks+ Gate House+Utility block
24.	R+U Value of Mate	rial used (Glass)	U = 5.4 W/sqm K
			R-0.9
25.	Total Cost of the	i) Land Cost	
	project:		54.63crores
26.		ii) Construction	167.05crores
		Cost	Total 221.68 Crores
27.	EMP Cost/Budget		3.8 Crores
28.	Incremental Load		0.074µg/m ³
	in respect of:		
	i) PM 2.5		
29.	ii) PM 10		0.074µg/m³
	iii) SO ₂ iv) NO ₂		0.17µg/m ³
			1.14µg/m ³
v) CO			0.45µg/m ³
30.	Construction Phase: i)Power Back-up ii)Water Requirement & Source iii)STP (Modular) iv)Anti-Smoke Gun		
			125 kVA
			50 KLD to be sourced from treated water from STP/CSTP.
			1
			As per NGT order 01 Anti-smog Gun will be provided at site

Table 2: EMP DetailsEMP budget for inside the project boundary are as follows

COMPONENT	CAPITAL COST (Rs. IN LACS)						
Operation Phase							
Sewage Treatment Plant	80						
Rain water Harvesting Pits	100						
Acoustic enclosure/stack for DG sets	20						
Solid Waste Management / OWC	25						
Environmental Monitoring and six monthly compliances	5						
Green Area/ Landscape Area	70						
Environment Cell	8						
Construction Phase							
EMP cost of Construction phase(green net, tarpaulin cover to cover the construction material)	8						
Tractors/Tanker cost for Water sprinkling in construction phase	14						
Wheel wash arrangement during construction phase	7						
Sanitation for labours(mobile toilets/septic tank)	8						
Anti Smog Gun	10						
Environmental Monitoring and six monthly compliances	25						
Total	380						

Total EMP budget

Sr. No.	Particular	Total Cost INR(in Crores)	
1.	EMP budget for nearby area/ outside the project boundary	0.63	
2.	EMP budget for inside the project boundary	3.8	
	Total	4.43	

The discussion was held on land details, Form IA, Water details, STP, List of chemicals, Soil testing reports, DG set location, onsite/offsite Emergency Plan and Disaster Management Plan etc. and certain observations were raised which were replied by the PP vide letter dated 30.01.2021 along with land details. The documents were placed before the committee and committee after discussion approved the reply. The Discussion was held on the storage of drugs and PP agrees that proper storage shall be created for the storage as per Drugs and cosmetics act, 1945. The PP submitted the affidavit that

- They will follow the MSIHC Rules,2000 and amended thereof, in case of storage of Hazardous Chemicals and the chemicals will be stored under the threshold limit.
- That, the project will not exceed the BUA of 143039 sqm as per the current plans submitted to SEAC/SEIAA on the given plot area of Rs.2,21,540.29 sqm. If there is any increase in BUA, they shall obtain prior approval for EC expansion/revision for the additional BUA.
- They proposed to provide 5% of electricity load (160kw) through solar power as per HAREDA norms. Accepting the suggestions and directions of SEAC, during the SEAC meeting, the project will meet up to 10% of its electrical load (320KW) through the solar power.

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:

A: Specific Conditions:

- 1. The PP shall take the necessary approval from PESO, if applicable
- 2. The PP shall follow the compliance of Public Liability Insurance Act, 1991
- 3. The PP shall carry the isolated storage of each chemical to be stored with the existing precautions as per the MSHIC Rules, 1989 and abide by all conditions of MSDS.
- 4. 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 & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall spend amount on online education support to needy children out of socio-economic component of EMP in the time of COVID. The PP shall establish Environment monitoring cell as per documents submitted.
- 5. The PP and consultant agree to display the First Aid measure, Fire Fighting Measure, Accidental Release measure, Exposure and control (Personal Measure) at the site.
- 6. 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.
- Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.
 e. Ultra Filtration. The Treated effluent from STP shall be recycled/reused for flushing. DG cooling, Gardening and HVAC. The PP shall maintain Zero Liquid Discharge

- 8. The PP shall comply with provisions of Occupational Safety health and working conditions Code 2019.
- 9. 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.
- 10. 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.
- 11. Separate wet and dry bins must be provided 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.
- 12. The PP shall implement the EMP and assess that the implemented EMP is adequate and periodic environmental audits shall be conducted and maintained the records of audit. These audits shall be followed by Corrective action plan to correct the various measures identified during the audits (CAP).
- 13. 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 km 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 05kms radius of the site in different scenarios of space and time
- 14. No tree cutting has been proposed in the instant project. A minimum of 1 tree 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. As proposed 45,147.00 sqm (@20.38% of plot area) of net plot area shall be provided for green area development.
- 15. The PP shall provide the Anti smog gun mounted on vehicle in the project for suppression of dust during construction phase and shall use the treated water, if feasible.
- 16. 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 by installing wet scrubbers/other Air Pollution Control Measures (APCM). The DG sets will be operated for maximum 04 hours during power failure through Executing Agency.
- 17. The PP shall not carry any construction below the HT Line passing through the project.
- 18. The PP shall not carry any construction above or below the Revenue Rasta.
- 19. 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.
- 20. The PP shall not allow parking of the vehicles on the roads or revenue Rasta outside the project area.
- 21. The PP shall follow the MSIHC Rules, 2000 and amended thereof , in case of storage of Hazardous Chemicals and the chemicals will be stored under the threshold limit.
- 22. The PP shall follow the hazardous chemicals communication standards causing health hazards needs OSHA norms.
- 23. The PP shall follow the Hazardous waste(management handling and transboundary movements) Rules 2008

- 24. The PP shall follow chemical accidents (emergency planning and preparedness) Rules 1996.
- 25. The PP shall intimate MSDC with case numbers of all chemicals, drugs, cosmetics to SEIAA before allowing storage.
- 26. The PP shall submit the complete details of land documents before SEIAA being conceptual appraisal
- 27. The PP shall develop the onsite and offsite emergency plan in consultation with the regulatory authority.
- 28. 29 Rain water harvesting recharge pits and one pond shall be provided for ground water recharging as per the CGWB norms.
- 29. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 29 Rain water harvesting recharge pits and one pond.
- 30. The PP shall not allow establishment of any category A or B type industry in the project area.
- 31. The PP shall carry out the quarterly awareness programs for the staff.
- 32. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
- 33. The PP shall comply with provisions of Manufacturing storage and import of Hazardous chemical rules.
- 34. The PP shall comply the requirements of drugs and cosmetics Rules 1954 as amended from time, if drugs all stored.

B. <u>Statutory Compliance:</u>

- [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, and the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules2001 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. <u>Air quality Monitoring and Preservation</u>

i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory 209th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.01.2021 & 30.01.2021

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 low Sulphur 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) Sand, Murram, 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 low sulphur 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. <u>Water Quality Monitoring and Preservation</u>

- 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.
- 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 recharge 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. <u>Energy Conservation measures</u>

- 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 no case shall 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. <u>Waste Management</u>

- 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 off 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. <u>Green Cover</u>

- 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. <u>Transport</u>

- 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. <u>Human Health Issues</u>

- 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. <u>Corporate Environment Responsibility</u>

- 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. <u>Miscellaneous</u>

- 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-abinitio 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 Ministry/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.
- 209.04 EC for Proposed Affordable Plotted Colony under Deen Dayal Jan Awas Yojna-2016 of land measuring 10.71875 acres (Phase-III) in Revenue Estate of village Shimla, Maulana, Sector 40, Panipat, Haryana by M/s Herman Properties Pvt. Ltd in collaboration with Herman Fin Properties Pvt. Ltd & others.

Project Proponent	: Sh. Amit Kumar
Consultant	: Vardan Environet

The project was submitted to the SEIAA, Haryana vide online proposal no SIA/HR/MIS/184580/2020 dated 26.05.2020. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

Then, the case was taken up in 206th meeting of SEAC Haryana held on 26.11.2020 but the PP and the consultant requested in writing to defer the case.

Thereafter the case was taken up in 208th meeting held on 07.01.2020 but the PP and the consultant requested vide letter dated 06.01.2020 for deferment of the case which was considered and acceded by the SEAC.

The Case was taken up in 209th meeting of SEAC Haryana held on 30.01.2021. The PP presented the case before the committee.

- The Proposed project is for EC for Proposed Affordable Plotted Colony under Deen Dayal Jan Awas Yojna-2016 of land measuring 10.71875 acres (Phase-III) in Revenue Estate of village Shimla, Maulana, Sector 40, Panipat, Haryana by M/s Herman Properties Pvt. Ltd in collaboration with Herman Fin Properties Pvt. Ltd, Jassum realtors Pvt. Ltd., Jassum construction Pvt. Ltd. and Best city projects Pvt. Ltd.
- The PP submitted the revised layout-cum-demarcation plan in the name of M/s Herman Properties Pvt. Ltd in collaboration with Herman Fin Properties Pvt. Ltd, Jassum realtors Pvt. Ltd., Jassum construction Pvt. Ltd. and Best city projects Pvt. Ltd.
- The Project is on concept basis as the CLU and building plan are not approved by Competent Authority.
- The project falls under Panipat Plan 2021.
- No Wildlife sanctuary falls within 10km 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:

Name of the Project: Proposed Affordable Plotted Colony under DeenDayal Jan AwasYojna Scheme 2016 of 10.71875 Acres (Phase-III) in the revenue estate of village Shimla Maulana, Sector-40, Panipat, Haryana by M/s Herman Properties Pvt. Ltd in collaboration with Herman Fin Properties Pvt. Ltd & others. Sr. No. **Particulars** Online Proposal Number SIA/HR/MIS/184580/2020 1. 2. Latitude 29°27'28.33"N 3. 76°58'39.14"E Longitude 4. Plot Area 43,377.24 m2/10.71875 Acres 5. Net Plot Area 43,377.24 m2/10.71875 Acres 6 Proposed Ground Coverage 14,893.68 m2 7. **Proposed FAR** 44,719.005m2 8 Non FAR Area 5,827.07 m2 9 Total Built Up area (FAR +Non FAR) 50,546.08 m2 10. Total Green Area with % 8,675.448m2 (20%) 11. Rain Water Harvesting Pits (with size) 11 12. **STP Capacity** 300 KLD 13. **Total Parking** NA 14. **Organic Waste Converter** 2 Nos. (1×1250+1×40= 1290 Kg) 15. Maximum Height of the Building (m) NA 16. **Power Requirement** 1,138 KVA (UHBVN) 17. 1 Nos. 125 KVA **Power Backup** 18. **Total Water Requirement** 333 KLD 19. **Domestic Water Requirement** 206 KLD 20. Fresh Water Requirement 206 KLD 21. Treated Water 127 KLD 22. Waste Water Generated 248 KLD

23.	Solid Waste Generated	4		1702 Kg/day		
24.				1792 Kg/day		
	Biodegradable Waste			1075 Кg NA		
25.	Number of Towers					
26.	No. of Plots			204		
27.	Basement			NA		
28.	Community Center			1 nos.		
29.	Stories			NA		
30.	R+U Value of Material	used (Glass)		NA		
31.	Total Cost of the project (in INR): i) Land Cost					
	ii) Construction		ii) Construction	16.92 Cr		
		cost				
32.	EMP Budget (in INR)			Construction Phase:		
				Capital Cost- 14 lacs		
				Recurring Cost- 7 lacs		
				Operation Phase:		
				Capital Cost- 36 lacs		
			I	Recurring Cost- 44 lacs		
33.	ii		i) PM 2.5	0.00317 μg/m3		
			ii) PM 10 0.00635 μg/m3			
			iii) SO ₂	0.01587 μg/m3		
			iv) NO ₂ 0.0127 μg/m3			
			v) CO	0.0000015 mg/m3		
34.	Construction Phase:	i) Power Back-up		Temporary electrical connection of 19 KW& 01 DG of 125 KVA		
		ii) Wa	ter Requirement &	Fresh water – 10 KLD for drinking &		
		Source		sanitation.		
				Treated wastewater 30 KLD f		
				construction		
				Source:		
				Fresh water – HSVP		
				Construction Water - treated waste		
		iii) STP (Modular)		water from operational project		
				01 Nos.		
		iv) Anti-Smoke Gun		01 Nos of Anti-smoke gun		

EMP Budget

Description	During Construction Phase		Description	During Operation Phase	
	Capital Cost	Recurring Cost		Capital Cost	Recurring Cost
	(Lakhs)	(Lakhs for 1 Year)		(Lakhs)	(Lakhs for 5 Year)
Sanitation and Waste Water Management (Modular STP)	1	2	Waste Water Management (Sewage Treatment Plant)	30	15
Green Belt Development	2	3	Green Belt Development	3	10
Air, Noise, Soil, Water Monitoring	0	1	Monitoring for Air, Water, Noise & Soil	0	5
Rainwater harvesting system	10	0	Rainwater harvesting system	0	6

(11 Pits) Medical cum First Aid facility (Providing medical room & Doctor)	1	1	Solid Waste Management (Dust bins & OWC)	3	8
Total	14	7		36	44

The discussion was held on revised RWH, STP, details of existing trees etc. and certain observations were raised which were replied by the PP vide letter dated 30.01.2021. The documents were placed before the committee and committee after discussion approved the reply.

The PP submitted the undertaking that

- There are 2 no. of trees present at the site. These trees will be cut for the development activities and they will take prior permission from the concerned department to cut the trees
- There are 2 no. of bushes having girth less than 30cm at the site.

After detailed 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 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific conditions:-

- 1. 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
- 2. 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.
- 3. 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 & 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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 05kms radius of the site in different scenarios of space and time

- 8. 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 8,675.448m² (20% of net plot area) shall be provided for Green Area development for whole project.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 13. 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.
- 14. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 15. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 16. 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.
- 17. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- 18. 11 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- 19. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 11 RWH pits.
- 20. 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.
- 21. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 22. The PP shall provide the mechanical ladder for use in case of emergency.
- 23. 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 Rules2001 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 low sulphur 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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.
- 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

- 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 if 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 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.
- 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 MoEFCC/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-abinitio 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 Ministry/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.

209.05 EC for Proposed Residential Plotted Colony on 22.6187acres land under DDJAY Scheme at Village Ullawas & Behrampur, Sector 61, Gurugram, Haryana by M/s Commander Realtors Private Limited & Others

Project Proponent	: Sh. Amarnath Ichhpujani
Consultant	: Ind Tech House Consultancy Pvt. Ltd.

The project was submitted to the SEIAA, Haryana vide online proposal no SIA/HR/MIS/59736/2020 dated 11.01.2021 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006. The TOR was granted vide letter dated 05.01.2021. Then the PP submitted the EIA/EMP report on 14.01.2021.

The case was taken up in 209th meeting of SEAC Haryana held on 30.01.2021. The PP

presented the case before the committee

- The Proposed project is for EC for Proposed Residential Plotted Colony on 22.6187acres land under DDJAY Scheme at Village Ullawas & Behrampur, Sector 61, Gurugram, Haryana by M/s Commander Realtors Private Limited & Others.
- The TOR was granted vide letter dated 05.01.2021
- The Project is on **concept basis** as the CLU and building plan are not approved by Competent Authority.
- The project falls under GMUC Master Plan 2031.
- No Wildlife Sanctuary falls within 10km 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:

Sr.	Particulars			
No.				
1.	Online Proposal Number	SIA/HR/NCP/57972/2020		
2.	Latitude	28°24'32.60" N,		
3.	Longitude	77°05′48.89″ E		
4.	Gross Plot Area	91534.687 sqm		
5.	Net Plot Area	90357.932 sqm		
6.	Proposed Ground Coverage	40051.825 sqm		
7.	Proposed FAR	143194.52 sqm		
8.	Non FAR Area	86731.94 sqm		
9.	Total Built Up area	229926.5 sqm		
10.	Total Green Area with %	18604.88 sqm (20.59%)		
11.	Rain Water Harvesting Pits	07 Nos.		
12.	STP Capacity	760 KLD		
13.	Total Parking	1805 ECS		
14.	Organic Waste Converter	01 No.		
15.	Maximum Height of the Building (m)	15 M.		
16.	Power Requirement	5350 KW		
17.	Power Backup	2750 KVA		
18.	Total Water Requirement	841 KLD		

19.	Domestic Water Requ	irement					734 KLD
20.	Fresh Water Requirement			551 KLD			
21.	Treated Water			289 KLD			
22.	Waste Water Generated				635 KLD		
23.	Solid Waste Generated	d					4.5 TPD
24.	Biodegradable Waste						2.7 TPD
25.	Number of plots/block	(S					405 Nos.
26.	Dwelling Units/ EWS						1620 Nos.
27.	Basement						01 No.
28.	Stories			B+ST+4			
	Total Cost of the project: i) Land Co			nd Cos	t	461 Cr.	
29.			onstru	ctionCost			
30.	EMP Budget	I				Capital- 206.2 Lacs	
					Recurring- 65.4 Lacs		
31.	Incremental Load in re	spect of:			i.	PM 2.5	0.56 ug/m ³
					ii.	PM 10	0.94 ug/m ³
					iii.	SO ₂	3.76 ug/m ³
					iv.	NO ₂	15.3 ug/m ³
					٧.	СО	0.00578 ug/m ³
32.	Construction Phase:	i.	Pow	er Ba	ck-up		01 X 125 KVA
		ii. Water Requirement &		ement &	Authorized treated water tanker		
		Source			supply		
		iii.	iii. STP (Modular)			1	
		iv. Anti-Smoke Gun			As per NGT order 03 Anti-smog		
					Gun will be provided at site		

TABLE 2: ENVIRONMENT BUDGET (Construction Stage)

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
BARRICADING OF CONSTRUCTION SITE	20	3
ANTI - SMOG GUN WITH COMPLETE SYSTEM)	6	3
DISPLAY OF DUST MITIGATION MEASURES	1.5	0.2
SITE SANITATION -	4	1
MOBILE STP	4	1.5
DISINFECTION/ PEST CONTROL	-	2
LABOUR HEALTH CHECK UP & FIRST AID FACILITY	3	2.0
LABOR WELFARE (canteen, creche, safeacess road - water power)	5	3
WHEEL WASHING	3	1.5
WASTE STORAGE BINS - LABOUR CAMP/SITE OFFICES	1.5	0.5
TRAFFIC MANAGEMENT SIGNAGES	1.5	0.2
SAFETY TRAINING TO WORKERS	-	2
ENVIRONMENT MONITORING & 6 MONTHLY COMPLIANCE REPORT OF EC CONDITIONS	-	2
TOTAL	49.5	21.9

COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum
SEWAGE TREATMENT PLANT (760KLD)	55	15
RAIN WATER HARVESTING (7 Recharge Pit)	25	3.5
SOLID WASTE STORAGE BINS & COMPOSTER (Organic Waste Converter 2.7tpd)	41	14
HORTICULTURE DEVELOPMENT (TREE PLANTATION & LANDSCAPING)	23	8
ROOF TOP SPV PLANT (60 KWp)	13	1
ENVIRONMENT MONITORING		2
TOTAL	157	43.5

TABLE 3: ENVIRONMENT BUDGET (Operation Stage)

The discussion was held on Anti smog gun, STP, Solid waste management plan, power assurance, water assurance, Forest NOC, ECBC, Legible plans, location of project site on GMUC Mater plan, self contained note, Wildlife affidavit, Green Plan, Dwelling units details etc. and certain observations were raised which were replied by the PP vide letter 30.01.2021. The documents were placed before the committee and committee after discussion approved the reply.

After detailed 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 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific conditions:-

- i. 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
- ii. 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.
- iii. 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 & 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.
- iv. 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.
- v. 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.
- vi. 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.

- vii. 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
- viii. 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 18604.88 sqm (20.59% of the net plot area) shall be provided for Green Area development for whole project.
- ix. 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.
- x. 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.
- xi. 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.
- xii. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- xiii. 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.
- xiv. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- xv. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- xvi. 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.
- xvii. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- xviii. 7 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- xix. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 7 RWH pits.
- xx. 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.
- xxi. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- xxii. The PP shall provide the mechanical ladder for use in case of emergency.
- xxiii. 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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.
- 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

- 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.
- 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 MoEFCC/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-abinitio 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 Ministry/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.
- 209.06 EC for Modernization of Development of Rajiv Gandhi Education City of Haryana Sehari Vikas Pradhikaran (HSVP) Village Bahalgarh, Tehsil Rai, District Sonepat, State Haryana by Haryana Sehari Vikas Pradhikaran (HSVP). 209th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.01.2021 & 30.01.2021

Project Proponent: Sh. Pawan KumarConsultant: SBA Enviro Systems Private Limited

The project was submitted to the SEIAA, Haryana on 08.11.2019. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC for approval of ToR under category 8(b) of EIA Notification 14.09.2006. Thereafter, the case was taken up in 192nd meeting of SEAC held on 03.12.2019 but the PP requested in writing for the deferment of the case which was considered and acceded by the SEAC.

Then, the case was taken up in 209th meeting of SEAC held on 30.01.2021. The discussion was held on earlier EC dated 29.10.2010, validity of EC after the expiry of EC, status of construction, compliance of EC, details of planned area of phase-I, the details of EC obtained by the various PP under the combined EC obtained by the PP, status of construction of area under commercial , under health facilities, public utilities, residential area, source of water, ground water, channel minor, solid waste management plan, multilevel parking, bus stations etc. and certain observations were raised as following:-

- 1) The PP shall submit the present status of water uses and its source
- 2) The PP shall submit the clear cut proposal for modernization of existing Rajiv Gandhi Education city.
- 3) The PP shall submit the self contained note on status of compliance of earlier EC
- 4) The PP shall submit the documentary proof/ evidence that no construction has been carried out after the expiry of EC dated 29.10.2010.
- 5) The PP shall submit the copy of certified compliance report from the RO. MoEF &CC.
- 6) The PP shall submit the plans regarding the modernization of the project in terms of different type of components
- 7) The PP shall submit the status of compliance of STP.

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 only after the receipt of complete information and in case of non-receipt of information in time the case shall be recommended for rejection/filing.

209.07 EC for Residential Plotted Colony under Deen Dayal Jan Awas Yojna (10.30 acres), Village Wazirpur & Meoka, Sector 92, Gurugram, Haryana by M/s Signature Infrabuild Private Limited.

Project Proponent	: Sh. Vinit Kumar
Consultant	: Grass Roots Research & Creation India (P) Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/191905/2021 on dated 12.01.2021 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 209th meeting of SEAC Haryana held on 30.01.2021. The PP appeared before the committee and requested in writing vide letter dated 29.01.2021 for the

deferment of the case. However, the committee asked to submit the detailed background note and their case will be appraised only after the receipt of required information.

209.08 ToR for Proposed Group Housing complex at Village- Badshahpur, Maidawas & Nangli Umarpur, Sector-62, Gurugram by M/s Emaar MGF Land Ltd.

Project Proponent	: Sh. Shishir Lal
Consultant	: Vardan Environet

The project was submitted for approval of ToR in the MoEF&CC on 07.12.2018. But the case is not listed in the MoEF&CC for the approval of ToR. After the constitution of SEIAA/SEAC, Haryana on 30.01.2019, the case is listed in the present Agenda but the case file has not been received from MoEF&CC yet. The PP is advised to submit the approval of Zoning Plan for the said license alongwith complete land related papers. The Committee decided to defer the case till the file is received from MoEF&CC. The Committee decided that PP can collect the baseline data on his own risk and behest.

Thereafter, the case was taken up in 209th meeting of SEAC held on 30.01.2021. The PP and consultant appeared before the committee and informed that FAR under TOD Policy is yet to be get approved from the Competent Authority and their project to be re-commended for delisting and they will apply fresh case for Environment Clearance after the receipt of required FAR. The Committee deliberated on the request of PP and Consultant and decided to recommend the case to SEIAA for withdrawal.

209.09 Amendment in EC of Non-Agro Warehouse project on land measuring 76.8437 acres (3,10,975.59 m2) located at Village Rahaka and Rani ka Singhola, Tehsil Sohna, District Gurugram, Haryana by M/s Emporium Industrial Parks (India) Private Limited.

Project Proponent	: Sh. Sunil Kumar
Consultant	: Grass Roots Research & Creation India (P) Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/191786/2021 on dated 12.01.2021 as per check list approved by the SEIAA/SEAC for obtaining amendment in Environmental Clearance under Category 8(a) of EIA Notification 14.09.2006.

Sr. No.	Equipment /Facility	Existing Configuration As Per EC Granted	Proposed Configuration	Final configuration after amendment
1	RWH	77 No's (Volume- 88.31 m ³)	75 No's	152 No's (Volume- 43.96 m ³)
2	Population	5,228 No's	5,228 No's	10,456 No's
3	Total Water Requirement	290 KLD	293 KLD	583 KLD
4	Solid Waste Generation	1,517 Kg/day	1,499 Kg/day	3,016 Kg/day

5	DG Power Backup	06 DG (3 x 1250 kVA +2 x 250 kVA + 1 x 750 kVA)	08 (1 x 1250 kVA + 2 x125 kVA + 3 x 630 kVA+ 1 x	12 DG Set (4 x1250 kVA + 3 x630 kVA + 2 x 125kV
6	Waste Water Generation	130 KLD	264 KLD	394 KLD
7	Power Load	7,500 kVA	3,360 kVA	10,860 kVA
8	STP Capacity	160 KLD	340 KLD	500 KLD
9	Project Cost	318.42 Cr	84.95 Cr	403.37 Cr
10	Fresh Water	98 KLD	145 KLD	243 KLD

The case was taken up in 209th meeting of SEAC Haryana held on 30.01.2021. The PP presented the case before the committee and requested for amendment in environment clearance granted to the project vide letter no. 369 dated 27.08.2020.

- The Proposed project is Amendment in EC of Non-Agro Warehouse project on land . measuring 76.8437 acres (3,10,975.59 m2) located at Village Rahaka and Rani ka Singhola, Tehsil Sohna, District Gurugram, Haryana by M/s Emporium Industrial Parks (India) Private Limited.
- Earlier EC was granted to the project vide letter no. 369 dated 27.08.2020 for a plot area measuring 76.84375 acres.
- The PP and consultant submitted Form-iv for amendment in EC granted to the project vides letter no. 369 dated 27.08.2020 for a plot area measuring 76.84375 acres.
- The PP informed the committee that due to change in the planning and making the provisions of double shift, the population is doubled and hence required parameters and thus amendments are required in the earlier EC granted vides letter no. 369 dated 27.08.2020
- The PP and consultant informed the committee that plot area and built up area of the project remains the same.

The details of the amendments of EC of 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:	

EMP BUDGET

Sr. No	Particulars	Capital Cost	Annual Recurring Cost
1	Pollution Control during construction stage (1 year)	15	
2	Air Pollution Control Systems (Water sprinklers, mechanical broomers, industrial vacuum cleaners, dust extraction system, bag filter, stack, ID fan, closed conveyors and enclosures	25	15
3	Rainwater harvesting systems	228	57
4	Wastewater Treatment Plant (STP), Recycling System	50	12.5
5	Environmental Management Department	5	2
6	Environmental Laboratory	5	2

7	Noise Reduction Systems	1	0.5
8	Occupational Health Management	2	0.5
9	Green Belt Development	28	7
10	Fire fighting systems	5	2
11	CSR/CER Budget/ Environmental Budget	605	-
	Total	969	98.5

The detailed discussion was held on the project whether it is to be considered as amendment or expansion and it is pointed out by members that as the built up area and plot area are same and there is no increase in the plot area and built up area. In the existing infrastructure, there is increase in population due to making provision double shift to better use of infrastructure and due to double shift the related components are changed i.e. Total Water requirement, solid waste generation, power load, STP capacity etc. Therefore, the committee discussed the project in terms of amendment in view of pollution load and after discussion the committee agrees to appraise the project in terms of amendment.

The committee also deliberated that as per the EIA Notification 2006 7(ii) Clause was given for expansion without change in pollution load, which was further modified by Gazette notification dated 23rd November, 2016 which state and where as in some industrial projects, information of production process, equipment, estimated pollution load and planned mitigation measures, which are mentioned in environmental clearance, change after detailed design engineering which is mostly under taken after environmental clearance is granted. The Environmental Impact Assessment Notification, 2006 shall provide for resultant change in environmental clearance process again, provided the proposed change does not result in any adverse impact on environment. In the Environment Impact Assessment Notification, 2006, -(I) in paragraph 7, for sub-paragraph (ii), the following sub-paragraph shall be substituted, namely:- "7(ii). Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:

"Any change in product-mix, change in quantities with in products or number of products in the same category for which environmental clearance has been granted shall be exempt from the requirement of prior environmental clearance provided that there is no change in the total capacity sanctioned in prior environmental clearance granted earlier under this notification and there is no increase in pollution load. The project proponent shall follow the procedure for obtaining No Increase in Pollution Load certificate from the concerned State Pollution Control Board"

Copy of Gazette Notification is placed in file. This project is a building construction project. In the present case neither there is an increase in plot area nor built up area. Hence, change in population result in change in parameters.

Sh. A.K. Mehta, member raised a point along with dissent note "that it is a case of expansion as in this case there is increase in pollution load from activity and needs fresh EIA due to

additional impact on Environment and environment risks and mitigate". It is also raised that the increase of pollution loads in number of activities to be considered. The points of member were considered and deliberated that in view of double shift the amendment is sought in recently granted EC dated 27.08.2020.After that the committee decided by majority that as the plot area and built up area has not been increased and due to double shift the population and related parameters have been changed which to be appraised as amendment in the EC granted to the project vide letter no. 369 dated 27.08.2020.

The discussion was held on RWH, Population, Total Water Requirement, Solid Waste Generation, DG Power Backup, waste water Generation, Power Load, STP Capacity, Project Cost and Fresh water, proposed amendments etc and after deliberation decided to recommend amendments in the earlier EC issued vides letter no. 369 dated 27.08.2020 to SEIAA with the following additional stipulations and other conditions will remain the same as per earlier Environment Clearance vides letter no. 369 dated 27.08.2020

Additional Stipulations:-

- 1. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget for amended part. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project.
- 2. 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 for amendment also.
- 3. 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 for the amendment part also.
- 4. 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.
- 5. The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 6. 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 by installing wet scrubbers/other Air Pollution Control Measures (APCM).
- 7. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 8. The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority
- 9. 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.
- 10. The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
- 11. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase and anti smog gun shall also be provided.
- 12. The PP shall provide the mechanical ladder for use in case of emergency.
- 13. The project proponent shall comply with the provisions regarding Corporate Environment Responsibility as per existing environment clearance for existing part.
- 14. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

209.10 EC of Residential Plotted Colony under DDJAY at Village Garauli Khurd, Sector 37-D, Gurugram, Haryana by M/s Signature Global Developers Pvt Ltd.

Project Proponent	: Sh. Vinit Kumar
Consultant	: Grass Roots Research & Creation India (P) Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/192507/2021 on dated 12.01.2021 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 209th meeting of SEAC Haryana held on 29.01.2021 but the PP requested in writing vide letter dated 29.01.2021 for the deferment of the case. However, the committee asked to submit the self-contained note and decided that their case will be appraised only after the receipt of required information.

209.11 EC for proposed 03 MLD Common Effluent Treatment Plan (CETP) HSIIDC, Industrial Estate, Village Kutana, Tehsil Rohtak, Haryana by M/s HSIIDC CETP Kutana.

Project Proponent	: Sh. Ravinder Singh
Consultant	: Shivalik Solid Waste Management Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/57776/2021 on dated 28.10.2020 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006. The TOR has been granted to the project on 08.11.2017. The PP submitted the EIA report on dated 14.12.2020.

The Case was taken up in 209th meeting of SEAC Haryana held on 29.01.2021. The PP presented the case before the committee.

- The proposed project is for EC for proposed 03 MLD Common Effluent Treatment Plan (CETP) HSIIDC, Industrial Estate, Village Kutana, Tehsil Rohtak, Haryana by M/s HSIIDC CETP Kutana.
- The TOR has been granted to the project on dated 08.11.2017 and PP submitted the EIA report on 14.12.2020.

Thereafter, the case was taken up in 209th meeting of SEAC. The discussion was held on the status of the project, no. of industrial units in the industrial area, the type of industries, waste water generated ,in-flow and outflow of the CETP and the standards of the outflow to be maintained and during discussion it was revealed that the CETP has already been constructed without taking the prior EC. The Committee decided that as the PP has already constructed the CETP without taking prior EC from SEIAA so it is a clear case of violation and decided to recommend to SEIAA for taking credible action under section 15 of the EP Act 1986 as PP has already constructed CETP. 209.12 EC for Residential Colony project (New Integrated Licensing Policy) located at village Naurangpur, Sector-80, Gurugram, Haryana by M/s Karma Lakelands Pvt. Ltd.

Project Proponent: Sh. Rajender PafniConsultant: Grass Roots Research & Creation India (P) Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/NCP/53872/2020 on dated 12.01.2021 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 8(b) of EIA Notification 14.09.2006. The TOR has been granted to the project on 28.10.2020. The PP submitted the EIA/EMP report on dated 13.01.2021.

The Case was taken up in 209th meeting of SEAC Haryana held on 29.01.2021. The PP presented the case before the committee. The Discussion was held on EMP Budget, aravali NOC, Sewer permission, dual plumbing, detail of existing trees on the project site etc. and certain observations were raised as following:-

- 1) The PP shall submit the undertaking of details of exiting trees along with girth and replantation/cutting of trees from the competent Authority on the project site.
- 2) The PP shall submit the Air simulation studies of vehicular and DG
- 3) The PP shall submit the revised Green Plan as per the discussion
- 4) The PP shall submit the details of revised EMP Budget
- 5) The PP shall submit the Arravalli NOC from competent Authority
- 6) The PP shall submit the location of STP, RWH. OWC on the site plan.
- 7) The PP shall submit the details of energy savings due to solar component
- 8) The PP shall submit the Aravali NOC from Competent Authority.
- 9) The PP shall submit the structure stability certificate.
- 10) The PP shall submit the approved Building plans of DU's from Director Town and Country Planning department.
- 11) The PP shall submit the signed copy of all legible plans on larger scale map i.e. Zoning plan/Building Plan, Dual plumbing plan, Traffic plan etc.
- 12) The PP shall submit the Traffic circulation/study plan of the project site along with ventilation plan of the parking in the basement.

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 in the next meeting only after the receipt of complete information and in case of non-receipt of information in time the case shall be recommended for rejection/ filing.

209.13 EC for Expansion of Commercial Colony at Sector 37, Faridabad, Haryana by M/s MPDL Limited.

Project Proponent	: Sh. Dinesh Pandey
Consultant	: Vardan Environet

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/191638/2021 on dated 11.01.2021 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 209th meeting of SEAC held on 29.01.2021. The PP presented the case before the committee

- The proposed project is for EC for Expansion of Commercial Colony at Sector 37, Faridabad, Haryana by M/s MPDL Limited
- The Zoning Plan for area measuring 1.6577acres has been approved vide letter no. 3020 dated 25.01.2012.
- The license no. 68 of 2009 for an area measuring 1.6577acres has been granted to the project vide letter no. 9554 dated 08.06.2020 which is valid upto 18.11.2024.
- Okhla Bird Santuary and Asola Bhatti Wildlife sanctuary falls within 6.4 km and 3.4 km respectively from the project site
- The project falls under Faridabad-2031 Master Plan.

The Discussion was held on status of construction of the project as the PP and consultant informed that they have not constructed area more than 20000 m2 and earlier EC was not applicable to the project and further discussion was held on CTE/CTE/, OC and present status at the site and after detailed deliberation on these issues the committee decided in the meeting to constitute a Sub-Committee for site visit to submit the report on the present status of the project and regarding the applicability of EC on the earlier status of the project.

The sub-committee will consist of the following:

- 1. Shri V. K. Gupta, Chairman
- 2. Dr. Vivek Saxena, Member
- 3. Ar. Hitender Singh, Member

The sub-committee shall submit its report within 15 days from the issue of the letter by

the Secretary SEAC and the project shall be considered only after the receipt of report of subcommittee.

209.14 EC for proposed affordable Group Housing Colony at Village Palra, Sec-70, Gurgaon Haryana by M/s Pyramid Dream Homes LLP.

Project Proponent	:Sh. Nagender
Consultant	:Vardan Environet

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/186557/2020 on dated 08.12.2020 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 209th meeting of SEAC Haryana held on 29.01.2021. The PP

presented the case before the committee

- The Proposed project is for EC for proposed affordable Group Housing Colony at Village Palra, Sec-70, Gurgaon Haryana by Pyramid Dream Homes LLP
- The license no. 26 of 2020 for an area measuring 4.3375acres which is valid upto 24.09.2025.
- The Zoning plan has been approved vide letter no. 7552 dated 25.09.2020 by Town and Country Planning Department.
- The Building plans for the project were approved vide letter no. 181691 dated 13.11.2020 by Town and Country Planning Department.
- The Project falls under Gurgaon-Manesar Master Plan 2031.

Table 1:

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:-

Sr. No.		Particula	ars		
1.	Online Proposal Number		SIA/HR/MIS/186557/2020		
2.	Latitude		28º 23' 15.6" N		
3.	Longitude		77º 1' 8.8" E		
4.	Plot Area		17,553.212 (4.3375 Acres)		
5.	Net Plot Area		16,572.1387 sq.m		
6.	Proposed Ground Coverag	e	3,859.249 m ² (21.985%)		
7.	Proposed FAR		41,177.929 m ²		
8.	Non FAR Area		4,113.901 m ²		
9.	Total Built Up area (FAR +	Non FAR)	45,291.83 m ²		
10.	Total Green Area with %		3314.428 m ² (20 % of net plot area)		
11.	Rain Water Harvesting Pits	s (with size)	4 (dia-5× depth-4)		
12.	STP Capacity		380 KLD		
13.	Total Parking		353 ECS		
14.	Organic Waste Converter		2 nos. of capacity 1,500 Kg/day (1×1,250 Kg/day+1× 250Kg/day)		
15.	Maximum Height of the B	uilding (m)	47.860 m		
16.	Power Requirement		2187.18 KW		
17.	Power Backup		02 Nos. of DG sets (1×250kVA+1×320kVA)		
18.	Total Water Requirement		368 KLD		
19.	Domestic Water Requirem	ient	256 KLD		
20.	Fresh Water Requirement		256 KLD		
21.	Treated Water		112 KLD		
22.	Waste Water Generated		300 KLD		
23.	Solid Waste Generated		2,033 Kg/day		
24.	Biodegradable Waste		1,220 Kg/day		
25.	Number of Towers		6		
26.	Dwelling Units/ EWS		684		
27.	Basement		NA		
28.	Community Center		1		
29.	Stories		G+14		
30.	R+U Value of Material use	d (Glass)	U Value-5.5 w/m ² K		
31.	Total Cost of the project:	i) Land Cost ii) Construction Cost	13.64 Cr. 126.24 Cr.		
32.	CER	,			
33.	EMP Budget		Construction Phase: Capital Cost- 70lacs Recurring Cost- 105lacs Operation Phase: Capital Cost- 209.76lacs Recurring Cost- 214 64lacs		
34.		ct i. PM 2.5	Recurring Cost- 314.64lacs 0.03007 μg/m ³		

²⁰⁹th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.01.2021 & 30.01.2021

	of:			ii.	PM 10	0.00779 μg/m³
	0.11					
				iii.	SO ₂	0.0.09785 μg/m³
				iv.	NO ₂	0.99281 μg/m³
				٧.	СО	0.000089μg/m ³
						Temporary electrical connection of 19
		i. Pov	Powe	ower Back-up		KW
	Constructio n Phase:					& 01 DG of 125 KVA
						Fresh water – 10 KLD for drinking &
				ter Requirement &		sanitation.
						Treated wastewater 30 KLD for
		ii. Wate	construction			
35.			Sourc	ce		Source:
						Fresh water – HSVP
						Construction Water – treated
						wastewater from operational project
		iii.	STP (Modula	ar)	1 Nos.
		iv.	Mitig for du		neasures	01 Nos of Anti-smoke gun

EMP DETAILS

During Cons	ise	During Operation Phase			
Description	Capital Cost (In Lakhs)	Recurring Cost (In Lakhs for 5 Year)	Description	Capital Cost (in Lakhs)	Recurring Cost (In Lakhs for 10Year)
Sanitation and Wastewater Management (Modular STP)	10.00	20.00	Waste Water Management (Sewage Treatment Plant)	80.00	160.00
Garbage & Debris disposal	5.00	10.00	Solid Waste Management (Dust bins & OWC)	45.00	60.00
Green Belt Development	20.00	10.00	Green Belt Development	38.76	59.64
Air, Noise, Soil, Water Monitoring	00.00	5.00	Monitoring for Air, Water, Noise & Soil	00.00	10.00
Rainwater harvesting system (04 Pits)	12.00	00.00	Rainwater harvesting system	00.00	15.00
Dust Mitigation Measures Including site barricading, water sprinkling and anti- smog gun)	10.00	15.00	DG Sets including stack height and acoustics	15.00	5.00
PPE for workers & Health Care	5.00	15.00	Energy Saving (Solar Panel system)	21.00	5.00
Medical cum First Aid facility (Providing medical room &Doctors)	5.00	25.00	Providing 40 nos. of desktopin the nearby	10.00	00.00
Storm Water Management (temporary drains and sedimentation basin)	3.00	5.00	schools to the project site.	10.00	00.00
	70.00	105.00		209.76	314.64
Total	70 Lakhs	105 Lakhs	Total	209.76 Lakhs	314.64 Lakhs

The discussion was held on air dispersion, revised EMP, elevation plan, site plan, Water assurance, power assurance, dual plumbing, sewage permission, horticulture area, SPV Capacity etc. and certain observations were raised which were replied by the PP vide letter dated 29.01.2021. The

documents were placed before the committee and committee after discussion approved the reply. The PP submitted the undertaking that in case they need to cut trees present in their site they will have to take prior permission from the concerned department for transplant/cut. After detailed 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 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific conditions:-

- 1) 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
- 2) 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.
- 3) 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 & 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.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) 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 05kms radius of the site in different scenarios of space and time
- 8) 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
- 9) 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 3314.428 m² (20% of net plot area) shall be provided for Green Area development for whole project.

- 10) 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.
- 11) 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.
- 12) 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.
- 13) The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 14) 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
- 15) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 16) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 17) 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.
- 18) The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- 19) 4 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- 20) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 4 RWH pits.
- 21) 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.
- 22) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 23) The PP shall provide the mechanical ladder for use in case of emergency.
- 24) 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 Rules2001 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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.
- 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

- 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/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 MoEFCC/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-abinitio 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 Ministry/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.
- 209.15 EC for Plotted Colony under DDJAY (Site-I) at Sector-36, Sohna, Haryana by M/s Signature Global Homes PvT. Ltd

Project Proponent	: Sh. Vineet Kumar
Consultant	: Grass Roots Research & Creation India (P) Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/192630/2020 on dated 13.01.2020 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 209th meeting of SEAC Haryana held on 29.01.2021 but the PP requested in writing vide letter dated 30.01.2021 for the deferment of the case. However, the committee asked to submit the self-contained note and decided that their case will be appraised only after the receipt of required information.

209.16 EC for Proposed API Bulk Drugs Manufacturing Plant (74 TPM) at Village Mauli, Sub Tehsil Barwala, Tehsil & District Panchkula, Haryana by M/s Banstag Life sciences Private Limited.

Project Proponent	: Sh. Sunil Bansal
Consultant	: J.M. EnviroNet Pvt. Ltd.

The project was submitted to the SEIAA vide online proposal no. SIA/HR/IND2/173278/2020 on dated 28.09.2020 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 5(f) of EIA Notification 14.09.2006.

The Project/activity is covered under Category A of item 5(f) "Synthetic Organic Chemicals Industry" of the schedule to the EIA Notification, 2006 and requires appraisal at central level by sectoral EAC in the Ministry.

However, as per Notification, Vide S.O. 1223(E) dated 27/03/2020 MoEF & CC deems it necessary to expedite the prior EC to the projects or activities in respect of bulk drugs and intermediates. As a part of comprehensive and robust system to handle the Novel Corona Virus (COVID-19) outbreak, drug availability or production to reduce the impact of the Novel Corona Virus (COVID-19) is to be ensured. The Ministry deems it necessary that all the projects or activities in respect of bulk drugs and intermediates manufactured or addressing ailments such as Novel Corona Virus (COVID-19) and those with similar symptoms are categorized as B2 for a period up to 30th September, 2020 and further up to 31.03.2021 as an interim measure.

Therefore, in the wake of recent crises of COVID-19, lockdown situation, notification of MoEF & CC regarding API and bulk drugs and subsequent OM issued on 11th March, 2020 and Notification on 27th March,2020, Committee took a decision to scope and appraised the project as B2 category for EC as per the guidelines issued by MoEF &CC from time to time by video conferencing.

The case was taken up in 209th meeting of SEAC Haryana held on 29.01.2021. The PP and their accredited consultant made a detailed presentation through video conferencing before the committee.

- The Proposed project is for EC for Proposed API Bulk Drugs Manufacturing Plant(74 TPM) at Village Mauli, Sub Tehsil Barwala, Tehsil & District Panchkula, Haryana by M/s Banstag Life sciences Private Limited.
- The Project is on concept basis as the State drug controller license is to be obtained and the PP has submitted the copy of letter dated 14.12.2020 addressed to SDC for issuing of Drug license.
- The PP submitted the two modules for carrying out the manufacturing of APi in the project area. Rosuvastatin Calcium, Citicoline Sodium, Amoxicillin tri hydrate, Ofloxacillin, Pantoprazole sodium, Letrozole, Moxifloxacin, Temozolomide will be prepared in the modules.

- The company has already acquired the land and land comes under Category "D" (Comprising of most industrially backward areas) and is marked for industrial use in Haryana as submitted by PP.
- The State boundary of Haryana and Punjab is 4.0 km WNW direction.
- No wild life Sanctuary falls within 10 km of the project site.
- The project falls under Barwala block, entire block is Non- notified and categorized as safe for ground water use (as per CGWA). There is no critically polluted area in 15 km radius of the project site.
- Dangri Nadi (1.0 km in NW direction) Baliali Nadi (2.0 km in SE Direction)Balrali Nadi (3.0 km in ENE direction) Dudgarh Nadi (4.5 km in NNW direction) Begna Nadi (9.5 km in ESE direction)
- The total fresh water requirement for the proposed project will be 20 KLPD which will be sourced from ground water. Quantity of waste water (domestic) generated will be 3 KLD. The domestic waste water will be disposed of in anaerobic septic tanks. The treated water will be pumped out and used in irrigation.
- The proposed plant is based on the concept of "Zero Effluent Discharge" hence no sewage or other effluent will be discharged outside the plant premises. Treated water from STP will be used for Greenbelt development within the plant premises. Treated water from ETP will be reused for utilities within plant. Plant will be based on ZLD concept.
- Hazardous chemicals are used in the manufacturing process. MSIHC rules shall be followed during storage, transportation and handling of raw materials. Hazardous chemicals and solvent shall be stored and handled in closed systems. MSDS for all chemicals and spill kit shall be provided for storage of hazardous chemicals/solvents. Necessary safeguards will be taken as per the standard procedures for the storage and handling of such raw
- ETP sludge will be stored in a secured manner and handed over to SPCB authorized TSDF. Sewage sludge will be used as manure/ given to authorized vendor. Ash from the boiler will be given to brick manufacturers.
- Storage, filling and transfer of material will be in closed pipelines so that there is Zero/ negligible fugitive emission.
- The operation of centrifuging/ filter will be done in closed system under nitrogen blanketing to avoid any fire and explosion hazard coming out in the local atmosphere. The vents of centrifuges / filters will be connected to scrubbers.
- Adequate system will be provided everywhere to capture the emissions from process plant & maintain the emission quality as per recommended guidelines with central scrubber having alkaline/ acidic solution, before venting it in to the atmosphere.
- The company will employ total manpower during the operational phase of the project will be 60 persons (54 persons Permanent & 6 persons Temporary). Environment Management Plan (Air Management)
- 3TPH boiler will have 30 m stack height along with Multi-cyclone type Mechanical dust collector with bag filters as Air Pollution Control Equipment.
- The operation of centrifuging/filters will be done in closed system to avoid any vapors coming out in the local atmosphere. The vents of centrifuges/filters will be connected to scrubbers.
- The company will establish safe shutdown procedure during emergency like APCD failure. DG sets will have adequate stack height (6 m above ground level) as per CPCB Guidelines.
- Greenbelt will be developed covering 40% of the total project area, around the plant boundary as dust preventive barrier.
- Online Stack Monitoring system will be installed. The overall quality of the ambient air will be monitored and maintained within the limit prescribed by CPCB/SPCB after the commencement of the operations of proposed project.

Fugitive emission control (To control fugitive emissions following measures will be adopted).

- Wet Scrubbing systems shall be installed to control the gaseous emissions generated during processes in the plant. Regular inspection of valves, inlet pies, outlet pipes to prevent any kind of gaseous leakage. Regular monitoring of chemical storage areas will be carried out to check for any kind of obnoxious emissions.
- Ambient air quality will be regularly monitored, so as to keep a check on the emissions of different pollutants. All transportation vehicles will carry a valid PUC (Pollution under Control) Certificate. Proper servicing & maintenance of vehicles will be carried out.

Solvent Recovery System:

- The company will install a solvent distillation unit for distilling and purifying spent solvents generated during various unit processes of API production. Solvents will be recovered by in-house distillation and recovered solvents will be reused & recycled in the process.
- After the completion of reaction, mother liquor from the reactor will be separated and then taken for distillation to recover the solvent for reuse. The mass will be distilled at required temperature, where pure solvents will be distilled out depending on the boiling points. Vacuum will also be applied as per requirement during distillation.
- The condensers having appropriate design and capacity will be installed for higher solvent recovery. Distillation column will be connected with the set of 3 number condensers having circulation of cooling water and chilled water and solvent recovered and collected in SS receivers. The average solvent recovery will be 99% for reuse in unit process and measures will be taken to ensure maximum recovery of solvent. Maintenance and cleaning of condensers will be done regularly to remove scaling and improve the efficiency.
- The entire manufacturing activities and distillation process will be carried out in totally closed system. Mechanical seals will be provided for all the reactors to control solvent losses. Heating during distillation will be carefully modulated and monitored to ensure low vapor load in condensers. Solvents will be stored in closed tanks and covered drums and will be kept in covered shed.

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:-

Name of	Name of the Project: Proposed API Bulk Drugs Manufacturing Plant (74 TPM) at Village Mauli, Sub					
Tehsil Ba	Tehsil Barwala, Tehsil & District Panchkula (Haryana) by M/s Banstag Lifesciences Private Limited					
S. No.		Particulars				
1.	Online Proposal Number	SIA/HR/IND2/173278/2020				
2.	Latitude	30°30'45.98" to 30°30'49.90" N				
3.	Longitude	76°58'23.45" to 76°58'29.51" E				
4.	Plot Area	3.0 Acres (1.21 Ha)=12140sq.m.				
5.	Net Plot Area	3.0 Acres (1.21 Ha)=12140sq.m.				
6.	Proposed Ground Coverage	2169.94 sq. m.				
7.	Proposed FAR	0.1787				

Table 1:

8.	Non-FAR Area		9970.06 sq. m.		
9.	Total Built Up area		2355.75 sq. m.		
10.	Total Green Area with	%	1.20 Acres (0.49 Ha)= 4855.85 sq.m. i.e. 40% of total project area		
11.	Rain Water Harvesting	Pits	Two		
12.	STP Capacity		6 KLPD		
13.	Total Parking		197.80 sq. m.		
14.	Maximum Height of th	e Building (m)	14.5		
15.	Power Requirement		410 KW		
16.	Power Backup		One DG Sets (350 KVA)		
17.	Total Water Requirem	ent	30 KLPD		
18.	Domestic Water Requi	rement	0.20 KLPD		
19.	Fresh Water Requirem	ient	20 KLPD		
20.	Treated Water		10 KLPD		
21.	Waste Water Generate	ed	13.3 KLPD		
22.	Solid Waste Generated	ł	0.07 TPD		
23.	Biodegradable Waste		0.02 TPD		
24 25.	Total Cost of the project:	i) Land Cost ii) Construction Cost	Land cost = 1.62 Cr Construction cost = 1.74Cr Plant & machinery = 4.77 Cr Total project cost = Rs. 8.13 Cr		
26.	EMP Budget	i) Capital Cost ii) Recurring Cost	Capital Cost: Rs. 1.018 Crores Recurring Cost: Rs. 30 Lakhs/annum		
27.	Incremental Load in	i. PM 2.5	0.085 μg/m3		
	respect of:	ii. PM 10	0.213 μg/m3		
		iii. SO ₂	0.146 μg/m3		
		iv. NO ₂	1.27 μg/m3		
28.	Construction Phase:	i. Power Back-up	Temporary connection		
		ii. Water Requirement & Source	5kl/day Tanker from outside agency		
		iii. STP (Modular)	UASB technology		
		iv. Anti-Smoke Gun	2 nos.		

Table No.2 Product Details:

S.No.	Product Name	Total					
		Quantity/Month					
1.	Rosuvastatin Calcium	1.0 TPM					
2	Citicoline Sodium	1.0 TPM					
3	Amoxicillin tri hydrate	50 TPM					
4	Ofloxacillin	15 TPM					
5	Pantoprazole sodium	5.0 TPM					
6	Letrozole	0.5 TPM					
7	Moxifloxacin	1.0 TPM					
8	Temozolomide	0.5 TPM					
	Total	74 TPM					

Table No.3 Raw Material Requirement

Sr. No.	Raw Material	Quantity /batch (kg)	Storage facility with capacity(kg)	
A)	Product – Rosuvastatin Calcium			
1.	N-(4-(4-Fluoro phenyl)-5(Hydroxy Methyl)-6-Isopropyl Pyrimidine 2-yl)- N- Methyl methane sulphonamide (Intermediate-I)	15	400	
2.	6-Acetoxy Methyl 2,2-di methyl-1-(1,3) dioxane=-4yl) acetic acid Tertiary Butyl Ester (Intermediate-II)	15	400	
3.	Hydrobromic acid (48%)	4	150	
4.	Tri phenyl Phosphine (TPP)	11	400	
5.	Potassium Carbonate	11	400	
6.	DMSO	100	2000	
7.	MTBE (Methyl Tertiary butyl Ether)	120	2000	
8.	Hydrochloric acid	20	200	
9.	Methanol	240	10000	
10.	Toluene	200	10000	
11.	2,2,6,6 Tetra methyl Piperidinyl oxy free Radical (TMPO)	0.4	20	
12.	Sodium Hypo chlorite	120	800	
13.	Potassium Bromide	4	100	
14.	MDC	240	5000	
15.	Sodium bi carbonate	20	400	
16.	Calcium Acetate	6	150	
B)	Product – Citicoline Sodium			
1.	Choline Chloride	27	400	
2.	Phosphoric acid (88%)	58	1000	
3.	Cytidine-5- Monophosphate	64	1000	
4.	Morpholine	18	300	
5.	N, N di-Cyclohexyl Carbodiimide	64	1000	
6.	Di-Isopropyl Amine	20	400	
7.	Calcium Hydroxide	29	300	
8.	Calcium Carbonate	40	300	
9.	Oxalic acid	18	300	
10.	Methanol	600	10000	
11.	IPA	600	10000	
12.	HCI	10	600	
13.	Caustic Flakes	25	500	
14.	Activated Carbon	5	200	
15.	Hyflow supercell	15	200	
C)	Product – Amoxicillin trihydrate			
1.	6 APA (6 Amino penicillanic acid)	108	5000	
2.	PHPG ME (Para hydroxyl phenyl	108	5000	
	Glycine methyl ester)			
3.	Ammonia Liquor	17.0	400	
4.	Enzyme (P G Amidase)	100	100	
D)	Product – Ofloxacin			

1.	DL Q acid (9,10 difluoro-2-3-dihydro-3-	140	5000
	methyl-7-oxo-7h-pyrido(1,2,3-de)1-		
	4benzoxazine-6-carboxylic acid)		
2.	N-methyl Piperazine	50	2000
3.	Methanol	700	10000
E)	Product – Pantoprazole Sodium		
, 1.	2 Mercapto-5-diflouro methoxy	108	1200
1.	Benzimidazole	100	
2.	2 Chloromethyl 3,4,	112	1200
	dimethoxypyridine. HCL		
3.	Caustic Flakes	60	500
4.	Methylene Di Chloride (MDC)	1330	4000
5.	Sodium Hypochlorite	37	300
6.	Acetone	200	1600
7.	Tetra Butyl Ammonium Bromide (TBAB)	4	50
G)	Product - Moxifloxacin		
1.	Propionic Anhydride	65	300
2.	Boric acid	30	200
3.	Ethyl-1 cyclo- Quinolone E3	115	400
5.	Carboxylate	115	400
4.	S,S, 2-8 diazo 4,3 nonane	63	150
 5.	N butanol	750	2000
6.	Methanol	500	10000
7.	HCI	10	10000
8.	Ammonia Liquor	10	100
9.	MDC	200	800
9. H)	Letrozole	200	800
 1.	1-bromo 4 benzo nitrile	14	150
2.		6.0	100
	1,2,4 triazole sodium	8.0	
3.	p-flour benzo nitrile		100
4.	DMF	100	600
5.	Potassium –t-Butoxide	12	100
6.	MDC	150	800
7.	Ethyl acetate	100	600
8.	Ethyl Alcohol	150	1000
9.	Di iso propyl ether	80	600
10.	Activated carbon	2.0	200
G)	Product - Temozolomide	27	200
1.	Cyano -acetic Acid Ethyl Ester	27	200
2.	PT/C 5%	1.0	100
3.	Hydrogen Gas	15	50
4.	Methanol	250	3000
5.	Ammonia Gas	4	50
6.	Acetic acid	12	100
7.	Sodium Nitrite	12	100
8.	DMSO	150	600
9.	Calcium Chloride	2.0	500

Solvent	Recovery Efficiency				
Methanol	99%				
DMSO	99%				
Toluene	99%				
Methylene di chloride(MDC)	98%				
Di-methy Formamide(DMF)	99%				
Ethyl acetate	99%				
Ethyl alcohol	99%				
N-BUTANOL	99%				

Table No. 4Solvent Recovery Efficiency

Table No. 5 Effluent load

Sr.	Product	Output per	Time cycle	No. of	Waste water	Capacity of
No.		batch	per batch	batches	generated/day	Effluent
				per month	(Liters)	Treatment
						Plant
1	Rosuvastatin	40.0 kgs	24 hours	25	80	20 KLPD
	Calcium					
2	Citicoline	100 kgs	72 hours	10	65	-
	sodium					
3	Amoxicillin	209 kgs	3 hours	240	9360	-
	trihydrate					
4	Ofloxacin	190 kgs	8 hours	80	-	-
5	Moxifloxacin	200 kgs	6 days	05	436	
6	Pantoprazole	200 kgs	28 hours	25	3216	
	Sodium					
7	Letrozole	20 kgs	28 hours	25	12	
8	Temozolomide	20 kgs	28 hours	25	40	
	Total effluent lo	oad of all the p	roducts		13,209 liters/day	

Table No. - 6

Hazardous Waste	Management
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S. No.	Hazardous Waste	Waste Category	Storage	Calorific value (Kcal/kg)	Total waste Generation	Mode of Disposal	Detailed Characteristic
1	Organic: ETP Sludge through MBBR	35.3	Closed packed in	1500 - 5000	0.020 TPD	Sent to TSDF	Organic and inorganic
2	Inorganic: ETP Sludge through RO- 1, RO-2 and followed by MEE/ATFD		leak proof double liner and stored in dedicated HW storage area		0.005 TPD		substance/ dry cake with 10-30% moisture content
3.	Residue of MEE and	28.1	Fiber Box/	5000-	0.010 TPD	Sent to	Organic solvents

S. No.	Hazardous Waste	Waste Category	Storage	Calorific value (Kcal/kg)	Total waste Generation	Mode of Disposal	Detailed Characteristic
	waste		HDPE/MS/GI/ Drums	7000		TSDF	and un reacted substances/ tarry or liquid incinerable
4.	Used or Spent Oil	5.1	HDPE / MS Drums	830- 2000	0.002 TPD	Sold to re- approved re-cycler	Flammable liquid, incinerable
5	Spent Catalyst	28.2	Closed Dry Container and away from strong oxidizer such as Ozone, liquid oxygen and chlorine	2000- 4000	0.01 TPD	Sent to supplier for re- activation of catalyst	Organic and inorganic substances with flammable or aqueous solvent base/ wet cake
6.	Spent Carbon	28.3	Closed packed in leak proof double liner	5000	0.005 TPD	Sent to TSDF	Flammable Organic material, Incinerable
7.	Spent Solvent	28.6	HDPE/GI Drums	5000- 7000	0.005 TPD	In-house SRP for re- use	Organic Solvents, un-dissolved substances/ liquid, Flammable
8.	Date expired Products / medicines	28.5	Closed Packed Liner/ Carton	4000- 5000	-	For incineration to TSDF	Organic and inorganic powder/ dry powder or wet cake, incinerable
9.	Off-Specification Products/medicines	28.4	Closed Packed Liner/ Carton	4000- 5000	-	Re- working/re- processing of the product	Organic and inorganic powder/ dry powder or wet cake, incinerable
10.	Empty barrels/ Containers/ liners contaminated with Hazardous chemicals/wastes	33.1	Stored at dedicated hazardous waste storage area	10-100	05 LINERS 20—Nos.	To be scrapped after washing	Solid/ reusable after decontamination/ incinerable Waste
11.	Contaminated cotton rags or other cleaning material	33.2	Closed packed in leak proof double liner and stored in dedicated HW storage area	100-200	0.001TPD	Sent To TSDF	Incinerable waste
12.	Oil and grease skimming	35.4	HDPE/GI Drums	500- 1500	0.002 TPD	Approved re-cycler	Flammable/ Incinerable sticky material
13	Spent carbon or filter medium	36.2	Closed packed in	5000	0.010TPD	Sent to TSDF	Flammable Organic material,

S. No.	Hazardous Waste	Waste Category	Storage	Calorific value (Kcal/kg)	Total waste Generation	Mode of Disposal	Detailed Characteristic
			leak proof double liner/HDPE Drum				Incinerable

Table 7:- List of Fugitive emissions and their mitigation

S.No.	Product Name	Fugitive emissions	Processes	Control System
1	Rosuvastatin Calcium	Hydrogen bromide –	Used in	APCB-Scrubber with
		Sodium Hypochlorite	reaction	dilute caustic circulation
2	Citicoline Sodium	No Fugitive		
		emissions		
3	Amoxicillin Tri hydrate	No fugitive		
		emissions		
4	Ofloxacin	Hydrofluoric Acid	Generated	APCB-Scrubber with
			from	dilute caustic circulation
			Reaction	
5	Pantoprazole Sodium	Sodium hypochlorite	Used in	APCB-Scrubber with
			reaction	dilute caustic circulation
6	Litrozole	Hydrofluoric Acid	Generated	APCB -Scrubber with
			from	dilute caustic circulation
			Reaction	
7	Moxifloxacin	Hydrofluoric Acid	Generated	APCB- Scrubber with
			from	dilute caustic circulation
			Reaction	
8	Temozolomide	No fugitive		
		emissions		

Table 8:-

Proposed boiler of 3 TPH capacity (IBR Steam Boiler)

Description	Unit	IBR-CF-3000-01
Design Pressure	Kg/Cm ²	10.54
Working Pressure	Kg/Cm ²	10.54
Fuel		Fire wood/bio briquettes
Stack Temp.	٥C	180-200
Chimney Dia.	MM	700
Feed Pump	H.P.	10x2 Nos.
ID Fan	H.P.	10
ID Fan	CFM	3000
No. of Furnace	Nos.	2

Table	: 9)	
Stack Emissi	on	De	tails

Stack attached	Fuel used	Height from	Internal Diameter	Emiss	ion Rate	(g/sec)	Exit Veloci	Exhaust	Gas		
to		ground level (m)	(Top) (m)	PM	SO ₂	No ₂	ty (m/ sec)	Temp (°C)	Density (kg/m³)	Specific heat for exit temperat ure	Volume tric Flow (Nm³/sec)

										(Kcal/kg °C)	
3 TPH boiler	Firewo od	30 m	0.7	0.10 1	0.069	1.14	8	180	0.275	0.29	2.02

Table 10: FMP

	- · · ·	1	MP		.
S.No.	Environmental Components	Capital Cost Activities	Capital Cost in Lakhs	Recurring cost activities	Recurring cost per annum in Lakhs
1	Air Noise quality management	MDS with bag filters	6.1	Power consumption of APCM, manpower costs,	7
		Scrubber system for emissions	4	maintenance of APCM systems. Acoustic enclosures and maintenance	0.5
2	Water quality management	Effluent treatment plant (ETP)	23	Treatment cost including cost of treatment chemicals,	15.5
		MEE & Tray type drying of sludge.	38.8	pumping costs, manpower costs, power consumption,	
		Sewage Treatment Plant and their accessories,	6.5	maintenance, replacements	
		Construction of storm water network	3		
3	Solid and hazardous waste management	Augmentation of storage areas for different types of wastes in compliance with the HW rules together with necessary infrastructure and equipment for collection and transport	4.4	Manpower costs, transportation	2
4	Environmental monitoring	Installation of Online monitoring systems, CEMS, Odor control measures, In house monitoring and analytical facilities, third party monitoring arrangements	6	EMS cell activities, environmental audits, compliance audits, statutory compliances, third party monitoring expenses, calibration and maintenance of online systems	2
5	Greenbelt development	Saplings & plantation services, Maintenance services (Watering, trimming, weeding), Fertilizers and	6	Maintenance of greenbelt, manpower chemical expenditure	2
6	Painwater baryosting	pesticides, Soil filling Construction of	4	Maintenance of RWH	1
U	Rainwater harvesting	rainwater harvesting structures	4	structures	1
	Total capital and recurri	ng cost per annum	101.8		30

The Discussion was held on exiting bore-well, license, water calculation, ZLD, Testing reports, parking plan, Traffic circulation Plan, Existing bore-wells, CGWA permission, Machinery, Boilers, Human resource, Category of project, pollution load, License issued by State Drug controller, air dispersion, VOC online monitoring of air and water, STP, ETP, EMP, Forest NOC, onsite emergency plan as per MHIC Rules, Occupation on healthy plan, Green Plan and certain observation were raised which were replied by PP vide letter dated 30.01.2021. The documents were placed before the committee and committee after discussion approved the reply.

The committee discussed at length solvents to be used, solvent recovery, their emission control, emission from the proposed unit, work zone monitoring arrangements, effluent treatment scheme with ZLD, order control action plan, authorization with various agencies, disposal of effluent in ETP, action plan for utilization of dryers of material safety data sheet for chemicals, details of incinerator risk assessment for storage of hazardous chemicals/solvent, health and safety action plan for workers. The discussion was also held that the area lies within 4.0 km of interstate boundary but in view of the wake of recent crises of COVID-19, lockdown situation, notification of MOEF & CC regarding API and bulk drugs and subsequent OM issued on 11th March, 2020 and Notification on 27th March, 2020, committee took a decision to scope and appraised the project as B2 category for EC as per the guidelines issued by MOEF &CC. The committee after discussion raised certain observation which were replied by PP vide letter dated 30.01.2021 along with onsite and off-site emergency plan, SOP for the product change over during manufacturing.

The PP submitted the undertaking

- That online monitoring of stacks shall be linked as per CPCB/HSPCB guidelines.
- Material safety sheet of all chemicals shall be followed.
- All statutory requirements shall be met before the start/ commissioning of the project.
- GMP guidelines shall be followed as per Schedule M of Drug and cosmetics act, 1945
- No national park or wild life sanctuary falls within 10 km of the project area.

The Documents were placed before the committee. The committee considered the reply and found it in order.

After detailed deliberations the Committee was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

- (i) The SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25th October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the SEIAA. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv) Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (v) Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

- (vi) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling.
 Safety and visual reality training shall be provided to employees.
- (viii) Total fresh water requirement shall not exceed 30 KLPD, proposed to be met from Groundwater.
- (ix) Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (x) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xi) Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xii) Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 40% out of the total project area.
- (xv) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

A. Specific Conditions:-

- 1. Effluent shall be treated in the ETP and should adhere to the HSPCB/CPCB Guidelines for outflow standards
- 2. 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.
- 3. Separate wet and dry bins must be provided at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted. 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 dumping site.

- 4. The PP shall prepare an Action Plan for solvent recovery and their emission control and details of solvent to be used.
- 5. The PP shall make arrangement to control the process emission from the proposed unit.
- 6. The PP shall monitor the ambient air quality of emissions from the project shall include BOC, other process specific pollutants like NH₃, Cl, HBr, H₂S, HF etc. (as applicable).
- 7. The PP shall prepare the work zone monitoring arrangements for hazardous chemicals.
- 8. The PP shall obtain drug license from SDC under Drug and Cosmetics Act, 1945.
- 9. The PP shall prepare the detailed effluent treatment scheme including segregation of effluent streams for unit adopting ZLD.
- 10. The PP shall prepare the action plan for odour control and utilization of MEE/Dryers Cells.
- 11. The PP shall submit the details of incinerator, if to be installed.
- 12. The PP shall prepare the Risk Assessment Action Plan for safety, storage and handling of hazardous chemicals.
- 13. The PP shall use material safety data sheets for all the chemicals being used or will be used.
- 14. The PP shall ensure health and safety of the workers engaged in handling of toxic materials.
- 15. No tree cutting has been proposed in the instant project. A minimum of 1 tree 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. As proposed 1.20 Acres (0.49 Ha)= 4855.85 sq.m. i.e. 40% of total project area shall be provided for green area development.
- 16. 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.
- 17. Consent to establish/operate for the project shall be obtained from the Haryana 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. The PP shall take CTE/CTO from HSPCB before start of the project.
- 18. 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.
- 19. 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
- 20. The PP shall switch over to gas boilers or other Green Alternative of fossil fuel (wood) boilers as and when gas or other Green alternatives available. The PP shall prefer stubble briquettes instead of wood as proposed and maintain the log book of use of fuel.
- 21. The PP shall provide 2 Rain water storage tanks for storage of rain water runoff by taking all precautions that the water from hazardous waste runoff shall not be mixed up with the runoff.
- 22. The PP shall get permission of 3TPH boiler from Haryana Boiler Inspection Department
- 23. The PP shall submit the details of total organic solvent used for the process in the unit
- 24. The PP shall take all precautions to the use of chemicals and their vapors to manage the fire accident.
- 25. 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:

- i. 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.
- ii. The project proponent shall obtain clearance from the National Board for wildlife, if applicable.
- iii. The Project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendation of the approved Site Specific Conservation Plan/Wildlife Management Plan shall be 200th Video Conferencies (VC) Mactine of SEAC Homese dated 20.01 2021 & 20.01 2021

implemented in consultation with the state Forest Department. The implementation report shall be furnished along with the six monthly compliance report (in case of the presence of schedule-1 species in the study area).

- iv. The project proponent shall obtain Consent to establish/operate under the provision of air (Prevention & Control pollution) Act, 1981 and the water (Prevention & control of pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as attended from time of time.
- vi. The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MJVA), 1989.

1. Air quality monitoring and preservation:

- i. The project proponent shall install 24*7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant of the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOX in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within Permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standard for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608 (E) dated 21st July, 2010 and amended form time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16th November,2009 shall be complied with

2. Water quality monitoring and preservation:

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD).
- ii. As already committed by the project proponent. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iv. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

- v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

3. Noise monitoring and prevention:

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant areas shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986, viz. 75dB(A) during day time and 70 dB(A) during night time.

4. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based
- ii. The PP will follow guidelines of ECBC required for industrial projects

5. Waste management

- i) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.Process organic residue and spent carbon, if any, shall be sent to cement industries, ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- ii) The company shall undertake waste minimization measures as below:
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in the other process.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapors recovery system.
 - f. Use of high pressure houses for equipment clearing to reduce wastewater generation.

6. Green Belt:

i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

7. Safety, Public hearing and Human health issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

- iii. 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 structure to be removed after the completion of the project.
- iv. Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act.

i) Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions of CER, as if applicable.
- ii. The company shall have a well laid down environmental policy duly approve 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 and /or shareholders/stake stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the 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 the competent authority. The Year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted and 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.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Pharma Industry shall be implemented.

ii) Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- 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 monitor the criteria pollutants level namely:PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. 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.
- vi. 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.

- vii. 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.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State government.
- ix. The project proponent shall abide by the all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. 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.
- xii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulate conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Presentation & Control of Pollution), Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986. Hazardous and Other Wastes (Management & Transboundry Movement)Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other order passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 209.17 EC for Proposed Affordable Group Housing Colony on 6.46875 acres land at Sector 99A, Gurugram by M/s Prime Infra developers Pvt. Ltd.

Project Proponent	: Sh. Mahender Sharma
Consultant	: Ind Tech House Consultancy Pvt. Ltd

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/188252/2020 on dated 22.12.2020 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 209th meeting of SEAC Haryana held on 29.01.2021. The PP

presented the case before the committee.

- The Proposed project is for EC for Proposed Affordable Group Housing Colony on 6.46875 acres land at Sector 99A, Gurugram by M/s Prime Infra developers Pvt. Ltd.
- The Zoning plan has been approved for an area measuring 6.46875acres vide letter no. 7604 dated 26.11.2020 from Town and Country Planning Department.
- The Project is **on concept basis** as the CLU and building plan are not approved by Competent Authority.
- LOI has been granted to the project vide letter no. 16251 dated 15.09.2020.
- Sultanpur Bird Sanctuary falls within 5.42km from the project site
- The project falls under GMUC Master Plan.

Table 1:

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:-

	me Infradevelopers			N 1			
Sr. No. 1.	Online Proposal N	umbor		Particulars	SIA/HR/MIS/188252/2020		
1. 2.	Latitude	uniber			28°27′34.68″ N,		
3.	Longitude				76°57′18.66″ E		
4.	Gross Plot Area				26178.061 sqm		
5.	Net Plot Area				19776.282 sqm		
6.	Proposed Ground	Coverage			6500 sqm		
7.	Proposed FAR			54080 sqm			
8.	Non FAR Area				6955 sqm		
9.	Total Built Up area	1			61036 sqm		
10.	Total Green Area v	with %			4969.06 sqm (25.1%)		
11.	Rain Water Harves	sting Pits			06 Nos.		
12.	STP Capacity				390 KLD		
13.	Total Parking (Two	wheeler)			854 NOS		
14.	Organic Waste Cor	nverter			01 No.		
15.	Maximum Height o	of the Building	(m)		44.95 M.		
16.	Power Requiremen	nt			2786 KVA		
17.	Power Backup				580 KVA		
18.	Total Water Requi	rement			396 KLD		
19.	Domestic Water R	equirement			389 KLD		
20.	Fresh Water Requi	irement			290 KLD		
21.	Treated Water				106 KLD		
22.	Waste Water Gene	erated			322 KLD		
23.	Solid Waste Gener	ated			2.30 TPD		
24.	Biodegradable Wa	ste			1.35 TPD		
25.	Number of DUs				844 Nos.		
26.	Community Center	r			1		
27.	Stories				G+14		
28.	Total Cost of the p	roject:		d Cost nstruction Cost	160 Cr.		
29.	EMP Budget				Capital- 172Lacs		
30.	Incremental Load i	in respect of:		i) PM 2.5	Recurring- 52.5Lacs 0.185 ug/m ³		
				ii) PM 10	0.317 ug/m ³		
				1.16 ug/m ³			
				5.10 ug/m ³			
				1.85 ug/m ³			
31.	Construction	i)	Power Ba	ck-up	01 125 kva		
	Phase:	,	Water Source	Requirement &	Authorized treated water tanker supply		
			STP (Mod	ular)	1		
	iv) Anti-Smo			ke Gun	As per NGT order 01 Anti-smog Gun will b provided at site		

TABLE 2: EMP BUDGET

ENVIRONMENT BUDGET (Operation Stage)					
COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum			
SEWAGE TREATMENT PLANT (390KLD)	39	12			
RAIN WATER HARVESTING SYSTEM (6 Nos)	27	3			
SOLID WASTE COMPOSTER (Organic Waste Converter 1.35 TPD)	20	7			
HORTICULTURE DEVELOPMENT	10	2.2			
ROOF TOP SPV PLANT (40 KWp)	24	1			
ENVIRONMENT MONITORING		3.0			
TOTAL	120	28			
TOTAL BUDGET FOR 1 YEAR (TRANSFER TO RWA & DEFECT LIABILITY PERIOD)		148			

ENVIRONMENT BUDGET (Construction Stage)						
COMPONENT	CAPITAL COST (Rs in Lacs)	RECURRING COST (Rs in Lacs)/Annum				
BARRICADING OF CONSTRUCTION SITE	20	2				
ANTI - SMOG GUN with complete assembly	7.5	3.5				
DISPLAY OF DUST MITIGATION MEASURES	2	0.5				
SITE SANITATION - (Mobile Toilets etc)	3	2				
MOBILE STP	4	1.5				
DISINFECTION/ PEST CONTROL		2				
LABOUR HEALTH CHECK UP & FIRST AID FACILITY	3	2				
LABOR WELFARE (canteen creche road - water power, shelter)	5	3				
WHEEL WASHING	3	2				
WASTE STORAGE BINS - LABOUR CAMP/SITE OFFICES	2	1				
TRAFFIC MANAGEMENT SIGNAGES	2	1				
SAFETY TRAINING TO WORKERS		2				
ENVIRONMENT MONITORING		3				
TOTAL	52	24.5				
TOTAL AMOUNT FOR 5 YRS CONSTN PERIOD		174.15				

The discussion was held on wildlife affidavit, revised EMP, IGBC Certificate, air dispersion modeling, Rain water storage tanks, water assurance, STP details, Power assurance, zoning plan, license of DTCP, Aravali NOC, Forest NOC, landscape plan and dual plumbing plan etc. and certain observations were raised which were replied by the PP vide letter dated 29.01.2021. The documents were placed before the committee and committee after discussion approved the reply. The PP submitted that Rs 5 Lakhs will be spent on various wildlife conservation activities like plantation and awareness program for peacock conservation through Environment Management Plan

After detailed 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 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific Conditions:-

- 1) 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
- 2) 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.
- 3) 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 & 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.
- 4) The PP shall comply the Wildlife conservation Management plan and spent Rs 5Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds, construction of feeding platforms through Environment Management Plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Warden.
- 5) 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.
- 6) The PP shall comply the Wildlife Activity plan and spent Rs 5 Lakhs on various wildlife conservation activities like plantation and awareness program for peacock conservation through Environment Management Plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Wardan
- 7) 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.
- 8) 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.
- 9) 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 05kms radius of the site in different scenarios of space and time

- 10) 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 4969.06sqm (25.1%) shall be provided for Green Area development for whole project.
- 11) 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.
- 12) 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.
- 13) 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.
- 14) The PP shall obtain the Fire NOC from the Competent Authority before taking the occupation of the building.
- 15) 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.
- 16) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 17) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 18) 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.
- 19) The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
- 20) 6 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.
- 21) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 6 RWH pits.
- 22) 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.
- 23) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 24) The PP shall provide the mechanical ladder for use in case of emergency.
- 25) Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
- 26) The PP shall take the permission of DFO for re-plantation/cutting, before the start of the project.

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 Rules2001 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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

- 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 contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility for existing part and shall comply with as applicable, regarding Corporate Environment Responsibility for existing part.
- 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 MoEFCC/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-abinitio 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 Ministry/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.

209.18 EC for Mining of Minor Mineral (Sand) at village Naggal, Alipur & Jalouli, Tehsil & District Panchkula, Haryana production capacity of 13,00,000 TPA, over an area of 31.08 hectare by M/s R M Secure Services Pvt. Ltd

Project Proponent	: Mr. Rohit Phore
Consultant	: Vardan EnviroNet

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIN/59774/2019 on dated 12.01.2021 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 1(a)of EIA Notification 14.09.2006. The ToR was granted by SEIAA vide letter dated 20.12.2019.

The case was taken up in 209th meeting of SEAC Haryana held on dated 29.01.2021. The PP presented the case before the committee.

- The proposed project is for EC for Mining of Minor Mineral (Sand) at village Naggal, Alipur & Jalouli, Tehsil & District Panchkula, Haryana production capacity of 13,00,000 TPA, over an area of 31.08 hectare by M/s R M Secure Services Pvt.Ltd
- This is a fresh Mining Lease area auctioned by Govt. of Haryana and LoI was issued vide letter no. DMG/HY/Cont/Naggal Block/PKL B15/2019/1098 dated 13.03.2019 attached as Annexure II, no production is started yet.
- Mining Plan and Progressive Mine Closure Plan has been approved by Director General of Mines and Geology Department Haryana vide letter no DMG/HY/MP/Naggal Block/PKL B15/2019/5525 dated 24.11.2020
- All corners of the coordinates of ML area are superimposed on Toposheet of survey of India Toposheet (OSM) No. H43K14, H43K15, H43L2 & H43L3. Coordinates of the mine lease area given.
- Baseline data of study area within 10 Km radius of the project site was collected from March to May 2019 as per ToR letter approved from SEIAA
- There is no involvement of forest land in the project area and the same has been confirmed by the DFO vide letter No. 1093 on dated 08.06.2020.
- Khol Hi Raitan Wild Life Sanctuary -8.0 km in North Direction and except than that there is no National Parks, Biosphere Reserves, Wildlife Corridors, Tiger/ Elephant Reserves existing within 10 km of the mine lease.
- EB Study has been carried out in and around the lease area to study the wild life of the area. 5 species of Schedule I were recorded. The conservation plan has been prepared along with budgetary provision of Rs. 20.00 Lakhs to conserve wildlife and the same has been submitted to PCCF Panchkula on 28.10.2020.
- The water table in the area is 8-10 mbgl (316-314 mRL). The mining area varies from 314.2 mRL to 324.2 m.
- Ultimate Working Depth : 321.2-311.2 mRL (3m from the surface (324.2-314.2mRL)) Ground water Table: 8-10 bgl (316-314 mRL)
- The specific gravity of the sand is 2 and the same has been approved by the DMG Haryana which is mentioned at page no 24 of Approved mining plan
- A requested letter for the site visit of A Sub-Divisional Committee comprising of Sub Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Boards or Committee, Forest Department, Geology or mining officer, revenue department shall visit the site and make recommendation on suitability of site for mining or prohibition thereof, has been submitted to mining department on dated 18.12.2020. The PP submitted that report of visit will be provided after the visit.
- Project Proponent has been carried out the pre monsoon and post monsoon replenishment study to ascertain the quantity of material replenished and the report is placed in record. Mining plan has been prepared on the basis of replenishment report and the same has been approved by the DMG/HY/MP/Naggal Block/PKL B-15/2019/5525 dated 24.11.2020.

- PP submitted an affidavit as required as per Ministry's O.M No. 3- 50/2017-IA.IM) dated 30.05.2018 to comply with all statutory and judgment of Hon'ble Supreme Court dated 2nd August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Ors.
- Total 58 persons will be required as technical and other supervisory staff in the project.
- The main fuel used in the mining operations is diesel. The total requirement of Diesel is 5680 LPD, out of which 5200 LPD is being used in Dumpers, 200 LPD is used in JCB, 100 liters is used in water tankers and 180 liters is required for other Light vehicles and maintenance purposes.
- This is a new mining area allotted to the applicant. Mining Contract has been allotted for a period of 10 years only. Mining area consist of 31.08 Ha. area in out of which about 8.27 ha. Area is under restricted zone. About 22.81 Ha. Area is free from restriction and the mining is proposed in this area only. Proposed Production = 13, 00,000 MT per Annum Working days (Excluding 52 Sundays and 45 Rainy days) have been taken as 268 days per Annum. Daily Production = 4850 MT/Day
- There are sufficient reserves to continue the mining project for Ten (10) years, as mineral get replenished every year during monsoon, since according to LOI the period awarded for mining of sand is 10 years at the proposed rate of production 13,00,000 MTPA.

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:-

Harya	na Production Capacity of 13, 00,000 TP	A, over an area of 31.08 hectares by M/s R M Secure Services Pvt. Ltd		
1.	Category/Item no. (in schedule):	Category-B1, Sector-I (a)		
2.	Area of the project	Area- 31.08 ha		
3.	Date of LoI granted by Mines &	13.03.2019		
	Geology Department, Haryana			
4.	Date of approval of Mining plan	24.11.2020		
	granted by Mines & Geology			
	Department, Haryana			
5.	Location of Project	Village Naggal, Alipur & Jalouli, Tehsil & District Panchkula, Haryana		
6.	Project Details Khasra No.	Village: Alipur		
		33//14min,17min,18min,23min,24min,37//3min,4min,7min,8min,13min,1		
		4,17,18min,23,24,25min,39//4,5min,6		
		Village: Naggal		
		13//22min,26//2min,3,4,6,7,8,9min,12,13,14,15,16min,17,18,19,22,23,24,		
		25min,29//2,3,4,min,5min,7min,8,9,11min,12,13min,18min,19,20min,21,2		
		2,23min,30//16min,25min,38//5min,6min,7min,14min,15,16min,17, 18		
		min,		
		22min,23,24min,39//1,2min,10min,11min,42//2min,3,8,9,min,12min,13,1		
		8,23min,46//3min,4min,7min,8min,13min,14		
		Village: Jalouli		
		20//13min,17min,18min,23min,24min,29//6min,7min,8min,13min,14min,		
		17min,18min,23/2min,24min,30//2min,3min,4min,8min,9min,10min,33//		
		10min,11min,12min,19min,22min,34//4min,5min,6min		
7.	Project Cost	Rs. 5 Crore / annum		
8.	Water Requirement	79.00 KLD.		
9.	Source of water	through hired Tankers.		
10.	Environment Management Plan	Rs102.5 lakh for 5 years		

Table 1:

Name of the Project: Mining of Minor Mineral (Sand) at Village Naggal, Alipur & Jalouli, Tehsil & District Panchkula,

1	Budget			
.1.	CER Budget		be a part of EMP	
.2.	Production Corner Coordinates of the lease area	13,00,000 TPA Point	Latitude	Longitude
.5.	Corrier Coordinates of the lease area			_
		1	30º 35' 46.0" N	76º 57' 23.5" E
		2	30º 35' 49.0" N	76º 57' 28.3" E
		3	30º 35' 42.0" N	76º 57' 28.2" E
		4	30º 35' 40.0" N	76º 57' 28.5" E
		5	30º 35' 36.0" N	76º 57' 28.5" E
		6	30º 35' 34.0" N	76º 57' 29.8" E
		7	30º 35' 31.0" N	76º 57' 30.0" E
		8	30º 35' 29.0" N	76º 57' 30.5" E
		9	30º 35' 27.0" N	76º 57' 28.5" E
		10	30º 35' 21.0" N	76º 57' 25.0" E
		11	30º 35' 15.0" N	76º 57' 22.5" E
		12	30º 35' 05.0" N	76º 57' 12.5" E
		13	30º 34' 55.0" N	76º 57' 12.5" E
		14	30º 34' 51.0" N	76º 57' 14.9" E
		15	30º 34' 46.0" N	76º 57' 13.7" E
		16	30º 34' 44.0" N	76º 57' 12.7" E
		17	30º 34' 42.5" N	76º 57' 10.0" E
		18	30º 34' 42.0" N	76º 57' 01.0" E
		19	30º 34' 40.0" N	76º 57' 01.0" E
		20	30º 34' 32.5" N	76º 57' 07.0" E
		21	30º 34' 30.3" N	76º 57' 07.0" E
		22	30º 34' 35.8" N	76º 57' 00.0" E
		23	30º 34' 39.8" N	76º 56' 58.6" E
		24	30º 34' 41.8" N	76º 56' 58.5" E
		25	30º 34' 43.8" N	76º 56' 59.5" E
		26	30º 34' 43.8" N	76º 57' 07.0" E
		27	30º 34' 45.5" N	76º 57' 10.5" E
		28	30º 34' 48.0" N	76º 57' 10.7" E
		29	30º 34' 53.0" N	76º 57' 10.8" E
			JU- J4 JJ.U IN	70-37 10.0 E

							_
			30	30º 34' 58.6" N	76º 5	7' 08.7" E	
			31	30º 35' 03.0" N	76º 5	7' 08.7" E	
			32	30º 35' 06.0" N	76º 5	7' 09.5" E	
			33	30º 35' 14.0" N	76º 5	7' 16.1" E	-
			34	30º 35' 15.5" N	76º 5	7' 16.1" E	-
			35	30º 35' 21.0" N	76º 5	7' 20.0" E	-
		36 30º 35' 30.5" N 76º 57' 20.0		7' 20.0" E			
			37	30º 35' 36.0" N	76º 5	7' 23.5" E	
			38	30º 35' 38.5" N	76º 5	7' 24.5" E	
14.	Green belt/ plantation	 33% of the total project area will be cover by plantation, which is 10.25 Ha (33%).Neem, Peepal, Ber, Shisham, Sirish and other native species will be planted as per DFO Panchkula. 					
15.	Machinery required	Following equipments are proposed:					
		S. No.	. Na	ame of machinery	Capacity	Nos	5.
		1		Excavator	1.30-2.0 m	1 ³ 04	
		2		Tippers/ Trucks	25 tons	40	
		3		Water Tanker	4000 liters	s 2	
		4		Light vehicles		2	
		Source	: Mining P	lan and Progressive	Mine Closure Plan		
16.	Power Requirement		_	ion will be taken			from
		Haryan	a Electrici	ty Board.			
17.	Power Back up	DG Set					
18.	Incremental Load in respect of:						
	i) PM _{2.5}	Paran	neter	Max Baseline	Predicted GLC	Cumulative	
	ii) PM 10			Conc. (µg/m³)	(µg/m³) –	GLC (µg/m ³)	
	iii) SO ₂				ISCST3		
	iv) NO ₂				Model		
	v) CO	PM _{2.5}		85.1	0.26	85.3	
		PM ₁₀		44.7	0.03	44.73	
		SO ₂		30.5	0.1	30.6	
		NO ₂		21.6	0.11	21.7	
		СО		1.05	0.0000077	1.050008	3

Table 2: Details of Site Elevation

Lowest (mRL)	Elevation	Highest Elevation (mRL)	Working Depth (in meters)	Ground Water Table
314.2		324.2	River Bed: 3 m bgl	River Bed: 8-10 m bgl

Sr.No.	Nature of land	Lease area in ha	Total proved Geological reserves MT = Area x depth x BD (A)	Blocked area of 50m strip after each km, 25% blocked in river banks, lease boundary etc = hectares	Blocked Geological Reserves in blocked area (B)	Total Mineable reserves A-B=C	Minable Reserve (per Year)
1	River bed	31.08	18,64,800	8.27	4,96,200 MT	13,68,600 MT	13,00,000 MT

Table 3: Geological Reserves

Table 4: Five Years Proposed Production Details (Tons/annum)

Production From River bed					
Year	Trips/day	МТРА			
I	194	13,00,000			
II	194	13,00,000			
III	194	13,00,000			
IV	194	13,00,000			
V	194	13,00,000			

Table 5: List of Machineries

S. No.	Name of Machinery	Capacity	Nos.
1	Excavator	1.30-2.0 m ³	04

Table 6: Man Power Detail

S.No.	Category	Numbers
1	Manager (I/II Class/Permit Manager)	1
2	Foreman/ Mates	2
3	Skilled personnel	10
4	Semi-skilled personnel	40
5	Unskilled	05
	Total	58

Table 7 : Detail of Mining

S.No.	Particulars	Details
1	Method of Mining	Open Cast Semi-mechanized
2	Geological Reserves	18,64,800 MTPA
3	Mineable Reserves	13,68,600 MTPA
4	Proposed Production	13,00,000 MTPA
5	Elevation Range of the Mine Site	From 324.2 m to 314.2m RL
6 Bench Height 3 m i		3 m in Riverbed
7	Bench Width (Average)	Width of the bench around 20m

Table 8: Land use Pattern at Various stages

S.No.	Particulars	Present land use (ha.)	At the end of 5 th Year (ha.)
1	Pit Area	0.00	0.00
2	Dump area	0.00	0.00

3	Safety	Roads, 7.5m lease boundary, 25%	0.00	8.27
	Zone	restricted area of river banks, 50m barrier		
		at each km etc		
4	Infrastructur	e (Office, Temp. shelter etc) in restricted	0.00	0.20*
	zone			
5	Mineral Stor	age	0.00	0.00
6	Plantation (i	n safety zone)	0.00	10.25*
7	Un-worked		31.08	0.00
8	Naturally reclaimed area		-	22.81
		Total	31.08	31.08

Table 9: EMP

Sr. No.	Particulars for EMP	Capital Cost (in Lakh)	Recurring cost/YEAR In lakhs	Total cost in Lakhs for 5 years
1.	Dust Suppression	1	2	11
2.	Environmental Monitoring – Air, Water, Noise and Soil	10	2	20
3.	Haul road and other roads construction and Maintenance	3	3	18
4.	Waste water treatment and solid waste treatment	3	1	8
5	Plantation	3	2.5	15.5
6.	Pre-monsoon and post monsoon survey for replenishment in the river bed	0	5	25
7.	Rainwater recharging (outside the project site)	5	0	5
Tota	İ	25.00	15.5	102.5

Table: 10 Socio Economic part of EMP

S. No.	Activity proposed for CER	Budget Allocated (in Lakh)	
1.	 Repair & maintenance of toilets (separate 2 nos. toilets for boys & girls) at Primary School in Village Naggal etc. @ Rs. 50,000 x 4 = Rs. 2,00,000 		
2.	 Installation of (10-10 No.s) of street solar light at each village Naggal, Alipur & Jalouli in consultation with Village Panchayat @ Rs. 10,000 x 30= Rs. 3,00,000 		
3.	Pond adaptation at village Sultanpur (Pond Id 01HRPKLRPR0203SULT001 area 0.50 acers)	3	
4	4 Distribution of laptops to the poor children's @ 25000x8		
	Total	10	

The Committee discussed that the mining area proposed by the PP was 31.08 hectare. The total Geological reserve is 18,64,800 MT and total mineral able reserve is 13,68,600 MT. The Proposed production capacity is 13,00,000 MTPA. The Committee was of the view that PP shall use only Excavators for mining to ensure that the mining depth be maintained as 3.0 meters. No other heavy machinery like JCB Machine etc. shall be used for excavation/ digging which may adversely impacts the aquatic biota. The Committee deliberated that mining be allowed and PP shall get the scientific replenishment study conducted through digital mapping in respect of depth, tonnage on the basis of full year aforesaid and shall be submitted. The PP shall have to ensure that during the course of mining, leveled cross section is made (to the extent possible) so that replenishment studies in future are carried out with ease and transparency and depth of deposited material is measured. The DMG, Haryana shall ensure that leveled cross-section is made by the PP before the onset of next rainfall season and the same be communicated to SEIAA.

The Committee also observed that Hon'ble NGT recently in it order dated 04.09.2018 inter-alia directed that "One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit at least one in a year by reputed third party entity and report of such audit be placed in public domain. In the course of such environmental audit "a three member committee of local inhabitants will also be associated. Composition of three members committee may be preferably Ex-servicemen, Former Teacher, Former Civil Servant. The Committee will be nominated by the District Magistrate". Thus, in the instant case also DM Pachkula should nominate the committee to be associated with third party audit team for the environmental audit of the mining lease. The Committee is of the view that as the Environmental audit to be conducted annually and the report of the same needs to be placed in public domain. Thus, it is necessary that the excavation from the mining lease should be monitored closely and precisely. For the monitoring of the excavation it is necessary that the mine needs to be surveyed quarterly and the excavation quantities needs to be reconcile with amount dispatched. The Survey on regular interval not only provides the quantity excavated but also form the basis of future replenishment study.

Discussion was also held on the letter written by villagers to the DC, Panchukula, which was marked to RO, HSPCB for necessary action and the PP submitted the reply of the Mining officer, District Panchkula regarding clarification of objection of queries raised by villagers about the ownership of land allotted for mining and reply placed on record. The Mining officer informed vide letter no. 217 dated 27.01.2021 that:

- The auction notice of Naggal Block PKL-B15 village Alipur, Naggal & Jalouli was published in various newspapers. No separate information is required to be give to the villagers personally or any one.
- That the khasra no. notified may belong to villagers /surface right holders & the same shall not be changed, as only mineral right has been given to you & you are liable to pay rent and compensation to the land owner as per Haryana Mining Rules-2012.
- That as you have offered highest bid in E-auction and LOI was being issued to you. Here after complete all the formalities, you can undertook mining operation for mining of mineral in accordance with Approved Mining Plan, terms and conditions of Environmental Clearance and State Mining Rules 2012.

- That you has been allotted Mines for said Khasra no for the purpose of mining of sand by the State Govt. and you can under took for mining operation.
- No consent of land owners is required for auction of mining contract as the mineral rights vest with State Govt.

The letter of Mining department was considered by the committee. Further, the PP agreed that the points raised in the Public hearing shall be implemented in true spirit.

The PP will deposit 29.55 lakhs to the Mines and Mineral Development restoration and rehabilitation Fund. The amount will be spent by the Mining Department for environmental and mineral production in the surrounding mining area of core and buffer zone.

Further discussion was held on water requirement, Green Area plan, Mining plan, closure plan, replenishment study, Machinery required, Total Geological reserves, Mining reserves etc. and observation was raised about the fresh mining lease, replenishment study etc. The PP submitted the reply dated 30.01.2021. The documents were placed before the committee and committee after discussion approved the reply. The PP submitted the details of mining lease area, Undertaking regarding the amount of compensation, on which sand will be provided to the local villagers, Mine safety plan, Prior CGWA permission will be taken in case of extraction of ground water, Wildlife Conservation plan submitted to PCCF Panchkula dated 13.01.2021, traffic circulation plan and submitted that PP has done the replenishment study as per the "Sustainable Sand Mining Management Guideline-2016" (SSMG-2016), and these two guidelines viz. "Enforcement & Monitoring Guidelines for Sand Mining"(EMGSM-2020).

During the discussion the point was raised regarding the replenishment study carried by consultant, which shows mostly 1 meter to 2.5 meter and its approval by the mining department. The PP and consultant appeared and informed the committee that they have the required document in the mining plan and will submit the same. The consultant also informed the committee that the replenishment study shows variation up to 3.5 meter (record placed in the replenishment study) and Mining department has approved mining plan of 3 meter after consideration of Replenishment study. The point was also raised regarding the status of mine as a fresh mine. Thereafter PP submitted the letter no. 498 dated 04.02.2021 issued by Mining Department and the contents are as:

M/s R M Secure Services Pvt. Ltd. participated in the e-auction held on 14/15.02.2019 after accepting terms & conditions and offered the highest bid of Rs.2,95,50,000/- (Rupees Two Crore Ninety Five Lakh Fifty Thousand Only) per annum, against the reserve price of Rs.2,95,50,5000/-, for obtaining the Mining Contract of Mineral Mine namely 'Naggal Block/ PKL B-15' for extraction of sand having tentative area of 31.08 hectares. The State Government accepted the highest bid and LoI was issued on 13.03.2019 in their favour. The contract agreement was executed with the State on 28.08.2020. The draft Mining Plan and Progressive Mine Closure Plan were approved on 24.11.2020.

Further, vide letter dated 01.02.2021, PP have requested that in 209th meeting of SEAC, Haryana held on dated 29.01.2021, the SEAC members has asked for the clarification on following points i.e. as:

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- The Replenishment report approved along with Mining Plan and progressive Closure Plan DMG/HY/MP/Naggal Block/PKL B-15/2019/5525 dated 24.11.2020 by the mining department and the data mentioned in replenishment report is correct and compatible with approved mine plan.
- The depth on mining i.e. 3 m in case in river bed mining project is technically correct and as per approved mining Plan and replenishment study report.
- Please provide the detail of mine lease granted since 1994 on the same mine lease area.

The comments of the mining department on above 03 points are as under respectively:

- I. That Sh. S. N. Sharma, registered Qualified Person (RQP) on behalf of M/s R M Secure Services Pvt. Ltd., the contractor of Naggal Block/PKL B-15' district Panchkula submitted a Mining Plan and Progressive Mine Closure Plan (Sand, Minor, Mineral) and the same was got approved by this office on 24.11.2020. The details of Replenishment study conducted by the RQP is the part of the approved Mining Plan as mentioned in para 3.2.6. of the 'Mining Plan and Progressive Closure Plan'.
- II. That as per Rule, 57(iii) of the Haryana Minor Mineral Concession, Stocking and Transportation of Minerals, and Prevention of Illegal Mining Rules, 2012, "the maximum depth of mining in the river-bed shall not exceed three meters measured from the un-mined bed level at any point of time with proper bench formation". The depth on mining i.e. 3 meters in river bed has been approved which is incorporated in para 3.3.1. (b)(iii) of the "Mining Plan and Progressive Closure Plan".
- III. That as regard to the information with regard to point No. 3, the area granted to M/s R M Secure Services Pvt. Ltd. is part of three villages i.e. Alipur, Naggal and Jalouli district Panchkula has remained under mineral concession prior to present grant, which is detailed as under:-

Sr. No.	Name of Quarry	Name of Contractor	Date of Auction	Highest Bid	Period
NO.			Auction		
1.	Jalouli	Particular name of the contractor not found	31.03.1997	1,25,000	April, 1998 to 31.03.2000
2.	Naggal	Particular name of the contractor not found	31.03.1997	8,81,600	08.04.1997 to 31.03.2001
3.	Alipur	Particular name of the contractor not found	30.06.1998	3,02,000	02.08.1998 to 31.03.2001
4.	Jalouli	M/s Barwala Royalty	27.03.2000	7,62,000	10.04.2000 to 31.03.2003
5.	Sukhdarshan-pur Khatauli & Alipur	M/s Yamuna Royalty	03.04.2001	26,50,000	21.05.2001 to 31.03.2004
6.	Sultanpur, Naggal, Jalouli, Sukhdarshanpur Khatauli & Alipur	M/s Maa Durga & Co.	31.03.2008	2,01,00,000	27.05.2005 to 31.03.2008

The PP submitted the undertaking mentioning:

- That the sand mineral will be provided to the local villagers on 10% concessional rate for domestic use only.
- No ground water will be used during the mining operations and prior CGWA permission will be taken in case of utilization of ground water.
- Mining will be done by semi mechanized method as per the approved Mining Plan.

After detailed deliberations on the above said issues the Committee was of the unanimous view that this case be recommended for granting Environmental Clearance under EIA Notification under category B1, 1(a) dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A: Specific Conditions:-

- 1. The PP shall construct the pucca link roads connected to the main road at the mining site before the start of mining.
- 2. The PP shall construct the Haul roads of width 10 meters.
- 3. The PP shall submit the approved wildlife Conservation Plan from the Competent Authority before the start of the project. The PP agrees that Rs.20 lakhs shall be spent on Biodiversity Conservation of species towards wildlife conservation plan. The Budget of Wildlife activity plan on various specified activities shall be spent in consultation with Chief Wildlife Warden.
- 4. The PP shall comply with all the undertakings submitted to the SEAC/DGM.
- 5. 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 & 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
- 6. The PP shall provide only one exit and one entry to the Mining Project area and all the mining shall be dispatched through E-billing-.
- 7. The PP shall maintain an un-mined block of 50 meters width after every block of 1000 meters over which mining is undertaken or at such distance as may be directed by the Director or any officer authorized by him.
- 8. The PP shall restrict mining within the central 3/4th width of the river/rivulet.
- 9. The PP shall not permit any mining in an area up to width of 500 meters from the active edges of embankments in case of River Yamuna, 250 mtrs. in case of Tangri, Markanda and Ghaggar and 100 mtrs. on either side of all other rivers/rivulets.
- 10. The PP agrees and submitted the undertaking that no Boulder, gravel shall be mined in the mining lease area.
- 11. The PP shall develop 10.25 Ha (33%) for Green Area development in the project area.
- 12. 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 dumping site.
- 13. The PP shall maintain the garland drains in the project area and catchment area for preserving overburden and dump mining.
- 14. 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.
- 15. The PP shall not carry out the mining below 3 meter depth in the project area as the replenishment study is not carried out.
- 16. The PP shall submit the scientific replenishment study for the project site in the river bed every year after the start of the mining at the project site.
- 17. The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of work.
- 18. 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.

- 19. The PP shall take precautions to suppress the dust in and around the mining site. The PP shall use mixed cannon water sprinkle for dust suppression instead of conventional sprinkles for efficient dust suppression.
- 20. The PP shall also provide the Anti-smog gun mounted on truck in the project for suppression of dust and shall use the treated water, if feasible.
- 21. The PP shall create environment division unit in the project for implementing the conditions of Environment clearance.
- 22. 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.
- 23. The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.
- 24. Action plan for the public hearing issues shall be complied in letter and spirit.
- 25. The Proponent will provide adequate sanitary facility in the form of mobile toilets to the labours engaged for the project work.
- 26. The Project proponent shall comply all the measures, conditions suggested in the approved mining plan with post closure mine plan, Environmental Management Plan (EMP) in a letter and spirit.
- 27. The PP shall restrict maximum mining depth 3 meters above the Ground Water Table.
- 28. Any change in stipulations of EC of the approved mining plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

B: Statutory Compliance:-

- 1. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2. The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Others before commencing the mining operations.
- 3. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
- 4. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- 5. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- 6. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/Consent to Operate from the concerned State Pollution Control Board/Committee.
- 7. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012.
- 8. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- The Project Proponent shall follow the mitigation measures provided in MoEF & CC Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of 209th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.01.2021 & 30.01.2021

mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

- 10. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- 11. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 12. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 13. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEF & CC Regional Office for compliance and record.
- 14. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

I. <u>Air Quality Monitoring and Preservation</u>

- 1. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatologically data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM₁₀, PM_{2.5}, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- 2. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM₁₀ and PM_{2.5} are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF & CC/Central Pollution Control Board.

II. <u>Water Quality Monitoring and Preservation</u>

- 1. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF & CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- Regular monitoring of the flow rate of the springs and perennial Nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The <u>209th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.01.2021 & 30.01.2021</u>

Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

- 3. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezometer installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- The Project Proponent shall undertake regular monitoring of natural water course/ water 4. resources/ springs and perennial Nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on sixmonthly basis.
- 5. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- 6. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF &CC annually.
- 7. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- 8. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF& CC and State Pollution Control Board/Committee.

III. Noise and Vibration Monitoring and Prevention

1. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

- 2. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.
- 3. The Project Proponent shall take measures for control of noise levels below 85 dba in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

IV. <u>Mining Plan</u>

- 1. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- 2. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change and SEIAA for record and verification.
- 3. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

V. Land Reclamation

- 1. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- 2. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- 3. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- 4. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local

species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken for stabilization of the dump.

- 5. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC/SEIAA.
- 6. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- 7. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- 8. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VI. <u>Transportation</u>

- 1. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- 2. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VII. Green Belt

- 1. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted irrespective of the stipulation made in approved mine plan.
- 2. The Project Proponent shall carryout plantation/afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/Tribal Welfare Department/Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- 3. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- 4. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt. and implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

VIII. Public Hearing and Human Health Issues

- 1. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
- 2. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- 3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn)

Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

- 4. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
- 5. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- 6. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- 7. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

IX. <u>Corporate Environment Responsibility (CER)</u>

- 1. The activities and budget earmarked for Corporate Environmental Responsibility (CER)/EMP or as proposed by EAC should be kept in a separate bank account. The activities proposed for EMP shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- 2. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF & CC and its concerned Regional Office.

X. <u>Miscellaneous</u>

1. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF & CC.

- 2. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 3. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 4. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF & CC.
- 5. The concerned Regional Office of the MoEF & CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF & CC officer(s) including other authorized officer by furnishing the requisite data/information
