

Minutes of the 224th 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 29.10.2021 under the Chairmanship of Sh. V. K. Gupta, Chairman, SEAC, through Video Conferencing (VC).

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 223rd Meeting were discussed and approved without any modification. In the meeting 6 no. of agenda 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 appraise 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 29.10.2021.

The 224th meeting of SEAC Haryana was held online by video conferencing on 29.10.2021. The following members joined the meeting:

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

224.01 EC of Expansion of Affordable Group Housing Project at Village Badha, Sector 90, Gurugram, Haryana by Fortune land & Housing pvt. Ltd and others in collaboration with M/S B.D Infra developers pvt. LLP

Project Proponent : Mr. Neeraj Mishra
Consultant : GRC India(P) Ltd

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/225862/2021 on dated 24.08.2021 as per check list approved by the SEIAA/SEAC

224th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.10.2021

for obtaining Environmental Clearance for expansion under Category 8(a) of EIA Notification 14.09.2006.

Thereafter, the case was taken up in 220th meeting of SEAC held on 01.09.2021 but the PP requested for the deferment of the case which was considered and acceded by the SEAC.

Then, the case was taken up in 221th meeting of SEAC held on 29.09.2021. The PP presented the case before the committee. **The Discussion was held on** revised Form IA, Aravali NOC, revised Traffic study, no. of Trees details, revised EMP, combined Collaboration agreement, Geo Technical studies, Fire safety and fire rescue plan, contour plan etc. and certain observations were raised as following:-

1. The PP shall submit the revised Form IA
2. The PP shall submit the Aravali NOC
3. The PP shall submit the no. of Trees details
4. The PP shall submit the revised EMP
5. The PP shall submit the combined Collaboration agreement
6. The PP shall submit the Geo Technical studies of project area.
7. The PP shall submit the Fire safety and fire rescue plan (SOP)
8. The PP shall submit the contours plan indicating levels of proposed site in terms of drainage pattern
9. The PP shall submit the Analysis report of surface water.
10. The PP shall submit the Key plan of sampling locations, primary micromet data, DG/Vehicular emissions data, DAT file of PM2.5 instead of PM, Isopleths of PM10, PM2.5, So2, NO2 and CO vis a vis wind rose diagram.
11. The PP shall submit the Revised Traffic study and incremental load analysis with current status of connecting roads.

The PP submitted the reply of above said observations vide letter dated 29.09.2021. Thereafter, the case was taken up in 224th meeting of SEAC. The PP presented the case before the committee

- The proposed project is for **EC of Expansion of Affordable Group Housing Project at Village Badha, Sector 90, Gurugram, Haryana by M/S B.D Infra developers Pvt. LLP**
- **Earlier EC has been granted to the project vide letter no. SEIAA/HR/2019/474 Dated 18.12.2019.**
- **The Project is on concept basis as Building plans are not approved from the Competent Authority.**
- **The license no. 30 of 2019 and 39 of 2021 has been granted to the project in the name of Fortune land & Housing pvt. Ltd and others in collaboration with M/S B.D Infra developers Pvt. LLP and in the name of MRG World LLP in collaboration with M/S B.D Infra developers Pvt. LLP vide letter dated 28.02.2019 and 19.07.2021 for an area measuring 5.00 acres and 2.3375 acres which is valid upto 27.02.2024 and 18.07.2026 respectively.**
- **Sultanpur National Park lies within 6.8km from the project site**
- **Compliance report received vide letter dated 28.09.2021**

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:-

224th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.10.2021

Construction status

Construction Status- Commercial Colony Project at Village-Badha, Sec-90, Gurugram, Haryana by M/s BD Infradevelopers LLP						
Sr. No.	Block No.	No. of Floors	Total Area (sqm)	Costruction Status as on 01.10.2021	Area constructed (sqm)	Remarks
1	Tower - A1	G+14	9176.416	Mumty under progress	9130.53	Under Progress
2	Tower - A2	G+14	9176.416	Terrace under progress	9083.73	Under Progress
3	Tower - A3	G+14	9176.416	Mumty under progress	9130.53	Under Progress
4	Tower - A4	G+14	9176.416	Mumty under progress	9130.53	Under Progress
5	Tower - A5	G+9	6150.960	1st Floor under progress	1816.99	Under Progress
6	Tower - A6	G+9	6150.960	1st Floor under progress	1816.99	Under Progress
7	Tower - B1	G+14	5450.960	Terrace under progress	5409.96	Under Progress
8	Tower - B2	G+6	2384.242	Terrace completed	2288.61	Under Progress
9	Commercial	G+14	2049.412	Terrace under progress	1961.29	Under Progress
10	Community Hall	G	185.806	0	0	Not Constructed
11	Anganwadi	G	185.806	0	0	Not Constructed
Total Built up area			59263.140	Total Constructed area	49769.1783	

Table 1: Basic Details

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: Expansion of Affordable Group Housing Colony Project at Village-Badha, Sector-90, Gurugram, HaryanabyM/s B.D Infradevelopers LLP (Formerly M/s B.D InfradevelopersPvt Ltd).				
Sr. No.	Particulars	Existing	Expansion	Total Area (in M²)
	Online Project Proposal Number	SIA/HR/MIS/225862/2021		
1.	Latitude	28° 24' 40.70" N		
2.	Longitude	76° 56' 30.41" E		
3.	Plot Area	20,234.250	+9,459.512	29,693.762
4.	Net Plot Area	--	--	--
5.	Proposed Ground Coverage	5,604.708	+2,576.498	8,181.206
6.	Proposed FAR (including Community	47,952.75	+22,408.498	70,361.248

	+Creche)				
7.	Non FAR Area		11,310.39	+4,559.91	15,870.3
8.	Total Built Up area		59,263.14	26,968.408	86,231.548
9.	Total Green Area with Percentage		(@20.04% plot area) 4,055.58	+1,895.686	(@20.04 % plot area) 5,951.266
10.	Rain Water Harvesting Pits		5	+2	7
11.	STP Capacity		350 KLD	+180 KLD	530 KLD
12.	Total Parking		363 ECS	+170 ECS	533 ECS
13.	Organic Waste Converter		1	--	1
14.	Maximum Height of the Building (m)		44.55m (G+14)	--	44.55m (G+14)
15.	Power Requirement (kW)		2,575	+1,153.34	3,728.34
16.	Power Backup		770 kVA (1x 320 +1x 250 + 1x 200)	+ 200 kVA (1x 200 kVA)	970kVA (1x 320 +1x 250 + 2 x 200)
17.	Total Water Requirement		350 KLD	+161 KLD	511 KLD
18.	Domestic Water Requirement		334 KLD	+159 KLD	493 KLD
19.	Fresh Water Requirement		334 KLD	+28 KLD	362 KLD
20.	Treated Water		224 KLD	+45 KLD	379 KLD
21.	Waste Water Generated		249 KLD	+172 KLD	421 KLD
22.	Solid Waste Generated		2,016 kg/day	+997 kg/day	3,013 kg/day
23.	Biodegradable Waste		1,209.6 kg/day	+ 598.2 kg/day	1,807.8 kg/day
24.	Number of Towers		6 with Community & commercial Building	3 with Commercial Building	9 with Community & commercial Building (2)
25.	Dwelling Units/ EWS		720	+344	1064
26.	Salable Units		720	+344	1064
27.	Basement		--	--	--
28.	Community Center		1	--	1
29.	Stories		Ground Floor to fourteenth Floor	--	Ground Floor to fourteenth Floor
30.	R+U Value of Material used (Glass)		The project will involve limited use of clear & tinted glass having U-value less than 3.11w/m ² -°C.	--	The project will involve limited use of clear & tinted glass having U-value less than 3.11w/m ² -°C.
31.	Total Cost of the project:	i) Land Cost	INR 148.74 Crore	+ INR 68.42 Crore	INR 217.16 Crore
		ii) Construction Cost			
32.	EMP Budget (per year)	i) Capital Cost	--	Capital Cost : Rs. 325.7 lacs Recurring Cost : Rs. 57.023	Capital Cost : Rs. 325.7 lacs Recurring Cost : Rs. 57.023lacs
		ii) Recurring Cost			

				lacs	
33.	Incremental Load in respect of:		--	--	
	i) PM 2.5				0.01 µg/m ³
	i. PM 10		--	--	0.01 µg/m ³
	ii. SO ₂		--	--	0.096 µg/m ³
	iii. NO ₂		--	--	0.14 µg/m ³
	iv. CO		--	--	0.15 µg/m ³
34.	Status of Construction	The construction status of site as on date is as follows: Existing part including Tower A1 to A4 (G+14), A5 & A6 (G+9), B1 (G+14) & B2 (G+6)], Community Building including Creche (G+1) and Commercial Building (G+1) are under construction phase.			
35.	Construction Phase:	i) Power Back-up	100 kW	30 kW	130 kW
		ii) Water Requirement & Source	119 ml	+ 53.4 ml	172.4 ML
		iii) STP (Modular)	1	1	1
		iv) Anti-Smoke Gun	1	1	1

Table 2: EMP BUDGET

DURING CONSTRUCTION PHASE		
COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Labor Sanitation & Waste water Management	15	7
Dust Mitigation Measures Including site barricading, water sprinkling and anti-smog gun)	20	5
Storm Water Management (temporary drains and sedimentation basin)	10	2.5
Solid Waste Management	5	1

TOTAL	50	15.5
--------------	-----------	-------------

DURING OPERATION PHASE		
COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	95	23.75
Rain Water Harvesting System	10.5	2.625
Solid Waste Management	6.026	1.506
Environmental Monitoring	0	9
Green Area/ Landscape Area	3.57	0.892
Others (Energy saving devices, miscellaneous)	10	2.5
Socio-Economic		
Providing laptops and mobile phones to students of - <ul style="list-style-type: none"> • Government School, Sector 86, Badha village • Government High School, Sector-93, Hayatpur village • Government Senior secondary School, sector-86, NawadaFatehpur 	30	---
Shelter for Cow in Badha, Sikandarpur Badha & Hayatpur villages	20	
Providing Rain Water Harvesting in the following local Govt. Schools- <ul style="list-style-type: none"> • Government School, Sector 86, Badha village • Government High School, Sector-93, Hayatpur village • Government Senior secondary School, sector-86, NawadaFatehpur 	20	
Providing Water Coolers in the following local Govt. Schools- <ul style="list-style-type: none"> • Government School, Sector 86, Badha village • Government High School, 	20	---

Sector-93, Hayatpur village • Government Senior secondary School, sector-86, NawadaFatehpur		
Setting up solar lighting facilities in Badha, SikandarpurBadha&Hayatpurvillages	40	---
Plantation in Badha, SikandarpurBadha&Hayatpur villages	10.604	---
Providing sanitation facility in Badha, SikandarpurBadha&Hayatpur villages	10	
TOTAL	275.7	40.273

TOTAL EMP BUDGET		
COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
During Construction Phase	50	15.5
During Operation Phase	275.7	40.273
TOTAL	325.7	55.773

The documents were placed before the committee. **Further, deliberation was held on**, Arravali NOC, revised Traffic study, revised EMP, Collaboration agreement, Geo Technical studies, Fire safety and fire rescue plan, contour plan and reply submitted by PP. The PP also submitted the affidavit as below:

- The PP shall spent Rs. 5 Lakhs 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 PP shall spent Rs5 Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds and construction of feeding platforms through Environment Management Plan
- 3) 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.
- 4) 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.
- 5) 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.
- 6) 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
- 7) The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. 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 5,951.266 (@20.04 % plot area) shall be provided for green area development.
- 8) 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.
- 9) 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.
- 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 fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
- 12) The PP shall not carry any construction above or below the Revenue Rasta, if any
- 13) The PP shall not carry any construction below the HT Line passing through the project, if any.
- 14) 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.

- 15) 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.
- 16) 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.
- 17) The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
- 18) The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority.
- 19) The PP shall not give occupation or possession before the electricity connection permitted by the competent Authority.
- 20) 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.
- 21) The PP shall carry out the quarterly awareness programs for the stakeholders of the commercial colony/project.
- 22) 2Rain Water Harvesting pits shall be provided in addition to already provided 5 pits for rainwater usages as per the CGWB norms.
- 23) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 7 RWH pits
- 24) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- 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, and the Plastics Waste (Management) Rules, 2016 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 PM25) 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be ultra 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 Water Quality Monitoring and Preservation

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. The per capita supply should adhere to NBC 2016 and CGWA Notification dated 12.12.2018.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain Water Harvesting pits shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess

treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

III Noise Monitoring and Prevention

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

IV Energy Conservation Measures

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

V Waste Management

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the

- M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
 - iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
 - iv. Organic Waste Converter within the premises with a minimum capacity of 0.5 kg /person/day must be installed. Leaves to be put in earmarked pits for converting them into compost to be used as manure.
 - v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
 - vi. Any hazardous waste generated during construction phase, shall be disposed 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 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.
- 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-ab-initio and PP will have to seek fresh Environment Clearance
- xi. The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to SEIAA.
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The 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.

224.02 EC for Expansion cum Modification of Group Housing Project at Village Palra, Sector 70A, Gurugram, Haryana by M/s Haamid Real Estate Pvt. Ltd.

Project Proponent : Julie Jha
Consultant : Vardan EnvironNet

The project proponent submitted the case along with EIA/EMP to the SEIAA vide online proposal no. SIA/HR/MIS/61220/2021 dated 04.10.2021 as per check list approved by the SEIAA/SEAC for obtaining EC under category 8(b) of EIA Notification dated 14.09.2006.

Thereafter, the case was taken up in 224th meeting of SEAC held on 29.10.2021. The PP presented the case before the committee and **the Discussion was held on** revised EMP, certified compliance report, ATR submitted, STP, feasibility report of STP, Aravalli NOC, Forest NOC, water demand, sludge, green plan, road to be constructed by HUDA, construction in the new expansion of the project etc. and certain observations were raised as below:-

- 1) The PP shall submit the Aravalli NOC from the competent Authority.
- 2) The PP shall submit the forest NOC from the competent Authority.
- 3) The PP shall submit the progress of existing green plan.
- 4) The PP shall submit the tangible EMP
- 5) The PP shall submit the evidence for construction of land of expansion for road by HUDA.

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

224.03 EC for Expansion of Group Housing Colony planned at Village NangliUmarpur, Sector 62, Gurugram, Haryana by M/s Emaar MGF, Emaar MGF Bussiness Park

Project Proponent : Not Present
Consultant : Not Present

The project proponent submitted the case to the SEIAA vide online proposal no. SIA/HR/MIS/66969/2019 dated 04.10.2021 as per check list approved by the SEIAA/SEAC for obtaining EC under category 8(b) of EIA Notification dated 14.09.2006.

Thereafter, the case was taken up in 224th meeting of SEAC held on 29.10.2021 but the PP requested for the deferment of the case vide letter dated 26.0.2021 which was considered and acceded by the SEAC.

224.04 EC for establishment of proposed 18MW Cogeneration power plant at village SheikhpuraJagir, Tehsil & District Karnal Haryana by M/s Karnal Co-Operative Sugar Mill Ltd.

Project Proponent : Mr. Bhajan Lal
Consultant : Mantras Green Resources Ltd.

The project proponent submitted the case to the SEIAA vide online proposal no. SIA/HR/THE/63370/2020 dated 18.06.2021 as per check list approved by the SEIAA/SEAC for obtaining EC under category 1(d) of EIA Notification dated 14.09.2006.

The Case was taken up in 217th meeting of SEAC Haryana held on 19.07.2021. Before the presentation, the PP informed during discussion that they have already run the trial of the machinery for enhanced capacity of sugar plant.

- The Proposed project is for EC for establishment of proposed 18MW Cogeneration power plant at village SheikhpuraJagir, Tehsil & District Karnal Haryana by M/s Karnal Co-Operative Sugar Mill Ltd

The discussion was held on machinery installed, status of the project, construction status, capacity of COGEN Power plant and decided that the PP shall reply to the following observation before taking up the case for further appraisal

1. The PP and Consultant shall submit the affidavit about the status of installation of proposed COGEN 18 MW Power plant machinery at site.
2. The PP shall submit the list of all the FAE's who were involved in the preparation of proposed report.
3. The PP shall submit the status of construction at the proposed COGEN 18 MW Power plant

The PP submitted the reply of above said observation vide letter dated 23.08.2021.

The case was taken up in 220th meeting of SEAC held on 30.08.2021. And after detailed deliberation the committee decided in the meeting to constitute a Sub-Committee for site visit to verify the status report of the project.

The sub-committee consists of the following:

1. Sh. A.K. Mehta, Member, SEAC
2. Sh. Mehar Chand, Member, SEAC

The Committee shall visit the project site and submit the report regarding the status of the project in view of the details as mentioned above within 15 days positively and their case will be taken up in next meeting accordingly.

The sub-committee submitted the site inspection report as detailed below:

Brief report

In reference to the 220th meeting of SEAC held on 31-08-2021 and the direction of Chairman, SEAC for immediate inspection for bagasse used 18 MW Cogeneration Plant at "The Karnal Cooperative Sugar Mills Ltd", the sub-committee comprising of Dr. Mehar Chand and Sh. A.K. Mehta members SEAC visited the above site on dated 02-09-2021. The team inspected the Sugarmill complex along with the project Incharge of the new sugarmill Mr. A.K. Sharma and EIA Consultant Mrs. Abha Garg mantra Green Resources Ltd. The major component of the bagasse based Cogeneration Plant of 18 MW capacity i.e. Boiler, DG sets, turbine, alternator, cooling tower and powerhouse were thoroughly inspected. While inspecting the Sugarmill premises, the project incharge informed the sub-committee that the above components of Cogeneration Plant are common to the Sugar Factory and Cogeneration Plant both except powerhouse. The trial of new Sugar Factory was conducted for 39 days during the month of April and May 2021. The present status of the different components of bagasse based 18 MW Cogeneration Plant is as under:

Name of Component	Construction/operation status
Boiler 100 TPH	Installed in sugar factory area and operational since April 2021
Boiler Stack (1.0*68 metre)	Installed in sugar factory area and operational since April 2021
Turbine 18 MW	Installed and operational since April 2021
Alternator 22500 KVA	Installed and operational since April 2021
Cooling tower Area	Completed and operational since April 2021
Powerhouse	Completed except CTPT installation at power station and not operational (as per statement of Project Incharge)
DG sets (Two-1010 KVA and 750 KVA)	Installed and operational since April 2021 without proper stack

Project Incharge also informed the sub-committee that the turbine has the potential to generate 18 MW of electricity but only 4.8 MW of the electricity is being used for sugar factory-related operations and domestic use and the rest of the power will be exported to the UHBVN Power Grid after completing power distribution infrastructure and obtaining prior Environmental Clearance from SEiAA, Haryana. The powerhouse will be operational only after obtaining the Environment Clearance from the competent authority. The committee could not ensure the export of surplus power to the UHBVN Power Grid as no such documents were placed before the committee.

The PP and the Consultant have misled the SEAC by showing no construction (Vacant land) in the earmarked are for the bagasse based 18 MW Cogeneration Plant in the recent photo section of the document/presentation as circulated to the SEAC members for the 220th meeting. All operational except CTPT installation at the power station. After going through all the facts and infrastructure available at the site, there is a clear cut violation of EIA notification 2006 at the site.

Thereafter, the case was taken up in 221st meeting of SEAC held on 29.09.2021. The MD sugarfed and Sh. SK Sharma appeared before the committee and requested that the report of the committee be shared with them so that the reply of the sub-committee report can be submitted to the SEAC for further decision, however Sh. A.K Mehta Member of sub-committee requested vide email dated that the report shall not be shared with the PP but the committee deliberated on the request & decided to share the site inspection report of sub-committee with the PP and members through email by Secretary SEAC.

224th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.10.2021

The PP and consultant submitted the reply of observation of SEAC and thereafter, the case was taken up in 223rd meeting of SEAC. The members of sub- committee were not available for meeting due to previous engagements and committee decided to take up the case on 22.10.2021, The case was again taken up on 22.10.2021 on the request of PP but the PP requested for the deferment of the case which was considered and acceded by the SEAC and decided to take up the case in the next meeting.

The PP and consultant submitted the affidavit mentioning that:-

1. *As per DPR of the project only one turbo generating set/ turbine of 18 MW and alternator of 22500 KVA are the common equipment for refined Sugar Plant of 3500 ICD and Power Plant.*
2. *That cooling tower work is completed. This is the common equipment of refined Sugar Plant of 3500 ICD and Power Plant.*
3. *By turbo generating set so far 18 MW Power is not generated only around 4.8 MW electric Power has been generated and utilized to run the 3500 ICD refined Sugar Plant.*
4. *No electric Power is exported as power Plant is not installed.*
5. *Power export line and other related facilities not yet installed.*
6. *Switch yard along with CTPT not yet installed/completed.*
7. *18 MW turbine, cooling tower and alternator are the common equipment.*
8. *In addition to it. DG sets of 1010 KVA and 750KVA are also installed for power backup as these equipment's are the common to run the refined Sugar Plant.*
9. *After clearance of EC necessary pending work of power project will be carried out and 18 MW electric power will be generated by turbo generating set, out of this electric power 13.2 MW power will be exported and balance of 4.8 MW (already tried and tested) will be utilized for domestic purposes for running of refined Sugar Plant.*
10. *In context of Gazette notification of Govt. of India No. CG-DL-E-18012021-224513 dated 18.01.2021 request of Karnal Sugar mill for grant of EC be considered for relaxation.*

Thereafter the case was taken up in 224th meeting. The PP presented the case before the committee.

- The proposed project is for EC for establishment of proposed 18MW Cogeneration power plant at village SheikhpuraJagir, Tehsil & District Karnal Haryana by M/s Karnal Co-Operative Sugar Mill Ltd
- TOR has been approved for setting up of 18W Cogeneration power plant vide letter no. SEIAA(126)/HR/2021/7dated 05.01.2021
- No wild life sanctuary falls within 10 km from the project site.
- This project is an integrated project of sugar plant which was established before EIA notification 2006.
- Geo-Technical report submitted as prepared by NIT, Kurukshetra.

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

Table 1: Basic details

Name of the Project: Proposed 18MW Cogeneration power plant at village- Sheikhpura Jagir, Tehsil & District- Karnal , Haryana by M/s The Karnal Co-Operative Sugar Mills Ltd		
Sr. No.	Particulars	
1.	Online Proposal Number	SIA/HR/THE/55040/2020
2.	Latitude	29°39'43.28"N

224th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.10.2021

3.	Longitude		77°01'36.01"E
4.	Plot Area		3.21 Acres
10.	Total Green Area with %		Co Gen green area-1.06 area (33% of the Co-gen area)
11.	Rain Water Harvesting Pits (with size)		3 pits
12.	ETP Capacity		1 MLD
16.	Power Requirement		4.80MW
17.	Power Backup		750 KVA & 1010 KVA
18.	Total Water Requirement		390 KLD
19.	Domestic Water Requirement		40 KLD
20.	Water Required for Co-Gen Plant		350 KLD (one time use)
		ii) Construction Cost	6350 Lakhs
32.	Socio-Economic		95.0 lakhs
33.	EMP Budget		The unit has proposed Rs 101.63 Lakhs capital investment Rs 10.163 Lakhs as Recurring cost.
34.	Incremental Load in respect of:	i) PM 2.5	57.84 µg/m ³
		ii) PM 10	90.591 µg/m ³
		iii) SO ₂	11.750 µg/m ³
		iv) NO ₂	24.477 µg/m ³
		v) CO	3.4 µg/m ³
35.	Construction Phase:	i) Power Back-up	50 KVA
		ii) Water Requirement & Source	10KLD & Treated Water
		iii) STP (Modular)	Existing water treatment system
36	Boiler		100 TPH
37	Machinery	Alternator, Cooling Tower for co generation plant	22500 KVA
38	Turbine		18 MW

Table 2: Environmental Management Plan

S.No.	Particulars	Initial Cost (Lakhs)	Recurring cost
1	Air Pollution Control ESP	15.0	1.5
2	Fire and Safety	5.0	0.5
3	Green Belt Development	5.0	0.5
4	Rain water Harvesting	5.0	0.5
5	Solar lights, LEDs & Village redevelopment	18	1.8
6	Organic Farming and Drip Irrigation	31.63	3.163

7	Education Development	12	1.2
8	Occupational Health	10	1
	Total	101.63 Lakhs	10.163 Lakhs

TABLE 3: Specification of boiler

Boiler Details	1 x 100 TPH, Single Drum, Top Supported, Travelling Grate Boiler
MCR Steaming Capacity	100 TPH (Gross)
Steam Pressure at MSSV	110 Kg/cm ² (a)
Main Steam Temperature	540 ± 5 °C
Boiler Design Pressure	130.5 Kg/cm ² (g)
No of Drums	Single - Drum
Boiler Supporting	Top Supported
Flue gas conditioning System	ESP
Super Heater Safety Valve Set Pressure	117.5 Kg/cm ² (g)
Drum Safety Valve # 1 Set Pressure	130 Kg/cm ² (g)
Drum Safety Valve # 2 Set Pressure	130.5 Kg/cm ²

Table 4: **DESIGN BASIS**

Boiler capacity at MCR (Kg/hr)	100000
Boiler Peak capacity at MCR (Kg/hr) (Only 30 minutes per shift)	110000
Steam Pressure at Main Steam Stop Valve outlet Kg/cm ² (g)	109
Steam temperature at Boiler MSSV outlet (Deg.C)	540 ± 5 °C
Steam temperature control range	60 – 100 % MCR Bagasse
Boiler design pressure	130.5 Kg/cm ² (g)
Feed water temperature at De-aerator outlet	110 °C
Feed water temperature at economizer inlet	210 °C
De-aerator operating pressure	0.46 Kg/cm ² (g)
De-aerator design temperature	150 °C
Dissolved oxygen in feed water (max.) after LP dosing	0.007 ppm

Table 5:

BOILER PRESSURE PARTS		
BOILER DRUM		
	Unit	Steam Drum
Inside diameter	mm	1372
Shell thickness	Mm	80
Shell length	Mm	4980
Material		SA 516 Gr. 70
Design Pressure	Kg/cm ² (g)	130.5
Design Temperature	°C	330
1.1.2. Steam Drum Dished		

Head		
Type		Terispherical
Thickness	Mm	100 (Nominal)
Material		SA 516 Gr. 70

TABLE 6: Ultimate Fuel Analysis (% by weight)

Elements		Bagasse
Carbon	%	23.5
Hydrogen	%	3.25
Nitrogen	%	0.00
Sulphur	%	0.00
Ash	%	1.50
Moisture	%	50.00
Oxygen	%	21.75
GCV	Kcal/Kg	22.70
Gas temperature leaving air heater		160 °C
Dust content in flue gases leaving the dust collection system (with all fields in service)		50 mg/Nm ³

Table NO 7: Land Use Statement

S.No	Particulars	Area (Acre)
1	Boiler Area	0.37
2	Turbine Area	0.49
3	Cooling tower	0.25
4	Electrical Rooms	0.03
5	Transformer area	0.30
6	Switch Yard	0.19
7	Green Area	1.06
8	Open Area	0.40
9	Road	0.12
	Total Co-Gen Area	3.21

Table NO 8: Technical details of ESP

S.No	Particular	Parameter
1.	No. of ESP	1 ESP is proposed project.
2.	Inlet dust concentration	5.0 g/m ³
3.	Guaranteed Dust Load at ESP Exit:	50 Mg/NM ³
4.	Velocity of gases (in Electrode Zone):	0.8 m/s
5.	Operating temp. At ESP inlet:	160°C
6.	Pressure Drop Across ESP:	<25mmWc
7.	Gas flow rate	Corresponding to MCR of boiler.
8.	Efficiency	99.9%

The discussion was held on MSHIC rules, tangible EMP, boiler details, on-site and off-site plan, ECBC compliance, ZLD, zoning plan, traffic circulation plan, parking plan, RWH, Forest NoC, Geo-Technical report and certain observations were raised as following:-

1. PP shall submit the affidavit that SO₂ will not be allowed to go through the stack.
2. PP shall submit that they will install ESP for removing 99.9% fugitive emissions
3. PP shall submit the affidavit that no sulphur content is being used other than having in bagasse
4. PP shall submit the flow chart indicating the common components for sugar plant and cogeneration plant
5. PP shall submit the affidavit that no smell will come out of project site along with smell management plan.
6. PP shall submit the undertaking following the MSHIC rules
7. PP shall submit the affidavit regarding distance of project from inter-state border of UP
8. PP shall obtain the certificate from the boiler inspector
9. PP shall submit the green belt development plan
10. PP shall submit the revised tangible EMP detail along with socio economic components
11. PP shall adopt the most polluted pond in the area
12. PP shall prepare the onsite and offsite emergency plan
13. PP shall submit the permission for bore-well
14. PP shall submit the solar component in the ECBC compliance
15. PP shall submit the details/specifications of 100 TPH boiler
16. PP shall submit the details of disposal of chemical sludge of ETP
17. PP shall undertake for installing online monitoring system
18. PP shall submit the provisions of noise control and fly ash control
19. PP shall submit the affidavit regarding ZLD
20. PP shall submit the details of chemicals along with thresh hold value
21. PP shall submit the copy of agreement for export of power
22. PP shall submit the details of valid license of land
23. PP shall submit the zoning plan
24. PP shall submit the traffic circulation plan
25. PP shall submit the parking plan
26. PP shall submit the location of STP and RWH on plan
27. PP shall submit the forest NOC
28. PP shall submit the Geo-Technical report
29. The consultant shall submit the undertaking about the common components used for refined sugar plan and 18MW cogeneration power plan as submitted in the affidavit by PP. Also submit the affidavit and undertaking mentioning details of ESP to be installed.

The PP submitted the reply of above said observations vide letter dated 29.10.2021. The PP submitted the details of CO₂ generation, RWH calculations, Green area, specification of Boiler, Maintenance schedule, steam, ETP details. Also submitted the flow chart depicting the common equipment's for sugar and co-generation plant along with affidavit mentioning that:

- That the ESP will have the collection efficiency of 99.99% and strictly adhere to CEA norms as per latest Moef&CC guidelines.
- That in the project sulphur will not be used for sugar manufacturing
- That no Auxillary fuel will be used only bagasse will be used.
- The MSHIC rules are being adhred
- The interstate boundary is 12.8 km from Uttar Pradesh
- The PP shall abide by PESO, Public liability act
- That forest NOC, if required it will be taken up and cleared from forest deptt. As it is old plant of karnal cooperating sugar plant which was already in operation since 1976 and at the same location.

- Also submitted undertaking that they have installed turbine driven power generation system to generate 18 MW of power at 132 KVA, currently mill will generate upto 5MW for Capative power requirement till 1332 KVA line is laid.

The Consultant and PP also submitted the self contained note placed on record. The reply was placed before the committee and the Committee considered the reply . It was discussed in the meeting that

- *The PP submitted the context of Gazette notification of Govt. of India No. CG-DL-E-18012021-224513 dated 18.01.2021, which is applicable only for the Validity of TOR and validity of EC period during COVID-19 and thus is not applicable to new EC. However, committee deliberated that the spirit of Notification is to give relief to the projects during the period of COVID and this is a state importance project and shall be appraised with same spirit.*
- *The EIA Notification dated 14.09.2006 mentioned in the column of category of 1(d) note that power plants using waste heat boiler without any auxiliary fuel are exempted.*
- *The cogeneration Project is integrated with sugar plant and the campus was established before EIA notification 14.09.2006.*
- *The PP and consultant affidavit also discussed at length mentioning that one turbo generating set/ turbine of 18 MW and alternator of 22500 KVA are the common equipment for refined SugarPlant of 3500 ICD and PowerPlant, the cooling tower work is completed which are the common equipment of refined SugarPlant of 3500 TCD and PowerPlant. Through Turbo generating set 18 MW Power is not generated only around 4.8 MW electric Power has been generated and utilized to run the 3500 TCD refined SugarPlant. No electric Power is exported as power Plant is not installed. Power export line and other related facilities not yet installed. Switch yard along with CTPT not yet installed/completed. 18 MW turbine, cooling tower and alternator are the common equipment. In addition to it. DG sets of 1010 KVA and 750KVA are also installed for power backup as these equipment's are the common to run the refined Sugar Plant. After clearance of EC necessary pending work of power project will be carried out and 18 MW electric power will be generated by turbo generating set, out of this electric power 13.2 MW power will be exported and balance of 4.8 MW (already tried and tested) will be utilized for domestic purposes for running of refined Sugar Plant.*

In view of above discussion of committee in various meetings i.e. 217th , 220th , 221st, 223rd& 224th and report of sub- committee regarding installation of equipment's, SEAC took view that these are common equipment's as stated in the affidavit of consultant , which are installed in the project being an integrated project of Refined sugar and generation of power, also the true spirit of Moef&CC notification dated 18.01.2021 to give relief in view of COVID-19 pandemic, No auxiliary fuel used (pt. no.2), mentioned in category 1(d) of EIA Notification 2006. 15 MW generation based on biomass is also exempted from EC and further after at length deliberation the Committee by majority(excluding members of sub committee) have a view that this case along with the report of sub-committee, affidavits of PP and consultant be forwarded to SEIAA for considering the case for granting Environmental Clearance under category 1(d) EIA Notification dated 14.09.2006 issued by the Ministry of

Environment and Forest, Government of India with the following specific and general stipulations:

A. Specific conditions:-

1. The PP shall take the permission of competent authority to store the chemicals above the threshold limit
2. The PP shall manage the boiler Ash for manufacturing of manure to third party and shall not be disposed of in the open area
3. The PP shall not allow the Traffic jam in the roads leading to the unit.
4. The PP shall obtain the CTE/CTO from HSPCB before the start of the Project.
5. The PP shall maintain the Zero Liquid Discharge plan in project.
6. The PP shall control the fugitive emission upto 99.99% and take all preventive steps for smell and air pollution, breeding of mosquitoes, Fly ash etc.
7. The PP shall obtain the permission of Boiler inspector and take all precautions as per the existing guidelines
8. The PP shall adhere to the submitted on-site and off-site emergency plan in case of any untoward incident and help should reach in minimum time.
9. The PP shall take the maintenance schedule of Boiler, equipments, RWH regularly and maintain the record.
10. The PP shall comply with the ECBC norms for commercial activity.
11. The PP shall also install solar power in the socioeconomic component of EMP.
12. 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.
13. 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.
14. 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.
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.
16. 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 in the process.
17. 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
18. The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies including Municipal Corporation before commencement of work. All the construction shall be done in accordance with the local building byelaws.
19. 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.

20. 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.
21. The PP shall carry out the quarterly awareness programs for the stakeholders of the project.
22. Sewage shall be treated in the common 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
23. 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.
24. 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.
25. The PP is required to plant 10 times trees at the project site and compensatory tree plantation will be done @1:10. 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 1.05acres shall be provided for green development.
26. The PP shall not carry any construction below the HT Line passing through the project, if any.
27. The PP shall obtain the Fire NOC from the Competent Authority before taking occupation of the building.
28. 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.
29. 3 Rain Water Harvesting pits shall be provided for rainwater usages as per the CGWB norms.
30. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 3RWH pits
31. The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
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. For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plants shall be ensured.
34. PP shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
35. The particulate emissions shall conform to the prescribed standards. The emissions from the DG sets shall be dispersed through stack of adequate height as per HSPCB standards. Acoustic enclosures shall be provided to mitigate the noise pollution.
36. Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the Sate Pollution Control Board. Regular monitoring should be carried out for relevant parameters.

37. Regular monitoring of the air quality, including SPM & SO₂ levels both in work zone and ambient air shall be carried out in and around the cogen plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Haryana Pollution Control Board
38. Bagasse storage should be properly compressed and covered.
39. Internal roads and raw material storage yard area of the plant should be properly concrete/pakka to reduce dust emission.
40. Leq of noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
41. The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 and Rules 1989.
42. Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
43. Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes/improvements required. If any, in the on-site management plan shall be ensured.
44. Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.
45. Separate silos will be provided for collecting and storing bottom ash and fly ash.
46. To control the particulate emission from the boiler, ESP controlling 99.99% emission shall be installed. Dust extraction system shall be also be provided for control of fugitive emissions from the ash handling areas. High efficiency electrostatic precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³
47. On-line continuous monitoring systems for emission monitoring should be installed and data connectivity must be provided to the HSPCB server for remote operations.
48. Bag filters shall be provided for control of fugitive emissions from the ash handling areas.
49. Fly ash generated shall be provided to farmers to be used as manure or disposed of as per Fly Ash Utilization Notification, 1999 and as amended subsequently.
50. No water bodies (including natural drainage system) in the area shall be disturbed due to activities associated with the setting up / operation of the cogen plant.
51. Monitoring surface water quality in the area shall also be regularly conducted and records maintained. The monitored data shall be submitted to the State Pollution Control Board regularly.
Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from source. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.
52. Regular monitoring of ambient air ground level concentration of SO₂, NO_x, PM_{2.5} & PM₁₀ shall be carried out in the impact zone and records maintained. The location of the monitoring stations shall be decided in consultation with Pollution Control Board.
53. Well designed acoustic enclosures for the DG sets and noise emitting equipments to achieve the desirable insertion loss viz. 25 dB(A) should be provided.

54. Ultrasonic/Magnetic flow/Digital meters shall be provided at the inlet and outlet of the proposed treatment plants & all water abstraction points and records for the same shall be maintained regularly.
55. All the commitments made in the Public Hearing shall be implemented by PP and adequate budget provision shall be made accordingly.
56. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
57. As proposed, no effluent shall be discharged outside the plant premises and Zero discharge shall be maintained. PP should also install Internet Protocol PTZ camera with night vision facility along with minimum 05X zoom and data connectivity must be provided to the HSPCB server for remote operations.
58. First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
59. PP should explore the possibility of installing "Baggas Drying System".
60. A stack of proper height with fuel gas velocity not less than 22m shall be installed
61. Adequate safety measures shall be provided in the plant area to check /minimize/spontaneous fires especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the ministry as well as to the regional office of the ministry
62. Provisions shall be made for the hosing of construction labour (as applicable) within the site within 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.
63. Full cooperation shall be extended to the Scientists/ Officers from the Ministry/ Regional Office of the Ministry/ CPCB/ SPCB who would be monitoring the compliance of environmental status.
64. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.
65. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous wastes (Management, Handling & Transboundary Movement) Rules, 2008 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.

B. Standard Conditions:-

1. Any enhancement of capacity, change in technology, modernization and scope of working shall again require prior environmental clearance as per EIA notification, 2006.
2. All activities / mitigative measures proposed by PP in Environmental Impact Assessment and must be ensured.
3. All activities,mitigative measures proposed by PP in Environmental Management Plan and approved by SEAC must be ensured.
4. All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
5. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of raw material and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. No overloading of raw material for transportation shall be committed.
6. The industry has to keep strict vigilance on the Fugitive emission and shall ensure that the ambient air quality is well within the prescribed norms by MoEF/ CPCB.

7. Data on ambient air quality (RPM, SPM, SO₂, NON) should be regularly submitted to the State Pollution Control Board / Central Pollution Control Board once in six months.
8. Ambient air quality at the boundary of the plant premises shall conform to the norms prescribed in MoEF notification no. GSR/826(E) dtd. 16.11.09.
9. Closed Cycle Cooling system with cooling towers shall be provided.
10. The waste water (workshop) should be properly collected, treated so as to conform to the standards prescribed by MoEF & CPCB under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed.
11. The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant boundary. There shall be zero discharge outside the plant boundary.
12. Regular monitoring of ground water quality including heavy metals shall be undertaken in the project area and around the ash pond to ascertain the change, if any, in the water quality due to leaching of contaminants, if any, from the ash disposal area.
13. Measures shall be taken for control of noise levels below 75 dBA in the work environment. Workers shall be provided with ear plugs /muffs.
14. Wherever possible, the area around the STP / ETP should be surrounded with dense green belt.
15. Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures shall be conducted followed by follow up action wherever required.
16. Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.
17. Industry should promote CDM projects as and where possible.
18. Use of Solar Energy should be promoted in the plant premises where ever possible.
19. The Project Proponent shall provide proper arrangement for the disposal of hazardous waste (if any) and obtain authorization under Hazardous Waste (Management Handling & Transboundary Movement) Rules 2008 from HSPCB.
20. Concrete measures shall be taken for prevention of solid waste from the premises into nearby land.
21. A separate Environmental Management Cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
22. Project Proponent has to strictly follow the direction/guidelines issued by MoEF, CPCB and other Govt. Agencies from time to time.
23. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported.
24. The Regional Office, MoEF, Gol, & HSPCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan, should be given to Regional Office, MoEF, Gol, HSPCB.
25. Action plan with respect to suggestion/improvement and recommendations made and agreed during public hearing consultation shall be submitted to the Regional Office, MoEF, Gol, HSPCB within six months.
26. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat and Municipal Bodies as

- applicable in addition to the associated Government Departments responsible for controlling the proposed projects who in turn has to display the same for 30 days from the date of receipt.
27. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the State Level Environment Impact Assessment Authority (SEIAA) website and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol.
 28. The Project Proponent has to submit half yearly compliance report of the stipulated prior environmental clearance terms and conditions in hard and soft copy to the Regulatory Authority, viz. HSPCB,CPCB and Regional office of MoEF, Gol on 1st June and 1st December of each calendar year.
 29. Full Cooperation should be extended to the Officers and staff from the Ministry and its Regional Office the CPCB / the SPCB during monitoring of the project.
 30. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
 31. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
 32. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 33. Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
 34. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with amendments and rules.
 35. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, 502, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 36. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the Regional Office of MoEF.

224.05 **Regarding Terms of Reference (ToR) for carrying out EIA studies of the Common Bio-Medical Waste Treatment Facility (CBWTF) located at Khevat No. 128, Khatoni No. 150, Rakba –69 canal –19 Rale, Village –Kandela, Tehsil & District –Jind (Haryana by Divya Waste Management Company**

Project Proponent: Not Present
Consultant: Not Present

The recommendation of SEAC was considered in 126th meeting of SEIAA held on 11.12.2020; the Authority decided to agree with the recommendation of SEAC. Accordingly, a letter was written to Regional Office, MoEF& CC, Gol, Chandigarh to conduct site visit of the Project but no response has been received so far.

The matter was taken up in 127th meeting of SEIAA held on 17.03.2021; after deliberations the Authority decided that reminder letter should be written to Regional Office, MOEF & CC, GOI, Chandigarh by Member Secretary, SEIAA on behalf of Authority for expediting the Report.

The case was again considered in the 128th Meeting of SEIAA held on 26.05.2021 and after going through the communication from MOEF & CC, GOI OM dated 18.11.2020; so, it has been revealed that guidelines of EAC at Ministry Level. Hence, it is decided that the case be sent back to SEAC for getting the project inspected by their members and take a final view after that.

Thereafter, the case was taken up in 217th meeting of SEAC held on 20.07.2021. The discussion was held on the MoEF& CC Notification 18.11.2020 and the decision of SEIAA in its meeting regarding the projects to be get inspected by the members of SEAC. As per the orders of SEIAA vide its 128th MOM dated 26.05.2021. A Committee was formed comprising of the following:-

1. Sh. S.K. Mehta, Member SEAC
2. Sh. Mehar Chand, Member SEAC

The Committee shall visit the project site and submit the report regarding the status of the project in view of the details as mentioned above within 30 days positively.

The subcommittee submitted the report dated 21.10.2021 and thereafter the case was taken up in 224th meeting and the report of subcommittee was placed before the committee. It is mentioned in the report of sub-committee that the paddy crop has been grown at the designated project site. A boundary wall existed at the site which seems to be more than 10 years old. However, a small office like structure seems to have been raised after that. The Affidavit dated 27.08.2021 of sh. Ishwar Singh s/o sh. Sum Ram is also attached with the report mentioning that

- He is the owner of Divya waste management company.
- That they have surrendered the Lease of land obtained from Sh. Satbir.

224th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.10.2021

The committee considered the report of subcommittee and decided to recommend to SEIAA for delisting the said case in view of above report of subcommittee.

224.06 ToR for setting up Integrated Paint Manufacturing Unit in Plot No. 48 to 62 (both plots inclusive), HSIIDC Industrial Estate Panipat, Village Dadlana, Tehsil and Dist. Panipat, State Haryana by M/s Grasim Industries

Project Proponent : Chaitanya C Kurle
Consultant : KadamEnviro

The project proponent submitted the case to the SEIAA vide online proposal no. SIA/HR/IND3/68324/2021 dated 22.10.2021 as per check list approved by the SEIAA/SEAC for obtaining TOR under category 5(h) of EIA Notification dated 14.09.2006.

Thereafter, the case was taken up in 224th meeting of SEAC held on 29.10.2021.

The PP presented the case before the committee

- The proposed project is for setting up Integrated Paint Manufacturing Unit in Plot No. 48 to 62 (both plots inclusive), HSIIDC Industrial Estate Panipat, Village Dadlana, Tehsil and Dist. Panipat, State Haryana by M/s Grasim Industries
- M/s. Grasim Industries Limited is proposing to establish greenfield integrated paint manufacturing facility at in Plot No. 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61 & 62, HSIIDC Industrial Estate Panipat, Village Dadlana, Tehsil and Dist. Panipat, State Haryana.
- Grasim Industries limited is planning to propose manufacturing of all varieties of paints including water based paints, solvent based paints, resin and emulsions etc
- The project site is located within HSIIDC Industrial Estate and existing land use is industrial, which will remain same. Site Allotment letter is enclosed as Annexure 1 of PFR Area break up is given in Section 5.3 of PFR Site location map is given in PFR.
- The PP submitted the affidavit that the area does not fall in Panipat critical polluted area
- As the project lies in the HSIIDC industrial area the public hearing is exempted.

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

Table 1: Basic Details

Name of the Project: Integrated Paint Manufacturing Unit in Plot No. 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60,61 & 62 HSIIDC Industrial Estate Panipat, Village Dadlana, Tehsil and Dist. Panipat, State Haryana			
Sr. No.	Particulars		
1.	Online Proposal Number	SIA/HR/IND3/68324/2021	
2.	Latitude	LAT	LONG
		29°28'19.72" N	76°53'53.09" E
3.	Longitude	29°28'19.40" N	76°54'16.48" E
		29°28'5.74" N	76°54'16.22" E
		29°28'6.09" N	76°53'50.14" E
		29°28'12.90" N	76°53'49.20" E
		29°28'12.80" N	76°53'53.00" E
4.	Plot Area	2,83,500 Sqm	

5.	Net Plot Area	2,83,500 Sqm	
6.	Proposed Ground Coverage	Less than 60% as per Haryana Building Code 2017	
7.	Proposed FAR	Less than 150% as per Haryana Building Code 2017	
8.	Non FAR Area		
9.	Total Built Up area	67% of Plot Area (Inclusive of Manufacturing, Storages, Roads and Parking etc. Other than Green Belt)	
10.	Total Green Area with %	33% of Plot Area	
11.	Rain Water Harvesting Pits (with size)	-	
12.	STP Capacity	STP Capacity: 30 KLD. ETP Capacity : 150 KLD	
13.	Total Parking	01 ECS (Equivalent Car Parking Space) per 100 sq. meter of covered area as per Haryana Building Code 2017	
14.	Power Requirement	Peak power demand : 10 MVA	
15.	Power Backup	4 DG Sets (2000 KVA) and 2 DG Sets(1010 KVA)	
16.	Total Water Requirement	1464 KLD	
17.	Domestic Water Requirement	30 KLD	
18.	Fresh Water Requirement	1163 KLD	
19.	Treated Water	138 KLD	
20.	Waste Water Generated	140 KLD	
21.	Biodegradable Waste	Construction phase : 360 kg/day , Operation phase : 250 kg/day	
22.	Total Cost of the project:	1260 crores	
23.	EMP Budget	To be provided at EIA Stage	
24.	Construction Phase:	i) Power Back-up	D.G sets
		ii) Water Requirement & Source	37.4 KLD HSIIDC

The Discussion was held on surfactants, emulsion, water based, oil based paints, fugitive emission, critical polluted area, alternate site, sources of air pollution, solvent recovery, flow chart, process of manufacturing, EMP, installation of Air Purifier etc.

- The PP submitted the letter to MS SEIAA that they will use baseline monitoring data collected by M/s Indian Oil corporation Ltd. which is adjacent to proposed integrated paint manufacturing unit (Data collected from March 2019 to May 2019) as per OM dated 29.08.2017 issued by MoEF&CC
- They will carry out the additional one month monitoring pertaining to one study area from 15th Oct, 2021 to 15th Nov, 2021.

The request of PP was considered and acceded by SEAC committee and after detailed deliberations the Committee recommend the case to SEIAA for approval of ToR and the project proponent will prepare the EIA by using Model Terms of Reference of MoEF&CC with following additional Terms of Reference:

A: Specific terms of Reference

- 1) Details on solvents to be used, measures for solvent recovery and for emission control.

- 2) Details of process emission from the proposed unit and its arrangement to control
- 3) Ambient air quality data should include VOC, other process- specific pollutants* like NH₃*, Chlorine*, HCL*, HBr*, H₂S*, HF*, CS₂*, etc., (*-as applicable)
- 4) Work zone monitoring arrangements for hazardous chemicals
- 5) Detailed effluent treatment scheme including segregation for units adopting 'Zero Liquid Discharge'
- 6) Action plan for odour control to be submitted
- 7) A copy of the Memorandum of Understanding signed with cement manufactures indicating waste in that they co-process organic solid/hazardous waste generated.
- 8) Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
- 9) Action plan for utilization of MEE/dryers salts.
- 10) Material Safety Data sheet for all the chemicals are being used/will be used.
- 11) Authorization/Membership for the disposal solid/hazardous waste in TSDF
- 12) Details of incinerator if to be installed.
- 13) Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
- 14) Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.
- 15) The measures to control air pollution, on line monitoring system and installation of Air purifier
- 16) On-site and off -site emergency plan for evacuation during untoward incidents
- 17) SOP for safety during fire hazards in the project site

B. STANDARD TERMS OF REFERENCE

- 1) Executive Summary
- 2) Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project
- 3) Project Description
 - i. Cost of project and time of completion.
 - ii. Products with capacities for the proposed project.
 - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
 - iv. List of raw materials required and their source along with mode of transportation.
 - v. Other chemicals and materials required with quantities and storage capacities
 - vi. Details of Emission, effluents, hazardous waste generation and their management.
 - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
 - viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
 - ix. Hazard identification and details of proposed safety systems.
 - x. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing lexisting operation of the project from SPCB shall be attached with the EIA-EMP report.

224th Video Conferencing (VC) Meeting of SEAC, Haryana, dated 29.10.2021

- b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY(2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/ Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5) Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if, yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyorcum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- xi. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- v. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- ii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11) Enterprise Social Commitment (ESC)

- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
- 12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- 13) A tabular chart with index for point wise compliance of above TOR.
1. Details on requirement of raw materials(bindings, solvents, pigments, additives, resin, driers etc. Their source and storage at the plant.
 2. Whether any of the material content lead if so details thereof.
 3. Details on solvent management including loss accounting.
 4. Details on composition, generation and utilization of waste from the plant-left out raw materials, paint sludge, filter cartridges, off-specification paint, etc
 5. Existing ambient air quality for expected emissions (VOCs, pigment dust, etc.) from paint Industry