Minutes of the 230thMeeting of the State Expert Appraisal Committee (SEAC), Haryana constituted for considering Environmental Clearance of Projects (B Category) under Government of India Notification dated 14.09.2006 held on 25.12.2021 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 229thMeeting were discussed in view of observations of a member 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 appraises the EC cases as per the guidelines issued by MoEF& CC from time to time by video conferencing. It was decided that before the commencement of online video conferencing the agenda is required to be mailed beforehand. Accordingly the agenda of the present meeting was mailed to SEAC members in advance and a video conference meeting was organized in this regard on25.12.2021.

The 230thmeeting of SEAC Haryana was held online by video conferencing on 25.12.2021 **.**The following members joined the meeting:

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

230.01 ToR for Modification and Expansion of Group Housing Scheme (19.244 Acre) under Mixed Landuse at Sector 53, District Gurugram, Haryana by M/s Vipul Limited.

Project Proponent : KaviaAnand
Consultant : GaurangEnviro

The project proponent was submitted vide proposal no. SIA/HR/MIS/69184/2021 dated 02.12.2021 the case to the SEIAA as per check list approved by the SEIAA/SEAC for approval of TOR

under category 8(b) of EIA Notification 14.09.2006. The Auto TOR has been granted vide letter dated 06.12.2021

Thereafter, the case was taken up in 230th meeting of SEAC held on 25.12.2021. The PP presented the case before the committee

The PP submitted DD of Rs. 2 Lakh in favour of MS, SEIAA

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:-

Table1: Basic details

Name of the Project: Modification & Expansion of Group Housing Scheme (19.244 acres) Under Mixed Landuse at Sector-53, Gurugram-Manesar Urban Complex, Dist. Gurugram, Haryana by M/s. Vipul Ltd.				
Sr. No.	Particulars	As per existing EC	Modification & Expansion	Total (Area in sqm)
1.	Online Proposal Number	SIA/HR/MIS/69184/2021		
2.	Latitude	*28° 26' 10.13'' N*		
3.	Longitude	*77° 6' 2.93'' E*		
4.	Plot Area	77,877.581 sq. m (19.244 acres)	-	77,877.581 sq. m (19.244 acres)
5.	Proposed Ground Coverage	19,477.468 sq. m (@ 25.01% of plot area)	- 4,791.228 sq. m.	14,686.24 sq. m (@ 18.86% of plot area)
6.	Proposed FAR • Commercial (1 & 2), Kiosk, Sports building & club Building • Residential o Flats o Convenient shopping	2,61,699.785 sq. m 45,013.41 sq. m 2,16,686.375 sq. m 2, 16,304.755 sq. m. 381.62 sq. m.	+ 9310.145 sq. m. + 1,521.82 sq. m. + 7,788.325 sq. m.	2,71, 009.93 sq. m 46,535.23 sq. m. 2,24,474.70 sq. m 2,24,093.08 sq. m 381.62 sq. m.
7.	Nursery & Primary School	4,846.74 sq. m	-	4,846.74 sq. m
8.	Non FAR • Basement area • Others (Gate post, religious building & milk booth), services area, Stilt &mumty machine room. • Balcony, staircase, projections, STP, ESS, ramps, DG, Meter room, HTVCB, bus shelter	1,36,720.52 sq. m 1,22,290.535 sq. m 14,429.985 sq. m - 	+ 1,45,071.983sq. m + 52,578.405 sq. m -7,723.039 sq. m. + 1,00,216.617 sq. m.	2,81,792.503 sq. m 1,74,868.94 sq. m 6,706.946 sq. m 1,00,216.617sq. m.
9.	Built up Area (6+7+8)	4,03,267.045 sq. m	+1, 54,382.128 sq. m	5,57,649.173 sq. m.
10.	Total Green Area with (30.39% of plot area)	23,671.766 sq. m	-	23,671.766 sq. m
11.	Rain Water Harvesting Pits (with size)	16 Pits	+ 3 Nos.	19 Pits

12.	STP Capacity	2 STPs of total capacity of 660 KLD (1 x 450 KLD + 1 x 210 KLD)	+ 390 KLD	1050 KLD
13.	Total Parking	3,799 ECS	+ 47 ECS	3,846 ECS
14.	Organic Waste Converter	1 No.	+ 2	3 No.
15.	Maximum Height of the Building (m)	139.3 m	+ 2.64 m	141.95 m
16.	Power Requirement	13,278 KW	-1,410 KW	11,868 KW
17.	Power Backup	10 nos. DG set of total capacity 12,500 kVA: Residential- 5 x 1000 kVA + 1 x 1500 kVA Commercial- 2 x 1000 kVA + 2 x 2000 kVA	- 2 nos. DG set of total capacity 2,500 kVA: Residential- 1 x 1500 kVA Commercial- 1 x 1000 kVA	8 nos. DG set of total capacity 10,000 kVA: Residential- 5 x 1000 kVA Commercial- 2 x 2000 kVA + 1 x 1000 kVA
18.	Total Water requirement (KLD) & Sources • One Time • Regular	985.93 say 986 KLD Source: HUDA/GMDA	+ 540 KLD + 516 KLD	1,526 KLD 1,502 KLD
19.	Fresh Water Requirement (KLD) • One Time • Regular	527.79 say 528 KLD	+ 211 KLD + 187 KLD	739 KLD 715 KLD
20.	Treated Water	458.14 say 458 KLD	+ 329 KLD	787 KLD
21.	Waste Water Generated	522.27 say 522 KLD	+ 352 KLD	874 KLD
22.	Solid Waste Generated	2,751 kg/day	+ 2,547 kg/day	5,298 kg/day
23.	Stories	3B+S+37	+3 Floor	3B+ G/S+UG+40
24.	R+U Value of Material used (Glass)	U Value 5.7 W/m^2K		
25.	Total Cost of the project:	1549.76 Cr	+ 1329.29 Cr	2879.05 Cr

The Discussion was held on Traffic study, parking plan, air dispersion modeling, water calculations, license etc. and after detailed deliberations it was decided by the committee to recommend the case to SEIAA for approval of additional TOR as auto TOR has already been granted to the project and the project proponent will prepare the EIA by using Model Terms of Reference of MoEF&CC with following additional Terms of Reference in addition to standard terms of reference:

Standard ToR

[1] Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.

[2] Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.

[3] Examine baseline environmental quality along with projected incremental load due to the project.

[4] Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.

[5] Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.

[6] Submit the details of the trees to be felled for the project.

[7] Submit the present land use and permission required for any conversion such as forest, agriculture etc.

[8] Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.

[9] Ground water classification as per the Central Ground Water Authority.

[10] Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.

[11] Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.

[12] Examine soil characteristics and depth of ground water table for rainwater harvesting.

[13] Examine details of solid waste generation treatment and its disposal.

[14] Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption, energy conservation and energy efficiency.

[15] DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.

[16] Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analyzed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.

[17] A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.

[18] Examine the details of transport of materials for construction which should include source and availability.

[19] Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.

[20] Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

[21] Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

[22] The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

[23] Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website “http://moef.nic.in/Manual/Townships”.

Additional ToR:

1. The PP shall submit the Geo Technical studies of project area
2. The PP shall submit the dual plumbing plan
3. The PP shall submit the Green development plan along with Miyawaki forest
4. The PP shall submit the EMP along with Socio economic component
5. The PP shall submit the details of population as per mandate for the project area.
6. The PP shall submit the water requirement, circulation treatment on the basis of population.

7. The PP shall submit the Key plan of sampling locations, primary micromet data, DG/Vehicular emissions data, DAT files (input and output).Isopletsvis a vis wind rose diagram.
8. The PP shall submit the traffic study along with proper parking plan for surrounding and traffic congestion points in and around the project area. The PP shall submit the decongestion of traffic and parking in the project area as the 9 meter roads are proposed as per existing byelaws. The PP shall submit details of ECS proposed within the plots to decongest the traffic as the four floors are proposed to be constructed.
9. The PP shall submit the hydraulic design and dimension of each component of STP along with its location.
10. The PP shall submit the energy saving details
11. The PP shall submit the revised Water calculation for all seasons along with details
12. The PP shall submit Environment Impact Assessment of vehicles during peak hours in and around the project area.
13. The PP shall submit the traffic circulation and parking management plan
14. The PP shall submit the details of existing trees in the project area.
15. The PP shall submit the land ownership details
16. The PP shall submit the approved building plans
17. The PP should enclose all analysis reports of Air, Water, Soil, Noise etc. from MoEF& CC/ NABL Laboratory with scope of accreditation along with range of testing. All original reports should be available during approval of project

230.02 ToR for the Proposed Stone along with Associated Minor Minerals Mine located at Kharsa No. 46Min, Village-Usmapur, District Mahendragarh, Haryana by M/s Astha Infra Developers Private Limited.

Project Proponent : Mr. Abhishek Sharma
Consultant : Sathi Planners Pvt. Ltd.

The project proponent was submitted vide proposal no. SIA/HR/MIN/69331/2021 dated 07.12.2021 the case to the SEIAA as per check list approved by the SEIAA/SEAC for approval of ToR under category 1(a) of EIA Notification 14.09.2006.

Thereafter, the case was taken up in 230th meeting of SEAC held on 25.12.2021. The PP presented the case before the committee.

- PP submitted DD of Rs. 1.50 lakh in favour of MS, SEIAA

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:-

Table1: Basic details

Name of the Project:		
1.	**Online Proposal Number**	**SIA/ HR/MIN/69331/2021**
2.	**Category/Item no. (in schedule):**	1(a)
3.	**Area of the project**	33.10HA.
4.	**Date of LoI granted by Mines & Geology Department, Haryana**	11/04/2016
5.	**Date of approval of Mining plan granted by**	2/01/2017

<table>
<tr><td></td><td>Mines & Geology Department, Haryana</td><td></td></tr>
<tr><td>6.</td><td>Location of Project</td><td>Village: Usmapur, District: Mahendargarh</td></tr>
<tr><td>7.</td><td>Project Details Khasra No</td><td>46 MIN</td></tr>
<tr><td>8.</td><td>Project Cost</td><td>10 crore</td></tr>
<tr><td>9.</td><td>Water Requirement</td><td>31.5 KLD</td></tr>
<tr><td>10</td><td>Source of water</td><td>Tanker</td></tr>
<tr><td>11</td><td>Environment Management Plan Budget</td><td>40,00,000</td></tr>
<tr><td>12</td><td>Production</td><td>69,00,000 MPTA</td></tr>
<tr><td>13</td><td>Corner Coordinates of the lease area</td><td>
<table>
<tr><td>A</td><td>N 28°19’34’’</td><td>E76°03’10.9’’</td></tr>
<tr><td>B</td><td>N 28°19’30’’</td><td>E76°03’ 26.1’’</td></tr>
<tr><td>C</td><td>N 28°19’12.3’’</td><td>E76°03’20.9’’</td></tr>
<tr><td>D</td><td>N 28°19’12.8’’</td><td>E76°03’17’’</td></tr>
<tr><td>E</td><td>N 28°19’05’’</td><td>E76°03’17’’</td></tr>
<tr><td>F</td><td>N 28°19’05’’</td><td>E76°03’22.2’’</td></tr>
<tr><td>G</td><td>N 28°18’59’’</td><td>E76°03’18’’</td></tr>
<tr><td>H</td><td>N 28°19’05’’</td><td>E76°03’8.6’’</td></tr>
</table>
</td></tr>
<tr><td>14</td><td>Green belt/ plantation</td><td>
<table>
<tr><th>Year</th><th>Saplings to be planted</th><th>Survival 90 %</th></tr>
<tr><td>I</td><td>16440</td><td>14796</td></tr>
<tr><td>II</td><td>16440</td><td>14796</td></tr>
<tr><td>III</td><td>16440</td><td>14796</td></tr>
<tr><td>IV</td><td>16440</td><td>14796</td></tr>
<tr><td>V</td><td>16440</td><td>14796</td></tr>
<tr><td>Total</td><td>82,200</td><td>73,980</td></tr>
</table>
</td></tr>
<tr><td>15</td><td>Machinery required</td><td>
<table>
<tr><th>Equipment</th><th>Size</th><th>Nos.</th></tr>
<tr><td>Hydraulic Excavator for Loading of mineral</td><td>3.2cu.m</td><td>8</td></tr>
<tr><td>Rock breaker (Hydraulic Excavator) as substitute to secondary blasting</td><td>1.6 cum</td><td>2</td></tr>
<tr><td>Rear dumpers for transportation of mineral from mine to destination</td><td>25T</td><td>80</td></tr>
<tr><td>Drill Machine with compressor of 365 cfm capacity.</td><td>100-110mm</td><td>4</td></tr>
<tr><td>Track chain Dozer</td><td>350 HP</td><td>1</td></tr>
<tr><td>Pay loader (General Purpose, loading etc.)</td><td>145 HP</td><td>1</td></tr>
<tr><td>Crane</td><td>40T</td><td>1</td></tr>
<tr><td>Tyre handler</td><td>--</td><td>1</td></tr>
<tr><td>Water sprinkler</td><td>10 KL</td><td>1</td></tr>
<tr><td>Mobile Maintenance van</td><td>--</td><td>1</td></tr>
</table>
</td></tr>
</table>

		Tractor	50hp	**1**	
		Tractor mounted compressor	--	**1**	

The discussion was held on Miyawaki forest, mining plan, LOI,DSR etc. After detailed deliberations Committee decided that the SEAC to 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 **along with public consultation**

STANDARD TERMS OF REFERENCE

1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mineshould be given.
3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areashould be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area(core and buffer zone).
5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
6) Details about the land proposed for mining activities should be givenwith information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
7) It should be clearly stated whether the proponent Company has a well laid down EnvironmentPolicy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The 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,may also be detailed in the EIA Report.
8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
12) A Certificate from the Competent Authority in the State Forest Department should be provided,confirming the involvement of forest land, if any, in the project area. In the event of any contraryclaim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

13) Status of forestry clearance for the broken up area and virgin forestland involved in the ProjectIncluding deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the'Aravali Range', (attracting court restrictions for mining operations), should also be indicated andwhere so required, clearance certifications from the prescribed Authorities, such as the SPCB orState Mining Department should be secured and furnished to the effect that the proposed miningactivities could be considered.
20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agenciesdemarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such asmangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation &Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided.The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
27) Impact of the Project on the water quality, both surface and groundwater, should be assessed andnecessary safeguard measures, if any required, should be provided.
28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished.The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
29) Details of any stream, seasonal or otherwise, passing through the lease area and modification /diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
30) Information on site elevation, working depth, groundwater table etc. should be provided both inAMSL and bgl. A schematic diagram may also be provided for the same.
31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside theProject area) should be worked out, indicating whether it is capable of handling the incrementalload. Arrangement for improving the infrastructure, if contemplated (including action to be takenby other agencies such as State Government) should be covered. Project Proponent shall conductImpact of Transportation study as per Indian Road Congress Guidelines.
33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plansand with adequate number of sections) should be given in the EIA report.
35) Occupational Health impacts of the Project should be anticipated and the proposed preventivemeasures spelt out in detail. Details of pre-placement medical examination and periodical medicalexamination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
37) Measures of socio economic significance and influence to the local community proposed to beProvided by the Project Proponent should be indicated. As far as possible, quantitative dimensionsmay be given with time frames for implementation.
38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

44) Besides the above, the below mentioned general points are also to be followed:-

a) Executive Summary of the EIA/EMP Report

b) All documents to be properly referenced with index and continuous page numbering.

c) Where data are presented in the Report especially in Tables, the period in which the datawere collected and the sources should be indicated.

d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc.using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reportsshould be available during appraisal of the Project.

e) Where the documents provided are in a language other than English, an English translation should be provided.

f) The Questionnaire for environmental appraisal of mining projects as devised earlier by theMinistry shall also be filled and submitted.

g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August,2009, which are available on the website of this Ministry, should be followed.

h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I andthe PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasonsfor such changes and permission should be sought, as the TOR may also have to be altered.Post Public Hearing changes in structure and content of the draft EIA/EMP (other thanmodifications arising out of the P.H. process) will entail conducting the PH again with therevised documentation.

i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and

k)sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Additional ToR

1. The PP shall submit the approved mining plan and closure plan
2. The PP shall submit the approved DSR from the Mining Department
3. The PP shall submit the actual replenishment study approved by the Competent Authority.
4. The PP shall submit the Green plan along with Miyawaki forest details.
5. The PP shall submit the copy of LOI
6. The PP shall submit the exact days of mining
7. The PP shall submit the hydrological study
8. A Sub-Divisional Committee comprising of Sub-Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining officer, revenue department shall visit the site and make recommendation on suitability of site for mining or prohibition thereof after {a} identification of the areas of aggradations or deposition where mining can be allowed; (b) identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited; (¢) verify the mining lease boundary; (d) verify the area of the mining lease; (e) suggest the route for transportation of the mineral so that to cause minimum impact on the nearby habitation& agricultural fields: (f) identify the safety zone/restricted area and the area that can be consider for mining after excluding the area as per recommendation of EAC , after considering the other restrictions mentioned in the Sustainable Sand Mining Management Guidelines 2016, S.O. 141(E) dated 15.01.2016, Letter of Intent & District Survey Report; (g) finalize the specific gravity of the material to be mined by the mining lease holders; (h) proposed location for the installation weigh bridge; (i) verification of the initial level of the mining lease already collected by the PP; (j) verification of the baseline air quantity data collected by the PP and any other point to be

considered for the protection environment and health of the nearby habitation. Recommendation of the Committee needs to be annexed with EIA/EMP Report.

9. EIA/EMP report should be prepared for the entire cluster.
10. The Replenishment Study needs to be conducted by an authorized agency and report of the same needs to be submitted.
11. High Powered Committee was constituted under the orders of Hon'ble NGT, headed by Secretary, MOEF&CC, which has given its report dated September, 2016. The PP needs to submit the details that how the PP will comply with the recommendation of the Committee.
12. The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identity grids which will we worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of Lol/Mining Lease deed, restriction as Mineral Concession Rule of the Haryana State, restrictions as per sustainable sand mining management guidelines 2016, restriction as per DSR etc. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide in tabular format the details of the grid viz. wise material availability, dimension of grid, location of grid (latitude, longitude, MSL and level from outside ground level of the corner points), average level of grid (AMSL and RL), depth of mining in each grid, area, volume, grids under mining zone and those left under no mining zone etc. The PP should submit surveyed data so collected in theexcel or CSV file so that the same can be readily used for verification in CAD or Datamine Software. In addition to this soft & hard copy of all the plan& section needs to be submitted.
13. PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
14. The PP should prepare the Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre- monsoon period (1st APR- 30th June), Plate-2 should for the period (1st July-15th Sep) as the mining lease area needs to be left for the replenishment of the river bed mineral and no mining should be proposed in thus period and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (16th Sep-31st March). The period of monsoon may also be defined in consultation with State Government.
15. PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (al! five years) shall be provided which include the level (AMSL & RL) of river bed recorded before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.
16. PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.
17. PP should submit an undertaking by way of affidavit as required as per Ministry's O.M No 3-50/2017 -1A. IM) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
18. PP should include in EIA Report details of all the statutory clearances, permissions, No objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
19. The PP should submit the revenue plan, revenue plan superimposed on the satellite imaginary clearly demarcate the Govt. land, private land, agricultural land.

20. The PP should clearly bring out the protective and mitigative measures to be taken for the nearby habitation and religious structures in line with the Ministry's O.M. No. Z- 11013/57/2014-IA. II (M) dated 29.10.2014.
21. The PP should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5 year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years.
22. The PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of ground water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
23. The PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP).
24. The PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted.
25. PP should submit the measures to be adopted for prevention of illegal mining and pilferage of mineral.
26. PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
27. PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modeling and isopleth. Further, frequency of testing of Poly Achromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in the event of damage to the crop and land on the either side of the road needs to be mentioned.
28. PP should clearly bring out that what is the specific diesel consumption and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
29. PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineers/diploma holders, mining engineers/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
30. PP should specifically mention in the mining plan that the method of mining should be as proposed by EAC i.e. by use only Scrapers for mining to ensure that the mining depth be maintained as 3.0 meters. No other heavy machinery like bucket excavators, back-how, shovel, JCB machines etc. shall not be used for excavation/digging.
31. The safeguards which are suggested in sustainable sand mining guidelines as well as notification dated 15.01.2016 ought to be scrupulously followed and taken into consideration while preparing EIA/EMP Report.
32. The Project Proponent shall apply for NBWL Clearance for the project, if applicable, as per Office Memorandum/Guidelines issued by MoEF&CC in this regard from time to time.
33. The PP should submit the MoU between State government and Project Proponent.
34. The PP should give the Mining plan duly approved by the competent authority before preparing EIA/EMP report.
35. The project proponent shall get approve the conservation plan from Chief Wildlife Warden, Haryana and submit during the appraisal of the project.
36. The PP should give an affidavit that the mining was not mined to any person including minor minerals and sand.
37. The PP should submit GoI Assessment of Mineral Resources.
38. The PP shall carry out the study of Ecological effect of particulate matter on the flora and fauna.

39. The Detailed reclamation plan of the project area to be submitted.
40. The PP shall submit the undertaking that mining will be carried out in accordance with all other provisions as applicable under the Mines Act, 1952, Mines and Minerals (Development and Regulation) Act, 1957, Forest (Conservation) Act, 1980 and Environment (Protection Act), 1986 and the rules made there under, wild life (Protection) Act 1972, water (Prevention and control of pollution) Act 1974 and Air (Prevention and Control of Pollution) Act, 1981.
41. The PP should submit an affidavit that no JCB will be used for mining and only semi-mechanized mining will be carried out.
42. The PP shall submit that no illegal mining has taken place in the mining lease area and no illegal mining will be allowed during operation of mine.
43. The PP shall get the EIA study conducted by accredited agency for the use of large number of trucks/tippers including the impact of load and frequency of large number of machinery in the mining lease area.
44. The PP shall also submit an affidavit that additional minerals mined during the mining shall be stored as mining burden and same will be intimated to the State Mines & Geology Department.

230.03 ToR for Proposed Common Effuluent Treatment Plant (CETP) based on Extended Aeration System having 10 MLD capacity coming up at Industrial Estate Rai, Sector 35, Near Village AkbarpurBarota, Tehsil Rai, District Sonepat, Haryana by /s Haryana State Industrial And Infrastructure Development Corporation Limited (HSIIDC).

Project Proponent : Mr. VerinderKadian
Consultant : GaurangEnviro

The project proponent was submitted vide proposal no. SIA/HR/MIS/68295/2021 dated 08.12.2021 the case to the SEIAA as per check list approved by the SEIAA/SEAC for approval of ToR under category 7(h) of EIA Notification 14.09.2006.

The case was taken up in 230th meeting of SEAC held on 25.12.2021. The PP presented the case before the committee.

- PP submitted DD of Rs. 1.5 Lakh in favour of MS, SEIAA

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:-

Table1: Basic details

Name of the Project:Proposed CETP of 10 MLD capacity based on Extended Aeration System followed by Tertiary Treatment, Rai (Phase-2)		
S. No.	**Particulars**	**Details**
1.	Online Proposal Number	**SIA/HR/MIS/68295/2021**
2.	Latitude	28°55'15.32"N
3.	Longitude	77°4'1.25"E
4.	Plot Area	91,939.48 Sq.m (22 acre, 5 kanal and 15 Marla)
10.	Total Green Area with Percentage	30,340.03sq.m(33%)
16.	Power Requirement	Power demand :400 kVA Source: DHBVN
17.	Power Backup	DG set Number – 2 no DG Set Capacity - 500 kVA (250 kVA–each)
18.	Total Water Requirement	4.0 KLD 3.0 KLD – chemical Dosing
19.	Domestic Water Requirement	1.0 KLD

20.	Fresh Water Requirement		4.0 KLD
21.	Treated Water		--
22.	Waste Water Generated		0.8 KLD – Domestic
23.	Solid Waste Generated		CETP Sludge – 1000 kg/day Domestic Solid Waste – 4.0 kg/day
24.	Total Cost of the project:	i) Land Cost	69.69Crores
		ii) Construction	

The Discussion was held on Traffic study, parking plan, air dispersion modeling, water calculations, type of industries, distance of CETP from industrial estate, mode of transport of effluent of industries, laying of pipe line, turbulent flow in pipe line, normal flow, phase 1 environment clearance etc. and after detailed deliberations it was decided by the committee to recommend the case to SEIAA for approval of additional TOR and the project proponent will prepare the EIA by using Model Terms of Reference of MoEF&CC with following additional Terms of Reference in addition to standard terms of reference:

Specific TOR

1) Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weight age criteria for short-listing selected site.
2) Details of member units, its production capacity, waste generation, characteristic and details of primary treatment provided by the member units.
3) Details on present treatment and disposal systems
5) Details of effluent collection system from member units level.
6) Details of hazardous waste collection. Sill proof arrangement
7) Examine and submit details of inlet characteristics
8) Details of the CETP with design parameters, Layout plan of CETP and open spaces.
9) Details of the adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
10) Details of the usage of treated effluent for green belt development and horticulture.
11) Submit a copy of MoU made between the Member units.
12) Details of storage facility available at the CETP.
13) Examine and submit details of sludge/solid waste generated and method of disposal. MoU in this regard.
14) Details of water requirement, source and water balance chart.
15) Details of green belt being developed.
16 Details of performance monitoring, lab facility with technical persons.
17) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
18) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
19) Details of water meters for inflow and outflow monitoring etc.

20) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministrywebsite"http://moef.nic.in/Manual/CETPs".

Additional TOR

1. Complete details of the proposed CETP to be furnished taking into account the future expansion of the industrial area and the total pollution load of the Industrial Area and the justification for selection of the proposed CETP site.
2. The PP shall submit clear title of land without any judicial order infringement.
3. The project proponent shall submit detailed drainage plan with levels for monsoon season
4. The project proponent shall submit the incremental load statement w.r.t. present and future scope
5. The project proponent shall submit land use and land cover study area of the project
6. The project proponent shall submit contour plan of the study area
7. The PP shall submit the final outfall of treated sewage in drainage after the usages in dual plumbing, horticulture etc.
8. The PP shall submit detailed drawings of sewage plan and drainage plan of the project.
9. The PP shall also submit the details of type of industries and their pollution load to be installed in the project area.
10. The project proponent shall submit air quality modeling isopleths of DG Sets with Air mode Software version details
11. An inventory of all the out-falls incorporating the discharge and quality of the waste being discharged shall be furnished.
12. Sampling shall be carried out across the length of the main sewer trunk at selected points to assess the quality (including toxic substances) of waste being carried by the sewer line. Analytical parameters should be selected on the basis of the nature of industries putting their wastes into the sewer line.
13. Based on the analytical results and the discharge rate worst-case scenario shall be evaluated and considering the same treatability studies for the proposed CETP shall be carried out to optimize the specifications.
14. Justifications for the selected concept of CETP based on different type of effluent shall be presented.
15. Impacts of CETP treated waste has to be assessed on the down streams where this waste is expected to join.
16. Detailed drawing and design with capacities of all units of proposed CETP.
17. Chemical analysis of sewage water if any before mixing industrial effluent (in the up-stream).
18. In CETP design parameters Inlet parameters such as BOD, COD, SO4, NO3, Solids etc., shall be studied and reported

230.04 ToR for Proposed Residential Plotted Colony under DDJAY scheme on land measuring 30.24375 acres situated in the Revenue Estate of Village Ghata, Sector 58, Gurugram, Haryana by M/s Bequeath Infrastructure Private Limited

Project Proponent : Mr. Amarnath Icchupujani
Consultant : Ind Tech Consult

The project proponent was submitted vide proposal no. SIA/HR/MIS/69833/2021 dated 22.12.2021 the case to the SEIAA as per check list approved by the SEIAA/SEAC for approval of ToR under category 8(b) of EIA Notification 14.09.2006.

Thereafter, the case was taken up in 230th meeting of SEAC held on 25.12.2021. The PP presented the case before the committee

- PP submitted DD of Rs. 2 Lakh in favour of MS, SEIAA

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:-

Table1: Basic details

Name of the Project: APPROVAL OF TERMS OF REFERENCE PROPOSED RESIDENTIAL PLOTTED COLONY UNDER DDJAY SCHEME ON LAND MEASURING 30.24375 ACRES SITUATED IN THE REVENUE ESTATE OF VILLAGE GHATA, SECTOR-58, GURUGRAM, HARYANA BY M/S BEQUEATH INFRASTRUCTURE PRIVATE LIMITED			
Sr. No.	**Particulars**		
1.	Online Proposal Number		SIA/HR/MIS/69833/2021
2.	Latitude		$28^0$25’00.58” N
3.	Longitude		$77^0$06’55.23” E
4.	Gross Plot Area		122391.92 Sqm
5.	Net Plot Area		120353.215 sqm
6.	Proposed Ground Coverage		43247.57 Sqm
7.	Proposed FAR		172992.20 Sqm
8.	Non FAR Area		172630.80 sqm
9.	Total Built Up area		345623 sqm
10.	Total Green Area with (20%)		24070.6 Sqm
11.	Rain Water Harvesting Pits (with size)		31 Nos.
12.	STP Capacity		975 KLD
13.	Total Parking		2364 ECS
14.	Organic Waste Converter		1
15.	Maximum Height of the Building (m)		16.4
16.	Power Requirement		5000 KW
17.	Power Backup		6250 KVA
18.	Total Water Requirement		1087 KLD
19.	Domestic Water Requirement		949 KLD
20.	Fresh Water Requirement		717 KLD
21.	Treated Water		370 KLD
22.	Waste Water Generated		813 KLD
23.	Solid Waste Generated		5.7 TPD
24.	Biodegradable Waste		3.5 TPD
25.	Number of Building Blocks (Residential)		591 Nos.
26.	Dwelling Units (@ 4 Du's on each plot)		2364
27.	Basement		One basement
28.	Community Center		2
29.	Stories		B+Stilt+4
30.	Total Cost of the project:	i) Land Cost	845 Cr.
		ii) Construction	

The Discussion was held on Traffic study, parking plan, air dispersion modeling, water calculations, license, stilt, STP, RWH, Green plan Dual plumbing, Net plot area, traffic study, parking, etc. and after detailed deliberations it was decided by the committee to recommend the case to SEIAA for approval of additional TOR and the project proponent will prepare the EIA by using Model Terms of

Reference of MoEF&CC with following additional Terms of Reference in addition to standard terms of reference:

Standard ToR

[1] Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.

[2] Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.

[3] Examine baseline environmental quality along with projected incremental load due to the project.

[4] Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.

[5] Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.

[6] Submit the details of the trees to be felled for the project.

[7] Submit the present land use and permission required for any conversion such as forest, agriculture etc.

[8] Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.

[9] Ground water classification as per the Central Ground Water Authority.

[10] Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.

[11] Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.

[12] Examine soil characteristics and depth of ground water table for rainwater harvesting.

[13] Examine details of solid waste generation treatment and its disposal.

[14] Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption, energy conservation and energy efficiency.

[15] DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.

[16] Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analyzed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.

[17] A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.

[18] Examine the details of transport of materials for construction which should include source and availability.

[19] Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.

[20] Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

[21] Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

[22] The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

[23] Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Townships".

Additional ToR:

1. The PP shall submit the Geo Technical studies of project area
2. The PP shall submit the details of population as per mandate for the project area.
3. The PP shall submit the water requirement, circulation treatment on the basis of population.
4. The PP shall submit the Key plan of sampling locations, primary micromet data, DG/Vehicular emissions data, DAT files (input and output).Isopletsvis a vis wind rose diagram.
5. The PP shall submit the traffic study along with proper parking plan for surrounding and traffic congestion points in and around the project area. The PP shall submit the decongestion of traffic and parking in the project area as the 9 meter roads are proposed as per existing byelaws. The PP shall submit details of ECS proposed within the plots to decongest the traffic as the four floors are proposed to be constructed.
6. The PP shall submit the hydraulic design and dimension of each component of STP along with its location.
7. The PP shall submit the activity wise breakup of residential plots, commercial area, community area, Nursing home & roads.
8. The PP shall submit the energy saving details
9. The PP shall submit the revised Water calculation for all seasons along with details
10. The PP shall submit Environment Impact Assessment of vehicles during peak hours in and around the project area.
11. The PP shall submit the traffic circulation and parking management plan
12. The PP shall submit the details of existing trees in the project area.
13. 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.
14. The PP shall submit the land ownership details
15. The PP should enclose all analysis reports of Air, Water, Soil, Noise etc. from MoEF& CC/ NABL Laboratory with scope of accreditation along with range of testing. All original reports should be available during approval of project

230.05 EC for Proposed Logistic Park of Instakart Services Pvt. Ltd at Plot No 1, Warehousing & Transport Hub in village PatliHazipur, Tehsil Farukhnagar in Industrial Model Township of Manesar, Gurgaon, Haryana by M/s Instakart Services Private Limited

Project Proponent : Mr.Akhileshwar vaid
Consultant : M/s.Amaltas EnviroIndustrial Consultants LLP

The project was submitted to the SEIAA vide online proposal no. SIA/HR/MIS/69653/2021 on dated 20.12.2021 as per check list approved by the SEIAA/SEAC forobtaining Environmental Clearance under Category 8 (b) of EIA Notification 14.09.2006.The TOR was granted to the project vide letter dated 23.12.2021.

Thereafter, the case was taken up in 230th meeting of SEAC held on 25.12.2021. The PP presented the case before the committee

- M/s Instakart Services Pvt. Ltd proposes for development of Logistic Park at Plot No 1, Warehousing & Transport Hub in village PatliHazipur, Tehsil Farukhnagar in Industrial Model Township of Manesar, Gurgaon, Haryana. The project falls under Item 8(b) with built up area

more than 1,50,000 sq. m (Township and Area Development projects) of the Environmental Impact Assessment (EIA) Notification dated September 14, 2006.

- The project site has the total area of 140.01 Acres, which is a part of already approved Industrial township being developed by HSIIDC for a total area of 243.89 Acres approx.
- HSIIDC has obtained the prior Environment Clearance from HSIIDC vide letter no SEIAA/HR/2018/114 dated 13.02.2018 for total 243.89. Out of these 243.89 acres, 140.01 Acres land has been allotted to Instakart Services Private Limited for Warehouse Development and ancillary services.
- The project is appraised on concept basis as building plans are not approved from competent Authority
- The project was granted TOR by SEIAA, Haryana vide File No. SEIAA/HR/2021/480 dated 01.12.2021.
- During Operation Phase, the total wastewater generated from the proposed project site will be 997 KLD. This wastewater generated will be treated in an on-site sewage treatment plants based on MBBR technique or similar efficient technology, treated up-to tertiary level having total design capacity of 1100 KLD.
- Sultanpur National park 6.0 km from the project site.
- PP submitted DD of Rs. 2 Lakh in favour of MS, SEIAA

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:-

Table1: Basic details

Name of the Project: **Environmental Clearance for Warehouse Development at Plot No 1, Warehousing & Transport Hub in village PatliHazipur, Tehsil Farukhnagar in Industrial Model Township of Manesar, Gurgaon, Haryana by Instakart Services Pvt Ltd.**		
Sr. No.	**Particulars**	
1.	Online Proposal Number	**SIA/HR/MIS/69653/2021**
2.	Latitude	22° 58' 58.05" N
3.	Longitude	88° 32' 12.86" E
4.	Plot Area	140.01 Acres (56.66 Ha.) **566,664.42 Sqmt**
5.	Net Plot Area	Same as above
6.	Proposed Ground Coverage	310,259.275 Sqmt
7.	Proposed FAR	718,605.425 Sqmt
8.	Non FAR Area	57,934.86 Sqmt
9.	Total Built Up area	**776,540.285 Sqmt**
10.	Total Green Area with %	**87975.45 Sqmt (15.53 %)**
11.	Rain Water Harvesting Pits	140 pits and RWH pond
12.	STP Capacity	**1100 KLD**
13.	Total Parking	Car Parking 990 Bike Parking 3650 Truck/Bus Parking 496
14.	Organic Waste Converter	Proposed
15.	Maximum Height of the Building (m)	21 m
16.	Power Requirement	20 MW
17.	Power Backup	7 x 2750 KVA (**6x 2750** + 1 x 2750 as backup)
18.	Total Water Requirement	**1617 KLD**
19.	Domestic Water Requirement	1172 KLD
20.	Fresh Water Requirement	721 KLD

21.	Treated Water		896 KLD
22.	Waste Water Generated		997 KLD
23.	Solid Waste Generated		6.58 TPD
24.	Biodegradable Waste		3.88 TPD
25.	Number of Towers		4 Warehouse boxes
26.	R+U Value of Material used (Glass)		U value 0.9 Btu/hr.ft^2
27.	Total Cost of the project: 4000 crores	i) Land Cost	406 crores
		ii) Construction Cost	3594 crores
28.	EMP Budget **(per year)**	i) Capital Cost	**During operation:1,185.00 (capital) 132.0 (recurring) 20.0 Socio economic During construction phase 400.00 (capital) 46.0 (recurring)**
		ii) Recurring Cost	
33.	Incremental Load in respect of:	i) PM 2.5	0.254 µg/m^3
		ii) PM 10	0.295µg/m^3
		iii) SO_2	2.62µg/m^3
		iv) NO_2	15.772µg/m^3
		v) CO	4.249µg/m^3
34	Status of Construction		Yet to start
35.	Construction Phase:	i) Power Back-up	490 KVA
		ii) Water Requirement & Source	Private Tanker Treated water
		iii) STP (Modular)	15 KLD
		iv) Anti-Smoke Gun	1

Table 2 :EMP Budget during operational phase

S. No	Item	Capital / Investment Cost (RsLacs)	Recurring / Maintenance Cost per year (RsLacs/yr)
1	Sewage Treatment Plant (STP)	300.00	70.00
2	Stacks for DG sets	125.00	1.00
3	Rainwater harvesting system	100.00	5.00
4	DG room enclosure & acoustic treatment	50.00	1.00
5	Solid waste storage bins & organic waste composter	50.00	15.00
6	Tree plantation & landscaping (including Miyawaki Forest)	150.00	30.00
7	Solar lighting / solar panel	400.00	5.00
8	Solar water heating system	10.00	1.00
9	Monitoring / testing (air, noise, water, soil,	0.00	2.00

S. No	Item	Capital / Investment Cost (RsLacs)	Recurring / Maintenance Cost per year (RsLacs/yr)
	stack emission, STP effluent, DG noise)		
10	Six-monthly compliance report of EC conditions	0.00	2.00
	Total during operation stage	**1,185.00**	**132.00**
	Socio Economic Activity Budget (0.5% of Project Cost) Activities like smog tower, pond rehabilitation & shelter homes	**20 crores**	

Table:EMP Budget during construction phase

S. No	Item	Capital / Investment Cost (RsLacs)	Recurring / Maintenance Cost per year (RsLacs/yr)
1	Barricade around construction site	25	
2	Paving of roads / walkways to reduce dust emission	40	5
3	Water sprinkling for dust suppression	0	5
4	Covering of site & excavated soil		5
5	Shed & covering for construction materials	50	
6	Construction of wheel wash bay	20	5
7	Sedimentation trap & storm water management	10	5
8	Housing & Sanitation facilities for construction workers including mobile toilets & drinking water	250	8
9	First aid room and medical facilities for workers	5	5
10	Garbage and debris disposal	0	5
11	Monitoring / testing (air, noise, water, soil, stack emission, STP effluent, DG noise)	0	2
12	Six-monthly compliance report of EC conditions	0	1
	Total during construction stage	**400**	**46**

The discussion was held on certified compliance report,mosaic plan,traffic circulation plan,parking plan,location of STP on plan, RWH, elevation plan,air simulation plan,forest NOC,water assurance, distance of wildlife sanctuary from the project site, self- contained note,online offline emergency plan etc. and certain observations were raised as following

And also decided to convey **displeasure to the co-ordinator (M/s.Amaltas Enviro Industrial Consultants LLP) regarding the poor preparation of documents (EIA report), unable to give satisfactory reply to technical observations, and not submitting the reply of observation on time.**

1. The PP shall submit the Green Belt development plan, provision of Miyawaki Forest in 9000sqm, details of existing trees with girth and species.
2. The PP shall submit the excess of way to KMP
3. The PP shall submit the SOP for solid waste management
4. The PP shall submit the C& D Waste details
5. The PP shall submit the revised RWH @90mm of rainfall
6. The PP shall submit the revised EMP including socio economic component for pond to be developed at village bhangrola UID 01HRGGMFRN0122BHAN004., shelter home , a smog tower and 12MW solar power
7. The PP shall submit the secondary data uses for AAQ from Gurugram CAQMS
8. The PP shall submit the MOU with authorized vendor for hazardous waste disposal
9. The PP shall submit the MOU with a STP for using treated water
10. The PP shall submit the undertaking for not using fresh water in greenery and filter back wash
11. The PP shall submit the using gas based generator set
12. The PP shall submit the wildlife activity plan
13. The PP shall submit the undertaking that excess solar power will be put into grid after agreement
14. The PP shall submit the documents as per revised possession
15. The PP shall submit the elevation plan
16. The PP shall submit approved building plan from the competent authority
17. The PP shall submit the Traffic circulation plan
18. The PP shall submit the Parking plan
19. The PP shall submit the location of STP on plan
20. The PP shall submit the location of RWH structure on plan
21. The PP shall submit the water assurance from the competent authority
22. The PP shall submit the power assurance from the competent authority
23. The PP shall submit theAravali NOC
24. The PP shall submit the sewer permission
25. The PP shall submit the dual plumping plan
26. The PP shall submit the location of OWC along with area
27. The PP shall submit the location of DG set
28. The PP shall submit the Forest NOC
29. The PP should submit key plan of sampling locations, primary micromet data, DG/Vehicular Emissions data, DAT files (input and output), Isoplets of PM10, PM2.5, So2, NO2, CO vis a vis wind rose.
30. The PP shall submit the Geo technical report
31. The PP shall submit the analysis report of soil, air, water, noise etc. from the competent authority
32. The PP shall submit affidavit mentioning that adequate studies have been carried out to ascertain that there would not be any obstruction or impediment in general traffic in vicinity of the project due to the said expansion of the project
33. The PP shall submit affidavit mentioning that the no. of in-bound & out-bound vehicles (____PCU/Hr.) and the running hours per day (_____) of DG sets considered while undertaking the studies for evaluating the “Incremental Pollution Load” and those are true to best of our knowledge.
34. The PP shall submit affidavit mentioning that the proposed & installed DG sets & fuel to be used would be as per NCAP/GRAP

35. The PP shall submit affidavit mentioning that no untreated water would be released inside or outside the project or anywhere; waste water would be treated to tertiary level & would be used with the installation of "Dual plumbing".
36. The PP shall submit the all the legible plans in 1:10,000 scale from the competent authority

PP submitted the reply along with undertaking and Affidavit mentioning as below:-

- That PP will sign an MoU with an authorised recycler for the handling and disposal ofthe hazardous Waste.
- That PP will sign the MoU with relevant authority for using treated waste water,subjected to the availability of quality treated water and requisite clearance from therelevant authorities.
- That PP will not use fresh water in greenery and filter back wash
- That PP will put the excess solar power into the grid after agreement and approvalfrom the relevant authority as per the solar policy of Haryana.
- That adequate study has been carried out to ascertain that there would not be anyobstruction or impediment in general traffic in vicinity of the project due to the saidexpansion of the project.
- That the no. of in-bound & out-bound vehicles (1000 PCU/Hr.) and the running hoursperday (4) of DG sets considered while undertaking the studies for evaluating the "Incremental Pollution Load" and those are true to best of our knowledge.
- That the proposed & installed DG sets & fuel to be used would be as per NCAP/GRAP
- That no untreated water would be released inside or outside the project or anywhere;waste water would be treated to tertiary level & would be used with the installation of"Dual plumbing".

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

A: Specific Conditions:

1. The PP shall take the necessary approval from PESO, if applicable
2. The PP shall follow the compliance of Public Liability Insurance Act, 1991
3. The PP shall carry the isolated storage of each chemical to be stored with the existing precautions as per the MSHIC Rules, 1989 and abide by all conditions of MSDS.
4. The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipment's etc. as per National Building Code including protection measures from lightening etc.
5. The PP shall ensure that total 2% of the cost of project shall be spent on EMP Budget. However, the amount and component shown in EMP table above shall also be included for the purpose of 2% amount. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project.
6. 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.
7. 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.
8. Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration. The Treated effluent from STP shall be recycled/ reused for flushing. DG cooling, Gardening and HVAC.
9. The PP shall comply with provisions of Occupational Safety health and working conditions Code 2019.

10. 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.
11. 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.
12. Separate wet and dry bins must be provided for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to solid waste dumping site through authorized vender.
13. The PP shall implement the EMP and assess that the implemented EMP is adequate and periodic environmental audits shall be conducted and maintained the records of audit. These audits shall be followed by Corrective action plan to correct the various measures identified during the audits (CAP).
14. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 km radius of the project is marinated and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habilitation being carried out or purpose to be carried out by the project or other agencies in this 05kms radius of the site in different scenarios of space and time
15. 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 87975.45 m2 (15.63% of plot area) shall be provided for green area development.
16. The PP shall also develop the Miyawaki Forest as proposed in the EMP with the capital cost in the area of 9000sqm. and maintain the same. The Miyawaki forest shall be developed under the guidance of MD Forest corporation Haryana
17. The PP shall develop the pond in consultation with Pond Authority and carry other activities in consultation with administration.
18. The PP shall spent Rs10 Lakhs on various wildlife conservation activities like artificial nests on the trees, digging of ponds and construction of feeding platforms through Environment Management Plan
19. The PP shall provide the Anti-smog gun mounted on vehicle in the project for suppression of dust during construction phase and shall use the treated water, if feasible.
20. 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 SO_2 load by 30% if HSD is used.
21. The PP shall not carry any construction below the HT Line passing through the project, if any.
22. The PP shall not carry any construction above or below the Revenue Rasta, if any.
23. The PP shall obtain the permission regarding withdrawal of ground water from CGWA/ State water Authority, Haryana before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
24. The PP shall not allow parking of the vehicles on the roads or revenue Rasta outside the project area.
25. The PP shall not give occupation or possession before the water supply and sewage connection permitted by the competent authority
26. The PP shall develop the onsite and offsite emergency plan in consultation with the regulatory authority.
27. 140 Rain water harvesting recharge pits and 1 pond shall be provided for ground water recharging as per the CGWB norms.

28. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 140 RWH pits.
29. The PP shall not allow establishment of any category A or B type industry in the project area.
30. The PP shall carry out the quarterly awareness programs for the staff.
31. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.
32. The PP shall comply with provisions of Manufacturing storage and import of Hazardous chemical rules
33. The PP shall comply the requirements of drugs and cosmetics Rules 1954 as amended from time

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

[1] The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority for ground coverage, FAR and should be in accordance with zoning plan approved by Competent Authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

[2] The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.

[3] The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

[4] The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

[5] The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Haryana State Pollution Control Board.

[6] The project proponent shall obtain the necessary permission for drawl of ground water /surface water required for the project from the competent authority.

[7] A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

[8] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

[9] The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 and Batteries waste (Management Handling Rules 2001 as amended in 2020) shall be followed.

[10] The project proponent shall follow the ECBC Act/ECBC, Rules prescribed by Bureau of Energy Efficiency, Ministry of Power strictly in addition of bylaws of the State Government.

I. **<u>Air quality Monitoring and Preservation</u>**

i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

ii) A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.

iv) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of ultra low Sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board

v) Construction site shall be adequately barricaded before the construction begins. Dust,

smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

vi) Sand, Murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

vii) Wet jet shall be provided for grinding and stone cutting.

viii) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

ix) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

x) The diesel generator sets to be used during construction phase shall be ultra-low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Ultra-low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

xii) For indoor air quality the ventilation provisions as per National Building Code of India.

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

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

ii) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

iii) Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

v) A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

vii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.

ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

x) Water demand during construction should be reduced by use of pre-mixed concrete,

curing agents and other best practices referred.

xi) The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms.

xii) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xiii) All recharge should be limited to shallow aquifer.

xiv) No ground water shall be used during construction phase of the project.

xv) Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

xvi) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

xvii) Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

xviii) No sewage or untreated effluent water would be discharged through storm water drains.

xix) Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

xx) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

xxi) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

III. Noise Monitoring and Prevention

i) Ambient noise levels shall conform to residential area/commercial area both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

ii) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

IV. 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 no case shall be less than 25% as prescribed.

ii) Outdoor and common area lighting shall be LED.

iii) Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof R & U-values shall be as per ECBC specifications.

iv) Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

v) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/local building bye-laws requirement, whichever is higher.

vi) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

vii) The PP will submit report indicating compliance of each parameter of ECBC requirement and submit quantification saving report for each component.

V. 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 as applicable, regarding Corporate Environment Responsibility for expansion and existing parts.

ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

X. Miscellaneous

i) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.

ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vi) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

vii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

viii) The project proponent shall abide by all the commitments and recommendations made in the form-IA, Conceptual Plan and also that during their presentation to the Expert Appraisal Committee.

ix) No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana. The project proponent shall seek fresh environmental clearance under EIA notification 2006 if at any stage there is change of area of this project.

x) Any change in planning of the approved plan will leads to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance

xi) The PP should give unambiguous affidavit giving land promoters in accordance with your ownership and possession of land legal the case referred for Environment Clearance to

SEIAA.

xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiii) The 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.

230.06 EC 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 : Mr. Chaitanya C kurle
Consultant : KadamEnviro

The project was submitted to the SEIAA vide online proposal no. SIA/HR/IND3/68324/2021 on dated 20.12.2021 as per check list approved by the SEIAA/SEAC for obtaining Environmental Clearance under Category 5(h) of EIA Notification 14.09.2006.The TOR was granted to the project vide letter dated 23.11.2021.

Thereafter, the case was taken up in 230th meeting of SEAC held on 25.12.2021. The PP presented the case before the committee

- M/s Grasim Industries Limited, have proposed an Integrated Paint Manufacturing Unit to be setup at Plot No 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61 & 62 at HSIIDC Industrial Estate Panipat, Village Dadlana, Tehsil and Dist. Panipat, State Haryana, As per EIA Notification, 2006 the project falls under 5h category 'B'. The EC proposal number is SIA/HR/IND3/68324/2021.
- The manufacturing setup will produce decorative paints including all varieties of Water Based Paint, Solvent Based Paint, Resins& Emulsions.
- Zoning plan approval by HSIIDC vid no. HSIIDC/IPD/1401, Dated: 20-12-2021
- The project is appraised on concept basis
- The project investment is around INR 1260 Cr.
- The proposed facility would be equipped with Zero Liquid Discharge Unit consisting of DT-RO, MEE & ATFD.
- Hazardous wastes would be sent to HSPCB Authorised Recyclers, Co-Processing Facilities and/or Approved TSDF Facilities. Organic solid waste would be composted at site in Organic Waste Convertor and used as manure for green belt development.
- The PP submitted copy of EC letter issued to HSIDC mentioning that the project does not fall in critically polluted area
- Public hearing to HSIDC Industrial estate was conducted in Feburary, 2015.
- There is no presence of National Park/wildlife sanctuary in 10 km radius area from the plot boundary.
- PP submitted DD of Rs. 2 Lakh in favour of MS, SEIAA

The following Environment Management points were discussed:

- Water conservation plans shall be ensured such as recycling of the effluent through recycle and reuse system Flow meters shall be installed at each of raw water intake point. Care shall be taken to avoid leakage of water sources.
- The effluent generation from the proposed unit shall be treated in proposed ETP and treated water shall be sued for gardening, fire-fighting, washing and dust suppression. Flow meters shall be installed at inlet and outlet of the ETPs. Use of spill control measures, mechanical handling, PPE's shall be mandatory while handling the chemicals in ETP to avoid spillages.
- In Process, majority of powders will be through bulk handling systems and these will be pneumatically conveyed into the disperser for further processing. The exhaust of bulk handling will have bag filters/dust collectors attached to control particulate matters. Bulk consumed liquids RMs will be stored in the storage tanks and they will be pumped through pipeline using pump into the Mixers, Dispersers, Reactors and other process vessels.
- Hazardous waste shall be segregated at source and stored in hazardous waste storage area. Proper area shall be demarcated for the storage of hazardous waste facilitate with impervious flooring to avoid leakage problem. Spill control mechanism shall be in place. PPE's shall be mandatory while handling the hazardous substances

Fugitive Emission Control (Dust collection system)

- Dust collection system Dust extraction system is provided to extract dust generated at various points, separate the dust from air and finally discharge the clean air into the atmosphere. The dust extraction system shall be complete with Dust Collector with fan, complete with housing, filter cartridge/bag filters with G. I. cages, pulsing arrangement, Delta P Type Controllers, dust collecting hopper, rotary feeders, hopper gates, discharge chutes, suction hoods, ducting, hangers, hanger supports, dust tight seals, dampers, control panels etc. It shall be as per recommendations of "American Conference of Governmental Industrial Hygienists" (ACGIH) or any equivalent standard.
- An automatic valve shall be installed in between the duct work and extraction point. This valve opens the vacuum to the extraction point only when the dust extraction is in operation.
- The exhaust air from the centrifugal fan shall be discharged into the atmosphere through exhaust chimney with a cowl at a height of minimum three (3) metre above the top of the nearby building. Design philosophy for the duct sizing and fan selection shall be based on "Balancing without blast gate" method as given in "American Conference of Governmental Industrial Hygienists" Handbook. The reverse flow filter dust collector utilizes cartridge/filter elements that are cleaned by "back flushing" with compressed air. The compressed air is released from the storage receiver by a fast-acting, high-flow diaphragm valve. This pulse of air dislodges the accumulated dust from the element. The dust then dumps into the hopper or collector drawers. Each pulse cleans a series of filter elements, leaving the remaining cartridges available to continue filtering the air. Each diaphragm valve typically operates one pulse-jet blow pipe. Each pulse-jet blow pipe contains a nozzle for each cartridge/filter — usually up to three cartridge filters per pipe. As the pulse of air reaches the nozzle, it is accelerated through the smaller diameter, creating a low-pressure center, or Venturi, which pulls in surrounding air through the filter in a counter-flow direction. The rated flow of compressed air per pulse is usually 3 to 6 cubic feet, with normal pulse durations of .15 to .5 second. One valve typically opens every 15 seconds.
- **Fume Extraction System with Dry scrubber**: In order to arrest the Fume generated during charging of solid materials in Resin Reactors at an elevated temperature, Fume extraction system is to be installed. The underlying principle of Fume Extraction system is counter current absorption, where fume rich in content of organic materials is brought in to contact with fresh water circulated counter currently in absorption Tower. The packing materials used in Tower are pall rings made of corrosion resistant polymerised products. A blower having the suitable capacity through hoods & ducts sucks the Fume. Fresh air after scrubbing is to be vented to the atmosphere through the 30 meter stack.
- **Air Emission control from Resin reactor** : Air emission streams from resin reactor vessels during resin making is passed through a condenser where the solvent vapours and steam (azeotrope) condensate and is collected in a separator. Thereafter, the separation of immiscible liquids is done and the solvent reused. Hence, emission to the atmosphere contains almost clean air, as the design efficiency of condensers is almost 100%. Prior to the reaction emissions, there is emission of phthalic dust during charging (while manufacturing alkyd resin only). Phthalic is odorous.

Emission during charging is sucked into scrubber, where most of the phthalic removed before venting. The scrub air is then passed through charcoal bed which absorb all the odour and clean air is released into the atmosphere

- **Solvent Management Plan**

  Waste solvent is mainly generated from cleaning of various process equipment, spent solvent is processed in Solvent Recovery Plant (SRP). Recovered solvent is re-used back into the process/cleaning of various process equipment. Residue generation from distillation process will be reused back into the operations or sent to co-processing

- **Monitoring of solvent losses**

  Workplace VOC monitoring through hand held VOC meter (photoionization detection (PID) sensor technology) is carried out at the shop floor.

- Fire /Explosion (Standard Operation during Fire) will be followed
- Major Spillage / Tanker Toppling / Monomer Spillage will be managed:
- Precautions to be taken during Transportation and storage of raw materials:
- Safety Measures for Monomer/Solvent and Styrene storage will be taken
- Evolution of large quantities of fumes / smoke due to organic fires will be managed efficiently:
- **During the Crisis:** Dissemination of information about the nature of the incidents, actions taken and instructions to the public through Public Address System with Police, mass media such as Mass-SMS, What App messages, Telephonic contact with schools and other organisation / public institutions etc. about protective measures to be taken, evacuation, etc. are the important steps during this phase.

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:-

Table1: Basic details

Name of the Project: Integrated Paint Manufacturing unit located 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	29°28'11.35"N
3.	Longitude	76°54'4.98"E
4.	Gross Plot Area	283500 Sqm
5.	Net Plot Area	283500 Sqm
6.	Total Built Up area	189945 Sqm
7.	Total Green Area with (33%)	93555 Sqm(33% of net plot area)
8.	Rain Water Harvesting Pits (with size)	Roof water & Strom-water reservoir (24m x 36m x 3m) and (40m x 36m x 3m) will be constructed. We will also be providing 23 Nos. of rainwater recharge pits (i.e., one per acre of greenbelt, 250 mm dia and 1000 mm depth) subject to approval from ground water authorities.
9.	STP Capacity &ETP	30 KLD(STP) &150 KLD(ETP)
10.	Total Parking	As per zoning plan given by HSIIDC vid no.

			HSIIDC/IPD/1401, Dated: 20-12-2021
11.	Organic Waste Converter		1 Nos.
12.	Power Requirement		10 MVA
13.	Power Backup		4 x 2000 kVA + 2 x 1010 kVA Emergency Generator Sets
14.	Total Water Requirement		1439 KLD (1146 KLD Fresh + 138 KLD Industrial Reused + 132 KLD Industrial Recycled + 23 KLD Domestic Recycled
15.	Domestic Water Requirement		24 KLD
16.	Fresh Water Requirement		1146 KLD
17.	Treated Water		132 KLD Treated Effluent water + 23 KLD Treated Sewage water
18.	Wastewater Generated		136 KLD Effluent + 23 KLD Sewage
19.	Solid Waste Generated		248 KG/DAY Organic Non-Hazardous Waste + Inorganic Non-Hazardous Waste as and when generated + 962 MT/Annum Hazardous Waste
20.	Biodegradable Waste		248 KG/DAY
21.	Total Cost of the project:	i) Land Cost	Rs. 225 Cr. (Land Cost) Rs. 180 Cr. (Building & Construction Cost) Rs. 650 Cr. (Plant & Machinery Cost) Rs. 205 Cr. (Misc.)
		ii) Construction	
22.	EMP Budget **(per year)**	iii) Capital Cost	Rs. 62.60 Cr (Capital Cost) Rs. 3.28 Cr (Recurring Cost) CER Cost: Rs. 6.5 Cr. For five years
		iv) Recurring Cost	
23.	Incremental Load in respect of:	i) PM 2.5	0.008 µg/m^3
		vi) PM 10	0.0135 µg/m^3
		vii) SO_2	0.0135 µg/m^3
		viii) NO_2	0.830 µg/m^3
		ix) CO	0.75 mg/m^3
24.	Construction Phase:	v) Power Back-up	750 KVA
		vi) Water Requirement & Source	HSIIDC Water Supply
		vii) STP (Modular)	1
		viii) Anti-Smoke Gun	1and wheel washing facility

Table 2: A. Environmental Management Plan Expenditure (Construction and Operations Phase)

S. No	Head	Approximate Capital Cost (crore)	Approximate recurring cost per annum (Crore)	Indicative Basis for cost estimate
1	Air Emission Management	13.00	0.30	***Operation Phase – Capital Items***
				Installation of Dust collector, scrubber, Fume extraction system etc. and adequate stack, CEMS etc.
				Operation Phase – Recurring Items
				Cost of stack monitoring and maintenance
				Construction Phase Items
				Spraying of water during construction and wheel washing system,
2	Water Pollution Control and water conservation Management	20.50	1.32	***Operation Phase – Capital Items***
				Installation of ETP, STP, Manpower cost, cost of chemicals, CEMS, etc. Rain-water harvesting and water conservation efforts cost
				Operation Phase – Recurring Items
				ETP inlet and outlet samples monitoring Maintenance of Rainwater harvesting and water conservation etc. (/ Wash Water Recycling/ Low Flow Fixtures/Flow Meters)
				Construction Phase Items
				Mobile Toilets and Mobile STPs
‘3	Noise Management	0.30	0.02	***Operation Phase – Capital Items***
				Installation of Acoustic enclosure
				Operation Phase – Recurring Items
				Noise Monitoring Cost
				Construction Phase Items
				Noise Barricading Sheets
4	Solid and hazardous waste management	5.00	0.70	***Operation Phase – Capital Items***
				Membership of TSDF, storage area for different type of waste
				Operation Phase – Recurring Items
				Cost of transportation and storage of Solid and hazardous waste
				Construction Phase Items
				C&D Waste Management

S. No	Head	Approximate Capital Cost (crore)	Approximate recurring cost per annum (Crore)	Indicative Basis for cost estimate
				(Collection, Handling, Storage, Transportation & Disposal) cost
5	Greenbelt including Miyawaki Forest	0.70	0.33	**Capital cost**
				Greenbelt development cost
				Recurring Cost
				Greenbelt maintenance cost
6	Renewable Energy Initiatives	0.30	0.02	Solar Street Lights, solar water heaters etc.
7	Occupational health	0.80	0.09	***Operation Phase – Capital Items***
				Occupational Health care centre, Ambulance
				Operation Phase – Recurring Items
				For annual health check-ups and work-place monitoring
				Construction Phase Items
				Employee Health Check-up
8	Fire and safety	22.0	0.50	Fire Hydrant, Sprinkler network, detector, protection and alarm system, Fire tender cum emergency rescue vehicles, safety feature on various equipment, machineries, tanks and other areas. Emergency and rescue devices and equipment
Total		62.60	3.28	

Table 3 : Socio Economics Expenditure

Sr. No	Activity	Total Expenditure (INR) in Cr
1	Installation of Air Purification Towers	3.5
2	pond to be developed at village Azizullapur ID 02HRPPTPAN0001AZIZ001 Or any other suitable pond in consultation with SEAC	1.0
3	Shelters for Homeless in coordination with District Administrator	1.0
4	Providing solar lighting facility to nearby Government schools	1.0
	Grand Total (in Cr)	6.5

Table 4: specifications details

Description	Fuel	Specification	Stack height
Thermopacs (Thermic fluid heater)	HSD/ Gas	20 Lacs Kcal/Hr	30 M
Boiler	HSD/ Gas	2TPH	30 M
Boiler	HSD/ Gas	0.5TPH	30 M
Emergency backup Generator	HSD/ Gas	2MVA	30 M
Emergency backup Generator	HSD/ Gas	1MVA	30 M

Table 5: Equipment list

Sl. No	List of Major Equipment	Water Base
Water Based Paint Manufacturing Block		
1	Twin Shaft Disperser	10
2	Mixers	30
3	Packing machines	9
4	Charge Hoppers	9
5	Minor Charge Hopper	8
6	Pug mills	6
Solvent Based and wood finish Paint Manufacturing Block		
7	Twin Shaft Disperser	8
8	Mixer	25
9	Sand Mill	6
10	Over Head Mixers	12
11	Tinter Tank	20
12	Packing machines	8
Resin Manufacturing Block		
13	Reactor	9
14	Blender	10
15	Leaf Filters	7
Emulsion Manufacturing Block		
16	Reactors	8
17	Pre Emulsion tanks	17
18	Condensers	8

The discussion was held on certified compliance report,mosaic plan,traffic circulation plan,parking plan,location of STP on plan, RWH, elevation plan,air simulation plan,forest NOC,water assurance, distance of wildlife sanctuary from the project site, self- contained note,online offline emergency plan etc and certain observations were raised as following:-

1. The PP shall submit the Green Belt development plan, provision of Miyawali Forest in 9000sqm, details of existing trees with girth and species.
2. The PP shall submit the C& D Waste details
3. The PP shall submit the revised RWH @90mm of rainfall
4. The PP shall submit the revised EMP including socio economic component for pond to be developed at village Azizullapur ID 02HRPPTPAN0001AZIZ001, shelter home , a smog tower and 10% of solar power of power required
5. The PP shall submit the MOU with authorized vendor for hazardous waste disposal
6. The PP shall submit the MOU with a STP for using treated water
7. The PP shall submit the undertaking that no ground water will be used during construction
8. The PP shall submit the details of scrubber along with chemicals to be used for ammonia
9. The PP shall submit the details maximum 99% recovery of solvent in distillery unit
10. The PP shall submit the details of supreme court order dated 460/2004 Goa Foundation
11. The PP shall install online monitoring system for VOC

12. The PP shall submit the undertaking for not using fresh water in greenery and filter back wash
13. The PP shall submit the using gas based generator set
14. The PP shall submit the undertaking that excess solar power will be put into grid after agreement
15. The PP shall submit the elevation plan
16. The PP shall submit approved building plan from the competent authority
17. The PP shall submit the Traffic circulation plan
18. The PP shall submit the Parking plan
19. The PP shall submit the location of STP on plan
20. The PP shall submit the location of RWH structure on plan
21. The PP shall submit the water assurance from the competent authority
22. The PP shall submit the power assurance from the competent authority
23. The PP shall submit the sewer permission
24. The PP shall submit the dual plumping plan
25. The PP shall submit the location of OWC along with area
26. The PP shall submit the location of DG set
27. The PP shall submit the Forest NOC
28. The PP should submit key plan of sampling locations, primary micromet data, DG/Vehicular Emissions data, DAT files (input and output), Isoplets of PM10, PM2.5, So2, NO2, CO vis a vis wind rose.
29. The PP shall submit the Geo technical report
30. The PP shall submit the analysis report of soil, air, water, noise etc. from the competent authority
31. The PP shall submit the undertaking the chemicals shall not be stored above the threshold limit
32. The PP shall submit the approval of boiler inspector
33. The PP shall submit the safety plan for boiler
34. The PP shall submit the conservation plan approval from Chief wildlife warden
35. The PP shall submit the plan for existing trees
36. The PP shall submit thedetails of step emission of reactions
37. The PP shall submit the details and precaution to be carried out for less frequency high hazard incidents
38. The PP shall submit the details of catalyst used in the reaction and their recovery
39. The PP shall submit the undertaking regarding the uses of gas based generator set
40. The PP shall submit thedetails of incineration waste at page no. 55
41. The PP shall submit affidavit mentioning that adequate studies have been carried out to ascertain that there would not be any obstruction or impediment in general traffic in vicinity of the project due to the said expansion of the project
42. The PP shall submit affidavit mentioning that the no. of in-bound & out-bound vehicles (____PCU/Hr.) and the running hours per day (_____) of DG sets considered while undertaking the studies for evaluating the "Incremental Pollution Load" and those are true to best of our knowledge.
43. The PP shall submit affidavit mentioning that the proposed & installed DG sets & fuel to be used would be as per NCAP/GRAP
44. The PP shall submit affidavit mentioning that no untreated water would be released inside or outside the project or anywhere; waste water would be treated to tertiary level & would be used with the installation of "Dual plumbing".

The documents were placed before the committee and committee after discussion considered the reply. After deliberations the Committee was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following specific and general stipulations:

A. Specific Conditions:-

1. The PP shall get the mandatory registration of boiler as per the Boiler Act 1923 and rules 1950 from the Chief Boiler Inspector.
2. The PP shall ensure effective functioning of safety, drain valve, monitoring instruments of critical parameter through regular checks and maintain the record for it.
3. Effluent shall be treated in the 150 KLD and should adhere to the HSPCB/CPCB

Guidelines.

4. 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.
5. Separate wet and dry bins must be provided at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
6. The PP shall prepare an Action Plan for solvent recovery and their emission control and details of solvent to be used.
7. The PP shall make arrangement to control the process emission from the proposed unit.
8. The PP shall monitor the ambient air quality of emissions from the project shall include VOC, other process specific pollutants like NH_3, Cl, HBr, H_2S, HF etc. (as applicable).
9. The PP shall prepare the work zone monitoring arrangements for hazardous chemicals.
10. The PP shall prepare the detailed effluent treatment scheme including segregation of effluent streams for unit adopting ZLD.
11. No lead and chromium based paint shall be manufactured.
12. The PP shall prepare the action plan for odour control and utilization of MEE/Dryers Cells.
13. The PP shall submit the details of incinerator, if to be installed.
14. The PP shall prepare the Risk Assessment Action Plan for safety, storage and handling of hazardous chemicals.
15. The PP shall use material safety data sheets for all the chemicals being used or will be used.
16. The PP shall ensure health and safety of the workers engaged in handling of toxic materials.
17. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 93555 Sqm (33%) shall be provided for green area development.
18. 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.
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 fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.
21. 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
22. 23 Rain water harvesting recharge pits shall be provided for ground water recharging as per the CGWB norms and one pond
23. The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 23 RWH pits.
24. The PP shall get permission of 2.0 &0.5 TPH boiler from Haryana Boiler Inspection Department
25. The PP shall record the details of total organic solvent used for the process in the unit
26. The PP shall take all precautions to the use of chemicals and their vapors to manage the fire accident.
27. As proposed by the project proponent, zero liquid discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Domestic sewage shall be disposed off through septic tank/soak pit

28. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines
29. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
30. Solvent management shall be carried out as follows:
    (i) Reactor shall be connected to chilled brine condenser system
    (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
    (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 99% recovery
    (iv) Solvents shall be stored in a separate space specified with all safety measures
    (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done
    (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses
    (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation
31. Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond
32. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps
33. Process organic residue and spent carbon, if ay, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF
34. The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
35. The company shall undertake waste minimization measures as below:-
    i) Metering and control of quantities of active ingredients to minimize waste.
    ii) Reuse of by-projects from the process as raw materials or as raw material substitutes in other processes
    iii) Use of automated filling to minimize spillage
    iv) Use of Close Feed system into batch reactors
    v) Venting equipment through vapour recovery system
    vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation
36. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Dire fighting system shall be as per the norms.
37. Raw material storage should not exceed threshold limit.
38. Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance

B. Statutory Compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for wildlife, if applicable.

iii. The Project proponent shall prepare a Site-Specific Conservation Plan &Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendation of the approved Site Specific Conservation Plan/ Wildlife Management Plan shall be implemented in consultation with the state Forest Department. The implementation report shall be furnished along with the six monthly compliance report (incase of the presence of schedule-1 species in the study area).

iv. The project proponent shall obtain Consent to establish/operate under the provision of air (Prevention &Control pollution) Act, 1981 and the water (Prevention & control of pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.

v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as attended from time of time.

vi. The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MJVA), 1989.

I Air quality monitoring and preservation:

i. The project proponent shall install 24*7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.

iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant o the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOX in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.

iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within Permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

vi. National Emission Standard for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608 (E) dated 21st July, 2010 and amended form time to time shall be followed.

vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16th November,2009 shall be complied with

II Water quality monitoring and preservation:

i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD).

ii. As already committed by the project proponent. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).

iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.

iv. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

III Noise monitoring and prevention:

i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

ii. The overall noise levels in and around the plant areas shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986, viz. 75dB(A) during day time and 70 dB(A) during night time.

IV. Energy Conservation measures

i. The energy sources for lighting purposes shall preferably be LED based

ii. The PP will follow guidelines of ECBC required for industrial projects

V. Waste management

i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.Process organic residue and spent carbon, if any, shall be sent to cement industries, ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

ii. The company shall undertake waste minimization measures as below:-

a) Metering and control of quantities of active ingredients to minimize waste.
b) Reuse of by-products from the process as raw materials or as raw material substitutes in the other process.
c) Use of automated filling to minimize spillage.
d) Use of Close Feed system into batch reactors.
e) Venting equipment through vapors recovery system.
f) Use of high pressure houses for equipment clearing to reduce wastewater generation.

VI. Green Belt:

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

VII. Safety, Public hearing and Human health issues:

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP

, safe drinking water , medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.

iv. Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act.

VIII. Corporate Environment Responsibility:

i. The project proponent shall comply with the Corporate Environment Responsibility.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and /or shareholders/stake stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization .

iv. Action plan for implementing EMP and Environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority. The Year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted and for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.

IX. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely:PM10, SO_2 , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State government.

ix. The project proponent shall abide by the all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (protection) Act, 1986.

xii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.

xiv. The Regional Office of this Ministry shall monitor compliance of the stipulate conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.

xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Presentation & Control of Pollution), Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986. Hazardous and Other Wastes (Management &Transboundry Movement)Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other order passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.

xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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