

**Minutes of the 295<sup>th</sup> meeting of the State Level Expert Appraisal Committee held on 22/6/2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar.**

The 295<sup>th</sup> meeting of the State Level Expert Appraisal Committee (SEAC) was held on 22<sup>nd</sup> June, 2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar. Following members attended the meeting:

1. *Shri V. C. Soni, Vice Chairman, SEAC*
2. *Shri R. J. Shah, Member, SEAC*
3. *Dr. V. K. Jain, Member, SEAC*
4. *Shri V.N. Patel, Member, SEAC*
5. *Dr. Mayuri Pandya, Member, SEAC*
6. *Shri Rajesh I Shah, SEAC*
7. *Shri Hardik Shah, Secretary, SEAC*

The agenda of TOR/Scoping/Category 8 (a) cases, Appraisal & Reconsideration cases was taken up. Ten (10) cases of TOR/Scoping/Category 8 (a), two (2) cases of Reconsideration and nine (9) cases of Appraisal was taken up. The applicants made presentations on the activities to be carried out along with other details furnished in the Form-1 / Form-1A, EIA report and other reports.

1.	landmark superstar	Block No. 709, O.P. No. 134, F.P. No. 142, TPS No. 17, (Puna), Moje - Puna, Surat.	Appraisal case
<p>The project was taken up in the meeting of SEAC held on 27/04/2016. During the meeting held on 27/04/2016, it was presented that the project was to be developed by M/s Landmark Empires as per the form – I &amp; IA submitted along with the application, but now the project will be developed by M/s Dreamland Corporation. The project proponent was asked to submit form-I &amp; IA with revised details. Further it was presented that loading-unloading activity will be carried out in small tempo of size 2.0 m x 3.0 m. Loading-unloading activity will take approximate 30 min for each tempo. Considering the fact that total loading / unloading activity will take for 1800 times/day (6 times for each textile house x 300), it is assumed that total 30 tempos will be engaged in the loading / unloading activity at a time within premises and hence they have provided space for parking of 30 tempos at a time for loading / unloading. Traffic survey carried out on 60 m wide canal road approaching the project site, shows that the level of service of the road will be same as excellent “A” in existing as well as in the proposed scenario. There will be provision of natural ventilation in the form of air cut outs &amp; mechanical ventilation system, LED lights connected with solar panels, CO sensors connected with automatic alarm system &amp; mechanical ventilation system (i.e exhaust fans), oxygen level sensors with alarm system etc. in the basement. While discussing about the electrical fittings to be provided in the proposed textile house it was presented that there will be provision of one automatic power ON/OFF switch (MCB/RCB) for each textile house in case of fluctuation or higher power load to prevent electric overloading or sparking. It was presented that they will provide ISO &amp; DGMS approved flame proof electrical fittings. After detailed discussion, it was decided to appraise the project only after submission of the following:</p>			

1. Revised Form – I & Form – IA with the change in name of the applicant / project proponent. Land possession documents showing the ownership of land by the applicant, list of partners & directors of the company, copy of permission obtained for non agricultural use of the project site for commercial use or a copy of documents showing the correspondences made in this regard and a copy of agreement made between the land owners & developers (if any).
2. Realistic details on the travel distance of the staircases from the farthest corner of the floor and between the two consecutive staircases.
3. Details on budget allocated for the installation, operation & maintenance of the proposed Grey Sewage Treatment Plant. Location of the proposed Grey Sewage Treatment plant on the layout plan.
4. Lay out plan showing the areas designated for loading / unloading activity.
5. Plans showing the proposed fire fighting installations and floor wise evacuation plan in case of emergency.
6. Permission from the concerned competent authority for the proposed FSI of the project.
7. A notarized undertaking stating that any kind of manufacturing activity will not be allowed in the textile houses of the proposed project and any textile house will not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.

Project proponent submitted the above mentioned details along with revised Form-I & IA and the above mentioned notarized undertaking vide their letter dated 14/05/2016.

Project proponent along with their expert consultant attended the meeting & the project was appraised based on the revised Form –I & IA & additional details submitted as well as based on the facts presented before the committee.

They have submitted a copy of Sub-registrar's office index showing that the land of F.P.No. 142 admeasuring 8720 sq.m. has been purchased by M/s Dreamland Corporation through its authorized administrator. Travel distance to staircases from the farthest corner of the floor is more than 30 m at some places. It was presented that the capital investment for the proposed STP for grey sewage will be Rs. 35 lacs and operation & maintenance cost will be about Rs. 15 lacs per year. Layout plans showing location of the proposed STP & spaces for loading / unloading of goods at ground level & upper basement level have been submitted. Typical plan showing fire fighting installations like fire detection & fire alarm call point at common passages of each floor & basement, fire extinguishers, location of fire water tanks, automatic water sprinklers at common passages of each floor & basement, fire evacuation plan etc. has been submitted by them.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/51799/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Landmark Superstar

5.	Name of Developer	M/s. Dreamland Corporation.															
6.	Estimated Project Cost (Rs. In Crores)	Rs. 70 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>Land / Plot Area (m<sup>2</sup>): 8,711.0</li> <li>FSI area (m<sup>2</sup>): 34,840.12</li> <li>Total BUA (m<sup>2</sup>) : 55,293.10</li> </ul> <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>19,599.75</td> <td>34,840.12</td> </tr> <tr> <td>Ground Coverage(m<sup>2</sup>)</td> <td>2,613.30</td> <td>3,769.12</td> </tr> <tr> <td>Common Plot Area(m<sup>2</sup>)</td> <td>871.88</td> <td>878.00</td> </tr> <tr> <td>Max. building height(m)</td> <td>--</td> <td>66.45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	19,599.75	34,840.12	Ground Coverage(m <sup>2</sup> )	2,613.30	3,769.12	Common Plot Area(m <sup>2</sup> )	871.88	878.00	Max. building height(m)	--	66.45
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9.	Building Details	<ul style="list-style-type: none"> <li>No. of Buildings: 1</li> <li>No. of Blocks: 1</li> <li>Scope of buildings/blocks: 2 level basement + ground floor + 11 floors.</li> <li>No. &amp; size of Residential Units: --</li> <li>No. &amp; type of Commercial Units: 300 Textile Houses</li> <li>Details of amenities if any: --</li> </ul>															
10.	No. of expected residents / users	<p>Expected residents:  Expected shop users: 900  Expected visitors: 700</p>															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>Water requirement (KL/day): 14.50</li> <li>Source of water: Borewell water</li> <li>Waste water generation quantity (KL/day): 2.16</li> <li>Mode of disposal: Into septic tank &amp; soak pit.</li> <li>Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment.</li> </ul>															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>Total water requirement (KL/day): 53.50</li> <li>Fresh water requirement (KL/day): 34.0</li> <li>Source of water: Water supply from Surat Municipal Corporation (S.M.C)</li> <li>Waste water generation quantity (KL/day): 19.50</li> <li>Mode of disposal: Sewage to be generated will be segregated into the grey &amp; black sewage. Grey sewage will be treated in the proposed onsite STP for grey sewage. Treated grey sewage will be used for gardening &amp; flushing purpose within premises and remaining quantity of treated grey sewage along with the untreated black sewage will be discharged into the underground</li> </ul>															

		<p>drainage line of S.M.C.</p> <ul style="list-style-type: none"> <li>• In case of STP provision, capacity of STP: Yes. Grey Sewage Treatment Plant - 40 KL/day.</li> <li>• STP Technology: Grey Sewage Treatment Plant</li> <li>• Purposes for treated water utilization: Treated sewage will be utilized for gardening and toilet flushing</li> <li>• Quantity of treated water to be reused: 1. Gardening (KL/day): 3.50, 2. Flushing (KL/day): 16.0</li> <li>• Provision of dual plumbing system (Yes/No): Yes</li> <li>• Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be segregated into the grey &amp; black sewage. Grey sewage will be treated in the proposed onsite STP for grey sewage. Treated grey sewage will be used for gardening &amp; flushing purpose within premises and remaining quantity of treated grey sewage along with the untreated black sewage will be discharged into the underground drainage line of S.M.C.</li> <li>• Mode of disposal: As above.</li> </ul>																																
13.	Status of water supply and drainage line	Applied to SMC for water supply & drainage connection, which will be available to the project at the time of getting B.U permission only after completion of the construction phase.																																
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>439.00</td> <td>439.0</td> <td>Reuse for developing garden area</td> </tr> <tr> <td>Other excavated earth</td> <td>52,915.03</td> <td>1,424.32 m<sup>3</sup> will be reused for back filling.</td> <td>Disposal to other project site in consultation with SMC</td> </tr> <tr> <td>Construction debris</td> <td>581</td> <td>276 m<sup>3</sup> will be reused as a filler up to plinth level.</td> <td>Remaining quantity will be reused for outer road development</td> </tr> <tr> <td>Steel scrap</td> <td>22</td> <td>--</td> <td>Sold to local scrap vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>14</td> <td>--</td> <td>Sold to local vendors</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity</th> <th>Mode of waste</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	439.00	439.0	Reuse for developing garden area	Other excavated earth	52,915.03	1,424.32 m <sup>3</sup> will be reused for back filling.	Disposal to other project site in consultation with SMC	Construction debris	581	276 m <sup>3</sup> will be reused as a filler up to plinth level.	Remaining quantity will be reused for outer road development	Steel scrap	22	--	Sold to local scrap vendors	Discarded packing materials	14	--	Sold to local vendors	Type of waste	Generation Quantity	Mode of waste	Mode of Disposal / Reuse				
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			(Kg/day)	collection	
		Dry waste	108.00	Blue colour bucket	Through door to door waste collection system of SMC
		Wet waste	72.00	Green colour bucket	Through door to door waste collection system of SMC
		STP Sludge	05	On SDB	Disposal through door to door waste collection system of SMC
		<ul style="list-style-type: none"> <li>• Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste.</li> <li>• Capacity and no. of community bins to be placed within premises: 2.0 m<sup>3</sup> in each building</li> <li>• Landfill site where waste will be ultimately disposed by local authority: Khajod Landfill Site of S.M.C</li> </ul>			
15.	Parking Details	<ul style="list-style-type: none"> <li>• Total parking area requirement for the project as per GDCR:10,452.03 m<sup>2</sup></li> <li>• Parking area requirement for Commercial units as per GDCR:10,452.03 m<sup>2</sup></li> <li>• Total number of CPS requirement for the project as per NBC : 140</li> <li>• Number of CPS requirement for commercial units as per NBC: 140</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of CPS: 19,315.0 m<sup>2</sup> &amp; 610 CPS</li> <li>• Parking area provided in basement (m<sup>2</sup>) &amp; No. of CPS: 12,013.0 m<sup>2</sup> &amp; 376 CPS.</li> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of CPS: 1332.50 m<sup>2</sup> &amp; 48 CPS.</li> <li>• Parking area provided as mechanical parking in upper basement (m<sup>2</sup>) &amp; No. of CPS: 5969.50 m<sup>2</sup> &amp; 186 CPS.</li> </ul>			
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 60.0 m wide road in N direction &amp; 18.0 m wide road in W direction.</li> <li>• Number of Entry &amp; Exit provided on approach road/s: 3 gates will be provided.</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 7.50 m</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 7.50 m</li> <li>• Width of all internal roads: 7.50 m</li> </ul>			

17.	Details of Green Building measures proposed.	Use of fly ash based material, flush tank instead of direct flushing in toilets, foam type aerated coke, rain water harvesting, use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles in common areas, maximum use of natural light, provision of sewage treatment plant & reuse of treated sewage etc.																														
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply</li> <li>• Maximum demand: 1500 KVA</li> <li>• Connected load:</li> <li>• Source: DGVCL</li> <li>• Energy saving measures: use of LED lights for common building areas, garden &amp; basement &amp; these LED lights will run through solar panels, reflective/ white tiles in common areas, maximum use of natural light, three nos. of solar panels, each of 1.2 KWH capacity, on terrace floor etc.</li> <li>• DG Sets</li> <li>• No. and capacity of the DG sets: 03 x 125 KVA</li> <li>• Fuel &amp; its quantity: Low Sulphur High speed Diesel (HSD) &amp; quantity 55 L/h in each</li> </ul>																														
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• Fire extinguishers, hose reel, wet riser, yard hydrant, automatic sprinkler system (in passages of all floors &amp; basements), manually operated electric fire alarm system, automatic detection &amp; alarm system, underground fire water storage tank (100 KL x 2 nos), terrace tanks of 10 KL x 2 nos., provision of pump: one electric &amp; one diesel pump of capacity 1,620 L/min. &amp; one electric pump of capacity 180 L/min. having pressure 3.5 kg/cm<sup>2</sup> at terrace level etc.</li> <li>• The nearest fire station is Dumbhal fire station which is about 2 km away from the project site and a fire tender will take approximately 5-10 minutes to reach the project site.</li> </ul>																														
20.	Details on staircase																															
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table: ---</li> <li>• No. &amp; dimensions of RWH tank(s) : 05 no. of RWH tanks;</li> <li>• size: 4m x 3m x 3m</li> <li>• size of Bore: 350 mm dia.</li> <li>• size of pipe: 150 mm dia.</li> <li>• No. and depth of percolations wells: 05 nos. of percolating wells,</li> <li>• Details on Pre-treatment facilities: A de-silting chamber will be provided to de-silt and remove floating material through bar screen.</li> </ul>																												
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) : 358.0</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>): --</li> <li>• Lawn covered area (m<sup>2</sup>): 520</li> <li>• Total Green Area (m<sup>2</sup>): 878.0</li> <li>• Green Area % of plot area: 10.08 %</li> <li>• No. of trees and species to be planted:60 trees of Gulmohar, Neem tree, Coconut palm, Asopalav, Champa etc.</li> </ul>																												
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Particulars</th> <th>Approximate recurring cost per annum (Rs. In Lacs)</th> <th>Approximate Capital cost (Rs. In Lacs)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Air pollution</td> <td>0.50</td> <td>1.00</td> </tr> <tr> <td>2.</td> <td>Sewage treatment, reuse &amp; disposal</td> <td>35.0</td> <td>15.0</td> </tr> <tr> <td>3.</td> <td>Solid and hazardous waste management</td> <td>0.50</td> <td>0.50</td> </tr> <tr> <td>4.</td> <td>Green belt development</td> <td>0.35</td> <td>1.25</td> </tr> <tr> <td>5.</td> <td>Rain water harvesting</td> <td>0.50</td> <td>4.00</td> </tr> <tr> <td colspan="2" style="text-align: center;">Total</td> <td>2.35</td> <td>26.75</td> </tr> </tbody> </table>	Sr. No.	Particulars	Approximate recurring cost per annum (Rs. In Lacs)	Approximate Capital cost (Rs. In Lacs)	1.	Air pollution	0.50	1.00	2.	Sewage treatment, reuse & disposal	35.0	15.0	3.	Solid and hazardous waste management	0.50	0.50	4.	Green belt development	0.35	1.25	5.	Rain water harvesting	0.50	4.00	Total		2.35	26.75
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24.	Proposed dust control measures.	Water sprinkling, covered shed for cement unloading activity, tarpaulin cover on excavated earth & construction material etc.																												
25.	Use of Eco – friendly building materials.	Use of fly ash bricks & aerated blocks for water partition, paving blocks for parking areas & walk ways, Portland Pozzolona Cement for RCC structure, plaster & flooring etc.																												
26.	Details on amenities to be provided to construction workers.	Drinking water & tap water, sanitation facilities, domestic waste water collection facility, lunch space, first aid box, free medicines, doctor service, PPEs etc.																												
27.	Documents related to land possession	A copy of Sub-registrar's office index submitted by them shows that the land of F.P.No. 142 admeasuring 8720 sq.m. has been purchased by M/s Dreamland Corporation through its authorized administrator.																												

During the meeting, the project proponent was asked to make parking area provision as per NBC norms considering the mercantile activities to be carried out in the proposed textile market. Further they were suggested to make entire building sprinkler proof considering the type of goods to be stored in the proposed textile market and also considering the chances of fire in such type of projects. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Permission from the concerned competent authority for the proposed FSI of the project.
2. Notarized undertaking stating that the entire building will be provided with automatic sprinkler system.
3. Revised details on parking area provision for the project considering the actual parking area requirement for the project as per NBC norms.

2.	ITC Hotel	R.S. No.104/P, S.P.No. A, T.P.S. No. 31, Vastrapur, Ahmedabad	Refer back case.
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The SEIAA, Gujarat has accorded environmental clearance to M/s ITC Limited for the building construction project at R.S. No.104/P, S.P.No. A, T.P.S. No. 31, Vastrapur, Ahmedabad vide order no. SEIAA/GUJ/EC/8(a)/190/2013 dated 03/07/2013 for the built up area of 56,486.94 m<sup>2</sup> comprising of hotel building with 307 rooms, restaurant, coffee house, banquet hall & party hall, swimming pool, spa & fitness centre etc.

The project proponent vide proposal no. SIA/GJ/NCP/2023/2015 dated 11/09/2015 submitted revised Form-I & IA and requested for amendment of Environmental Clearance order dated 03/07/2013 for the proposed changes in the project.

The request for amendment in terms of proposed changes was considered during the meeting of SEAC held on 16/12/2015 and the additional information submitted by the project proponent was considered during the meeting of SEAC held on 10/02/2016. The project was recommended vide this office letter no. EIA-10-2015-7176-E-578 dated 15/03/2016 based on the decision taken in the meeting of SEAC held on 10/02/2016 for granting the amendment in Environmental Clearance order no. SEIAA/GUJ/ EC/8(a)/190/2013 dated 03/07/2013.

Based on the recommendation of the SEAC, the project was taken up in the meeting of SEIAA dated 19/03/2016. As per the decision taken during the meeting of SEIAA dated 19/03/2016, the project was referred back to SEAC vide letter No. SEIAA/GUJ/EC/8(a)/243/2016 dated 31/03/2016 for the following reason:

“To verify the details of greenbelt & parking area provided.”

The project proponent along with their expert consultant attended the meeting and it was presented that from the total plot area of 8,887.50 m<sup>2</sup>, ground coverage is 2,582.13 m<sup>2</sup>, open surface parking area proposed is 816.61 m<sup>2</sup> and green belt area is 905.84 m<sup>2</sup>. After considering of all the areas of ground coverage, open surface parking and green belt area, about 4,582.92 m<sup>2</sup> area remains balance. Further it was found that the layout plan presented during the meeting shows that separate areas have been designated for open surface parking & common plot.

After discussing the matter, it was decided to recommend the project again to the SEIAA Gujarat for grant of amendment in Environmental Clearance order no. SEIAA/GUJ/EC/ 8(a)/190/2013 dated 03/07/2013.

3.	Kish Developers	S No.190, 191/B,207 T.P. 84/B, Makarba, Ahemdabad	Appraisal case.
<p>The project was taken up in the meeting of SEAC held on 27/04/2016. During the meeting held on 27/04/2016, while asking by the committee, it was replied that any kind of construction activity has not yet been started for the proposed project. It was presented that traffic survey carried out on adjacent 18 m wide road shows that the road having carrying capacity of 1400 PCU will be adequate enough to accommodate the total traffic load of 888 PCU (Existing – 752 PCU + proposed - 136 PCU) in the proposed scenario. Further it was presented that the basements will be provided with mechanical ventilation system (exhaust fans) and designed to provide 12 air changes per hour during normal mode and 30 air changes per hour during fire mode in accordance with NBC. Carbone monoxide sensors associated with automatic speed controller of exhaust fans, combination of duct and ductless jet nozzle fan system will be adopted to push and pull the air in the car park from the intake point to the discharge point. The project proponent was suggested to plant trees on the periphery of the common open plot. After detailed discussion, it was decided to appraise the project further only after submission of the following:</p> <ol style="list-style-type: none"> <li>1. Full size project plans showing building wise &amp; floor wise built up area, FSI area, Floor area details &amp; plot area statement.</li> <li>2. Justification for the proposed changes along with the supporting documents showing that the proposed commercial project is permissible at this location and availability of the proposed FSI to the project.</li> <li>3. Explore the possibility of providing two separate ramps and revised plans showing location of both the ramps.</li> <li>4. Plans showing the floor area &amp; maximum travel distance of the staircase from the farthest corner of the floor, distance between the two consecutive staircases and provision of staircases.</li> <li>5. Minimum fire water requirement for the proposed project based on the fire study.</li> <li>6. A notarized undertaking stating that any kind of manufacturing activity will not be allowed in the commercial units of the proposed project and any commercial unit will not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.</li> <li>7. Perspective view of the building(s) to be constructed along with the materials used such as fibers, glass, etc. on the facades or external walls and the impacts thereof on the nearby buildings / residents due to heat island effect and emissions from the air conditioning systems.</li> </ol> <p>Project proponent vide their letter dated 18/03/2016 submitted the above mentioned details along with the project plan, perspective view of the buildings to be constructed &amp; notarized undertaking as mentioned hereinabove.</p> <p>Project proponent along with their expert / consultant attended the meeting for appraisal of the project. During the meeting, the project was appraised based on the details submitted as well as facts presented before the committee.</p> <p>It was presented that the project site falls in R1 Zone as per the zoning certificate obtained from Ahmedabad Municipal Corporation and as per the provisions of GDCR 2021, the maximum permissible FSI is 2.7 for the projects falling under the R1 Zone. Further the mercantile 1&amp;2, Business etc. activities</p>			

are the permissible activities in R1 Zone as per GDCR 2021. Plan showing provision of total 3 ramps has been submitted. There will be two staircases in each building block and one stair case in each individual corporate house. Maximum travel distance to the staircase from any of the farthest corner of the floor will not be more than 30 m. Underground fire water storage tank of 300 KL capacity and 60 KL (10 KLx 6) capacity overhead water storage tanks will be provided. Further it was presented that mechanical parking will be provided in basement and the parking area provision for the project after the proposed mechanical parking in basement will be 48,197.24 m<sup>2</sup> [22,423.66 m<sup>2</sup> in basement + 22,423.66 m<sup>2</sup> as mechanical parking in basement + 1,186.92 m<sup>2</sup> in hollow plinth + 2163.0 m<sup>2</sup> as open surface parking] which is equivalent to 1536 CPS against the parking requirement of 1536 CPS as per NBC norms. .

Salient features of the project are as under:

Sr. No.	Particulars	Details															
1.	Proposal is for	Change in scope / Expansion [SIA/GJ/10864/2016]															
2.	Type of Project	Residential & commercial Project															
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)															
4.	Name of the project	Commercial Project															
5.	Name of Developer	M/s Kish Developers															
6.	Estimated Project Cost (Rs. In Crores)	90 Crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 14,222.0</li> <li>• FSI area (m<sup>2</sup>):38,396.70</li> <li>• Total BUA (m<sup>2</sup>):77,752.94</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>38,399.4</td> <td>38,396.70</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>---</td> <td>4,627.57</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>1,422.2</td> <td>1,423.0</td> </tr> <tr> <td>Max. building height (m)</td> <td>45 m</td> <td>45 m.</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	38,399.4	38,396.70	Ground Coverage (m <sup>2</sup> )	---	4,627.57	Common Plot Area (m <sup>2</sup> )	1,422.2	1,423.0	Max. building height (m)	45 m	45 m.
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9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 3 buildings &amp; 17 corporate houses.</li> <li>• No. of Blocks: 3 buildings &amp; 17 corporate houses.</li> <li>• Scope of buildings/blocks: 2 buildings - 2 level basement + ground floor + 14 floors. 1 building - 2 level basement + ground floor + 13 floors. Corporate houses – Ground floor + 2 floors.</li> <li>• No. of residential units: ---</li> </ul>															

		<ul style="list-style-type: none"> <li>•No. &amp; type of Commercial Units: 11 shops, 17 corporate houses and 513 offices.</li> <li>•Details of amenities if any: No</li> </ul>												
10.	No. of expected residents / users	3710 occupants and 300 visitors												
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>•Water requirement (KL/day): 21.75</li> <li>•Source of water: Local water tankers.</li> <li>•Waste water generation quantity (KL/day): 5.73</li> <li>•Mode of disposal: Into septic tank &amp; soak pit.</li> <li>•Details of reuse of water, if any: No</li> </ul>												
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>•Total water requirement (KL/day): 187.9</li> <li>•Fresh water requirement (KL/day): 60.5</li> <li>•Source of water: Water supply from Ahmedabad Municipal Corporation (AMC)</li> <li>•Waste water generation quantity (KL/day): 145.2</li> <li>•Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening &amp; flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage line of AMC.</li> <li>•In case of STP provision, capacity of STP: Yes, 175 KL/day</li> <li>•STP Technology: biological treatment</li> <li>•Purposes for treated water utilization: Gardening and flushing</li> <li>•Quantity of treated water to be reused:1.Gardening (KL/day):6.40 2. Flushing (KL/day):121.0</li> <li>•Provision of dual plumbing system (Yes/No): yes</li> <li>•Quantity and type (treated/untreated)of water to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening &amp; flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage line of AMC.</li> <li>•Mode of disposal: as above.</li> </ul>												
13.	Status of water supply and drainage line	Available in the area.												
14.	Solid waste Management	<p><b>Construction Phase:</b></p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>2,500</td> <td>2,500</td> <td>Will be used for greenbelt development.</td> </tr> <tr> <td>Other excavated earth</td> <td>47,500</td> <td>21,000 m<sup>3</sup> will be used for back filling and raising</td> <td>Remaining will be send to their other project site for filling up of the low lying</td> </tr> </tbody> </table>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	2,500	2,500	Will be used for greenbelt development.	Other excavated earth	47,500	21,000 m <sup>3</sup> will be used for back filling and raising	Remaining will be send to their other project site for filling up of the low lying
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				plinth level.	areas.																
		Construction debris	700	350 m <sup>3</sup> will be used for development of internal road and back filling.	Remaining will be send to their other project site for filling up of the low lying areas.																
		Steel scrap	20	0	Sold to vendors																
		Discarded packing materials	10	0	Sold to vendors																
		<b>Operation Phase:</b>																			
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STP Sludge	20	Green Bins	Hand over to AMC																		
		<ul style="list-style-type: none"> <li>•Details of segregation if to be done: yes</li> <li>•Capacity and no. of community bins to be placed within premises: 15 kg and 40 number of community bins to be placed in common area</li> <li>•Landfill site where waste will be ultimately disposed by local authority: final disposal at the nearest municipal solid waste collection point of AMC.</li> </ul>																			
15.	Parking Details	<ul style="list-style-type: none"> <li>•Total parking area requirement for the project as per GDCR:19,198.35 m<sup>2</sup></li> <li>•Parking area requirement for Commercial units as per GDCR: 19,198.35 m<sup>2</sup></li> <li>•Total number of CPS requirement for the project as per NBC :1536</li> <li>•Number of CPS requirement for commercial units as per NBC:1536</li> <li>•Total Parking area provided (m<sup>2</sup>) &amp; No. of CPS: 48,197.24 &amp; 1536 CPS</li> <li>•Parking area provided in basement (m<sup>2</sup>) &amp; No. of CPS: 22,423.66 &amp; 700 CPS</li> <li>•Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of CPS:1,186.92 &amp; 42 CPS</li> <li>•Parking area provided as open surface (m<sup>2</sup>) &amp; No. of CPS:2,163.0 and 94 CPS.</li> <li>• Parking area provided as mechanical parking in basement (m<sup>2</sup>) &amp; No. of CPS: 22,423.66 &amp; 700 CPS</li> </ul>																			
16.	Traffic Management	<ul style="list-style-type: none"> <li>•Width of adjacent public roads: 18 m wide proposed roads on two sides.</li> <li>•Number of Entry &amp; Exit provided on approach road/s: 4 gates +1 entry for basement.</li> <li>•Width of Entry &amp; Exit provided on approach road/s: 6 m</li> <li>•Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m to 4.5 m.</li> <li>•Width of all internal roads:6 m &amp; 4.5 m.</li> </ul>																			
17.	Details of Green	Maximum use of natural lighting through architectural design, energy																			

	Building measures proposed.	efficient motors & pumps, water efficient taps, water meters, solar lights in open & landscape areas, use of aerated blocks & RMC, use of LED lighting fixtures and low voltage lighting, roof-top thermal insulation, rain water harvesting & ground water recharge through 4 nos. of percolating wells, provision of Sewage Treatment Plant and reuse of treated sewage etc.																								
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply: Maximum demand: 2.5 MW Connected load: ---</li> <li>• Source: Torrent Power Limited.</li> <li>• % of saving with calculations: ~30% by use of LED, solar lights and star rated energy efficient electronic consumer durables</li> <li>• Compliance of the ECBC guidelines (Yes / No), if yes, compliance in tabular form: only roof area</li> <li>• DG Sets: No. and capacity of the DG sets: 1 X 125 KVA Fuel &amp; its quantity: HSD, 25 litre/hr</li> </ul>																								
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• During the construction phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor &amp; ambulance service.</li> <li>• During operation phase (Commercial): Fire extinguishers, hose reel, wet riser, yard hydrant, manually operated electric fire alarm system, automatic sprinkler system in basement, underground static water storage tank-300 KL capacity, terrace tank -60 KL capacity (total capacity), refuge area at 5<sup>th</sup>, 8<sup>th</sup> and 12<sup>th</sup> floors, pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm<sup>2</sup> at terrace level etc.</li> </ul>																								
20.	Details on staircase																									
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table: ---</li> <li>• No. &amp; dimensions of RWH tank(s) : 4 Nos and 2.0m X 2.0 m X 3.0 m</li> <li>• No. and depth of percolations wells : 4 nos.</li> <li>• Details on Pre-treatment facilities : oil and grease removal and filter.</li> </ul>																								
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) : 400.0</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>): Included in lawn covered area.</li> <li>• Lawn covered area (m<sup>2</sup>): 1,023.0</li> <li>• Total Green Area (m<sup>2</sup>): 1,423.0</li> <li>• Green Area % of plot area: 11%</li> <li>• No. of trees and species to be planted: 215 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar.</li> </ul>																								

23.	Dust control measures	Spraying of water, Peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Allocation of Rs. 56.5 lacs & Rs. 10.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.
25.	Details of ecofriendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.
27.	Documents related to land possession	Copy of sub registrar's office index submitted by them shows that the N.A land of all the three survey numbers is in the name of M/s Kish Developers.

During the meeting, after detailed discussion, it was decided to consider the project only after submission of the following:

1. Compliance report in respect of the stipulated terms and conditions in the Environmental Clearance order no. SEIAA/GUJ/EC/8(a)/82/2012 dated 21/03/2012.

4.	Vision Infrastructure	Block No. 48, 50/p1/p1, 50/p1/p2, 50/p2,53,55, 56, 75, 76/p/2, Vill. Bakrol, Ta. Waghodia, Dist. Vadodara.	Screening & scoping
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The project was taken up in the meeting of SEAC held on 27/04/2016. During the meeting held on 27/04/2016, it was observed that an overhead high tension line is passing through the project site. after detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained for non agricultural use of block numbers 55 & 76/p or copy of correspondences made with concerned authority in this regard.
2. Full size project plans showing building wise & floor wise built up area, FSI area, floor area and plot area statement etc.
3. Status of availability of water supply, drainage connection and municipal solid waste collection facility by VUDA. A letter from VUDA stating that the above mentioned facilities will be available to the project and also clearly indicating the time limit within which the facilities can be availed to the project.
4. Details on actual parking requirement for the project as per NBC norms. Details on plot area of each individual type of duplex, its ground coverage & open area available within premises of each individual type of duplex for tree plantation & parking.
5. Layout plan showing gates & width of entry / exit, width of internal roads, peripheral open margin,

location of STP etc.

6. Copy of permission, if any, from concerned competent authority with regards to the overhead high tension line passing through the project site.

Project proponent submitted the above mentioned details along with the project plan showing built up area, FSI area & plot area statement vide their letter dated 14/05/2016.

Project proponent along with their expert / consultant attended the meeting for appraisal of the project. During the meeting, the project was further appraised based on the additional details submitted as well as facts presented before the committee.

Copy of N.A orders for B.No.55 & 76/p/2 submitted by them show that the land for residential use is in the name of the land owners and a copy of development agreement between the land owners & the developers i.e M/s Vision Infrastructure has already been submitted. It was mentioned that actual B.No. is 76/p/2 instead of 76/p. They have submitted a copy of minutes of 226<sup>th</sup> Board meeting of VUDA stating that the water supply and drainage network will be provided to the projects existing as well as coming up in the areas like Sinkandarpura, Sayajipura, Hanumanpura, Bakrol, Amodar etc. Car parking space of 15-16 m<sup>2</sup> will be provided in each individual bungalow. Copy of N.A permission obtained for the block numbers 50/p1/p1, 50/p1/p2 has been submitted them which mentions about the NOC obtained by the land owners with regards to the transmission lines passing through the project site and the condition of leaving requisite margins on both the sides of the lines. Layout plan showing provision of three gates, internal roads with 12 m, 9m & 7.5 m width and showing the location of STP has been submitted by them.

Salient features of the project

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/52204/2016]
2.	Type of Project	Residential & commercial Project
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)
4.	Name of the project	Residential & commercial Project
5.	Name of Developer	Vision Infrastructure
6.	Estimated Project Cost (Rs. In Crores)	90 Crores
7.	Whether construction work has been initiated at site? If yes, details thereof	No

8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 1,14,679.0</li> <li>• Net Land / Plot Area (m<sup>2</sup>): 1,12,844.43</li> <li>• FSI area (m<sup>2</sup>): 69,938.83</li> <li>• Total BUA (m<sup>2</sup>): 74,471.81</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%;">Permissible</th> <th style="width: 20%;">Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>80,275.30</td> <td>69,938.83</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>39,576.65</td> <td>33,657.70</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>11,284.44</td> <td>13,902.79</td> </tr> <tr> <td>Max. building height (m)</td> <td>40 m</td> <td>21 m</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	80,275.30	69,938.83	Ground Coverage (m <sup>2</sup> )	39,576.65	33,657.70	Common Plot Area (m <sup>2</sup> )	11,284.44	13,902.79	Max. building height (m)	40 m	21 m
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9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 680 duplexes, 7 blocks (Residential &amp; commercial), 1 block commercial.</li> <li>• No. of Blocks: 680 duplexes, 7 blocks (Residential cum commercial), 1 block commercial.</li> <li>• Scope of buildings/blocks: 7 residential &amp; commercial blocks – ground floor (parking &amp; shops) + 5 floors, Duplexes – Ground floor + 1 floor, 1 commercial block – ground floor only.</li> <li>• No. of residential units: 680 duplexes &amp; 132 flats.</li> <li>• No. &amp; type of Commercial Units: 28 shops</li> <li>• Details of amenities if any: No</li> </ul>															
10.	No. of expected residents / users	3710 occupants and 300 visitors															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>• Water requirement (KL/day): 21.75</li> <li>• Source of water: Local water tankers.</li> <li>• Waste water generation quantity (KL/day): 5.73</li> <li>• Mode of disposal: Into septic tank &amp; soak pit.</li> <li>• Details of reuse of water, if any: No</li> </ul>															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Total water requirement (KL/day): 562.87</li> <li>• Fresh water requirement (KL/day): 331.2</li> <li>• Source of water: Water supply from VUDA</li> <li>• Waste water generation quantity (KL/day): 400.24</li> <li>• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening &amp; flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage line of VUDA.</li> <li>• In case of STP provision, capacity of STP: Yes, 2 X 225 KL/day</li> <li>• STP Technology: biological treatment</li> <li>• Purposes for treated water utilization: Gardening and flushing</li> <li>• Quantity of treated water to be reused: 1. Gardening (KL/day): 62.56 2. Flushing (KL/day): 169.11</li> <li>• Provision of dual plumbing system (Yes/No): yes</li> <li>• Quantity and type (treated/untreated) of water to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening &amp; flushing purpose within premises. Only</li> </ul>															

		<p>remaining quantity of treated sewage will be discharged into the drainage line of VUDA.</p> <ul style="list-style-type: none"> <li>• Mode of disposal: as above.</li> </ul>																																								
13.	Status of water supply and drainage line	Available at 2.4 km from the site																																								
14.	Solid waste Management	<p><b>Construction Phase:</b></p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>750</td> <td>750</td> <td>Will be used for greenbelt development.</td> </tr> <tr> <td>Other excavated earth</td> <td>14250</td> <td>14,250</td> <td>Will be used for back filling and raising plinth level.</td> </tr> <tr> <td>Construction debris</td> <td>700</td> <td>700</td> <td>Will be used for development of internal road.</td> </tr> <tr> <td>Steel scrap</td> <td>25</td> <td>0</td> <td>Sold to vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>15</td> <td>0</td> <td>Sold to vendors</td> </tr> </tbody> </table> <p><b>Operation Phase:</b></p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste</td> <td>893.44</td> <td>White bins</td> <td>Sold to vendors</td> </tr> <tr> <td>Wet waste</td> <td>1,340.16</td> <td>Green Bins</td> <td>Hand over to VUDA</td> </tr> <tr> <td>STP Sludge</td> <td>20</td> <td>Green Bins</td> <td>Hand over to VUDA</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Details of segregation if to be done: yes</li> <li>• Capacity and no. of community bins to be placed within premises: 15 kg and 50 number of community bins to be placed in common area</li> <li>• Landfill site where waste will be ultimately disposed by local authority: VUDA.</li> </ul>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	750	750	Will be used for greenbelt development.	Other excavated earth	14250	14,250	Will be used for back filling and raising plinth level.	Construction debris	700	700	Will be used for development of internal road.	Steel scrap	25	0	Sold to vendors	Discarded packing materials	15	0	Sold to vendors	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	893.44	White bins	Sold to vendors	Wet waste	1,340.16	Green Bins	Hand over to VUDA	STP Sludge	20	Green Bins	Hand over to VUDA
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15.	Parking Details	<ul style="list-style-type: none"> <li>• Total parking area requirement for the project as per GDCR: 10,778.04 m<sup>2</sup></li> <li>• Parking area requirement for residential units as per GDCR: 10,367.72 m<sup>2</sup></li> <li>• Parking area requirement for Commercial units as per GDCR: 410.32 m<sup>2</sup></li> <li>• Total number of CPS requirement for the project as per NBC : 763</li> <li>• Number of CPS requirement for residential units as per NBC: 746</li> <li>• Number of CPS requirement for commercial units as per NBC: 17</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of CPS: 21,921.78 &amp; 926 CPS</li> <li>• Parking area provided in basement (m<sup>2</sup>) &amp; No. of CPS: 1,386.32 &amp; 43 CPS</li> <li>• Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of CPS: 1,185.46 &amp; 42 CPS</li> </ul>																																								

		<ul style="list-style-type: none"> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of CPS: 19,350 and 841 CPS.</li> </ul>																																				
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 18 m wide proposed roads on two sides.</li> <li>• Number of Entry &amp; Exit provided on approach road/s: 3 gates will be provided.</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 12 m (Entry and Exist) and 7.5 m (Entry and Exist)</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5.5 m</li> <li>• Width of all internal roads: 12, 9, 7.5 m</li> </ul>																																				
17.	Details of Green Building measures proposed.	Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, water meters, solar lights in open & landscape areas – 40 nos. of solar lights, use of aerated blocks & RMC, use of LED lighting fixtures and low voltage lighting, roof-top thermal insulation, rain water harvesting & ground water recharge through 4 nos. of percolating wells, provision of Sewage Treatment Plant and reuse of treated sewage etc.																																				
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply: Maximum demand: 4250 KVA Connected load: 4500 KVA</li> <li>• Source: MGVCL</li> <li>• % of saving with calculations: ~30% by use of LED, solar lights and star rated energy efficient electronic consumer durables</li> <li>• Compliance of the ECBC guidelines (Yes / No), if yes, compliance in tabular form: only roof area</li> <li>• DG Sets: No. and capacity of the DG sets: 2 X 62.5 KVA Fuel &amp; its quantity: HSD, 25 litre/hr</li> </ul>																																				
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• During the construction phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor &amp; ambulance service.</li> <li>• During operation phase (Commercial): Fire extinguishers, hose reel, down comer, manually operated electric fire alarm system, yard hydrant, underground static water storage tank-300 KL capacity, terrace tank -80 KL capacity (total capacity), pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm<sup>2</sup> at terrace level etc.</li> </ul>																																				
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>•Level of the Ground water table: 15 m</li> <li>•No. &amp; dimensions of RWH tank(s) : 29 No and 2.0m X 2.0 m X 3.0 m</li> <li>•No. and depth of percolations wells :29 no and 11 m</li> <li>•Details on Pre-treatment facilities : oil and grease removal and filter</li> </ul>
22.	Green area details	<ul style="list-style-type: none"> <li>•Tree covered area (m<sup>2</sup>) :4,000</li> <li>•Area covered by shrubs and bushes (m<sup>2</sup>):3,000</li> <li>•Lawn covered area (m<sup>2</sup>):6,902.79</li> <li>•Total Green Area (m<sup>2</sup>):13,902.79</li> <li>•Green Area % of plot area: 10%</li> <li>•No. of trees and species to be planted: 1700 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar.</li> </ul>
23.	Dust control Measures	Spraying of water, Peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Allocation of Rs. 93 lacs & Rs. 12.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.
25.	Details of ecofriendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.
27.	Documents related to land possession	Village form no. 7 & 12 for block numbers 50/p1/p1, 50/p1/p2, 50/p2, 56 & 75 shows that the N.A land for residential use is in the name of land owners. N.A order for block numbers 48 & 53 submitted by them shows that the land for residential use is in the name of same land owners. N.A orders for B.No.55 & 76/p/2 submitted by them show that the land for residential use is in the name of the same land owners. The land owners have entered into the development agreement with M/s Vision Infrastructure for the proposed project.

During the meeting, after detailed discussion, it was decided to consider the project only after submission of the following:

1. Plan / drawing showing parking area to be provided in each type of duplex. Bifurcation of open surface parking into the parking space to be provided within duplexes & parking space to be provided outside the duplexes.

5.	Avadh Infracon by Mr. Ashok Undhad.	Block No.211, T.P.13, F.P.No.131, Near Shyambaba Temple, V.I.P Road, Vill.	Refer back case.
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	Bharthana, Vesu, Surat	
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This is a commercial building construction project "Avadh Infracon" at Block No.211, T.P.13, F.P.No.131, Near Shyambaba Temple, V.I.P Road, Vill. Bharthana, Vesu, Surat proposed by Mr. Ashok Undhad. The project proponent has applied for obtaining Environment Clearance of the above project on 16/06/2015. Based on the application made on 16/06/2015, the project was appraised during the meeting of SEAC held on 19/08/2015. The additional details submitted by the project proponent with reference to the meeting dated 19/08/2015 was considered by the SEAC during the meeting held on 27/01/2016. Based on the decision taken during the meeting of SEAC held on 27/01/2016, the project was recommended by the SEAC vide letter dated EIA-10-2015-7110-E-425 dated 24/02/2016. Based on the recommendation of the SEAC, the project was taken up in the meeting of SEIAA dated 26/02/2016. As per the decision taken during the meeting of SEIAA dated 26/02/2016, the project was referred back to SEAC vide letter No. SEIAA/GUJ/EC/8(a)/184/2016 dated 29/02/2016 for the following reason:

"To verify the details of parking including provisions for visitors parking"

The project proponent along with their expert consultant attended the meeting and it was presented that instead of providing store at upper basement level they will now provide parking space only at upper basement level. After increase in parking area at upper basement level, the parking area provision will be 9,602.41 m<sup>2</sup> [2,419.26 m<sup>2</sup> as open surface parking + 3,333.71 m<sup>2</sup> in upper basement + 3,849.44 m<sup>2</sup> in lower basement] which is equivalent to 329 CPS against the parking requirement of 290 CPS as per NBC.

After discussing the matter, during the meeting, it was decided to consider the project only after submission of the following:

1. Revised project plans with built up area and FSI area details considering provision of parking space instead of store at upper basement level.

6.	Ambika Textile Hub	B.No:121+122, O.P.No.:08, F.P.No: 08, T.P.S. No.:35(Kumbharia-Saroli-SaniaHemad-Devadh), At-Devadh, Ta: Choryasi, Dist: Surat.	Appraisal case.
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The SEIAA, Gujarat has accorded environmental clearance to M/s A.R.Sangani for residential & commercial building construction project – "Ambica Residency" at Block No:121+122/SubPlot No:1, Vill:Devadh, Ta: Choryasi, Dist:Surat vide order no. SEIAA/GUJ/EC/8(a)/95/2013 dated 10/05/2013 for the built up area of 45,502.24 m<sup>2</sup> comprising of 8 buildings (Commercial buildings-3 nos., Residential buildings-05 nos.) housing total 260 flats, 181 shops and 141 offices.

The project proponent, vide proposal no. SIA/GJ/NCP/50251/2016 dated 23/02/2016 submitted revised Form I & Form IA and requested for amendment of Environmental Clearance order dated 10/05/2013.

The request for amendment for the proposed changes in terms of proposed expansion, change in scope (from the mixed type of project with residential & commercial units to completely commercial) and transfer of EC was considered during the meeting of SEAC held on 31/03/2016.

During the meeting held on 31/03/2016, They have submitted a notarized undertaking stating that any kind of manufacturing activity will not be allowed in the commercial units of the proposed project and any textile house will not be sold / allotted for storage of chemicals, flammable substances, explosives, fire

crackers or any other material of hazardous characteristics. It was presented that flame proof electrical fittings will be provided & details of the same were also presented. It was presented that traffic survey was carried out on a 60 m wide Surat – Kadodara road which shows that the Level of Service will change from “A” Excellent in existing scenario to “B” Very Good in the proposed scenario.

1. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel’s etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
2. Copy of partnership deed of M/s Bhavani constructions.
3. Copy of permission obtained from Airports Authority of India for the proposed building height.
4. Copy of permission obtained from Urban Development & Urban Housing Department, Gandhinagar for the proposed FSI.
5. Details on common amenities like drinking water facility, sanitary blocks, first aid etc. to be provided on each floor.
6. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.

Project proponent submitted the above mentioned details vide their letter dated 18/05/2016.

Project proponent along with their expert / consultant attended the meeting for appraisal of the project . During the meeting, the project was appraised based on the details submitted as well as facts presented before the committee.

They have submitted a copy of NOC obtained from Airports Authority of India for permissible building height of 80.0 m above the ground level. Copy of application made for obtaining permission from Urban Development & Urban Housing Department for the proposed FSI has been submitted and the permission is still awaited. It is proposed to provide mechanical parking in upper basement having height of 5.27 m. Operational & maintenance aspects of the mechanical parking were discussed during the meeting and they have mentioned that a qualified person will be appointed for the proposed mechanical parking. They have submitted a copy of partnership deed of Bhavani Enterprise instead of Bhavani Constructions. Separate sanitary blocks, water closets and first aid box will be provided on each floor of the proposed commercial building. Space for loading & unloading activities will be provided at ground level & in upper basement. Goods lifts access will be there at the ground level as well as at upper basement level.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/50251/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Ambika Textile Hub
5.	Name of Developer	M/s. Bhavani Construction

6.	Estimated Project Cost (Rs. In Crores)	Rs. 130 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 17,349.0</li> <li>• FSI area (m<sup>2</sup>): 68,163.53</li> <li>• Total BUA (m<sup>2</sup>) : 1,08,211.70</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>69,396.0</td> <td>68,163.53</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>8,674.50</td> <td>8,426.98</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>1,734.90</td> <td>1,735.0</td> </tr> <tr> <td>Max. building height (m)</td> <td>--</td> <td>43.31</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	69,396.0	68,163.53	Ground Coverage (m <sup>2</sup> )	8,674.50	8,426.98	Common Plot Area (m <sup>2</sup> )	1,734.90	1,735.0	Max. building height (m)	--	43.31
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Max. building height (m)	--	43.31															
9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 1</li> <li>• No. of Blocks: 1</li> <li>• Scope of buildings/blocks: 2 level basement + ground floor + 8 floors.</li> <li>• No. &amp; size of Residential Units: --</li> <li>• No. &amp; type of Commercial Units: 891 Textile Houses</li> <li>• Details of amenities if any: --</li> </ul>															
10.	No. of expected residents / users	Expected shop users: 3528 Expected visitors: 1500															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>• Water requirement (KL/day): 14.50</li> <li>• Source of water: Borewell water</li> <li>• Waste water generation quantity (KL/day): 2.16</li> <li>• Mode of disposal: Soak pit</li> <li>• Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment.</li> </ul>															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Total Water requirement (KL/day): 230.5</li> <li>• Fresh water requirement (KL/day): 133.5</li> <li>• Source of water: Water supply from S.M.C</li> <li>• Waste water generation quantity (KL/day): 180.40</li> <li>• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening &amp; flushing purpose within premises and only remaining quantity of treated sewage will be discharged into the underground drainage line of SMC.</li> <li>• In case of STP provision, capacity of STP: 200 KL/day</li> <li>• STP Technology: Ozonization Treatment</li> <li>• Purposes for treated water utilization: Treated sewage will be utilized in gardening and toilet flushing</li> <li>• Quantity of treated water to be reused: 1. Gardening (KL/day): 7.0 2. Flushing (KL/day): 90.0</li> <li>• Provision of dual plumbing system (Yes/No): Yes</li> <li>• Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP.</li> </ul>															

		<p>Treated sewage will be reused for gardening &amp; flushing purpose within premises and only remaining quantity of treated sewage will be discharged into the underground drainage line of SMC.</p> <ul style="list-style-type: none"> <li>• Mode of disposal: As above.</li> </ul>			
13.	Status of water supply and drainage line	Applied for connection of water supply and drainage connection in S.M.C. and the facilities will be available to the project at the time of getting B.U permission.			
14.	Solid waste Management	Construction Phase:			
			Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse
		Top Soil	867.0	867.0	Reuse for developing garden area
		Other excavated earth	1,26,428.12	1,958.86 m <sup>3</sup> will be reused for back filling.	Disposal to other project site in consultation with SMC
		Construction debris	1136	541 m <sup>3</sup> will be reused as a filler up to plinth level.	Remaining quantity will be reused for outer road development
		Steel scrap	43	--	Sold to local scrap vendors
		Discarded packing materials	27	--	Sold to local vendors
		Operation Phase:			
		Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
		Dry waste	427.00	Blue colour bucket	Through door to door waste collection system of SMC
	Wet waste	285.00	Green colour bucket	Through door to door waste collection system of SMC	
	STP Sludge	20	On SDB	Reused in gardening as manure within project premises	
	<ul style="list-style-type: none"> <li>• Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste.</li> <li>• Capacity and no. of community bins to be placed within premises: 2.0 m<sup>3</sup> for the building</li> <li>• Landfill site where waste will be ultimately disposed by local authority: Khajod Landfill Site of S.M.C</li> </ul>				
15.	Parking	• Total parking area requirement for the project as per GDCR: 20,449.05			

	Details	<p>m<sup>2</sup></p> <ul style="list-style-type: none"> <li>• Parking area requirement for Commercial units as per GDCR: 20,449.05</li> <li>• Total number of CPS requirement for the project as per NBC : 1363</li> <li>• Number of CPS requirement for commercial units as per NBC: 1363</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of ECS: 45,624.5 m<sup>2</sup> &amp; 1449 ECS</li> <li>• Parking area provided in basement &amp; mechanical parking in basement (m<sup>2</sup>) &amp; No. of ECS: 43,849.0 m<sup>2</sup> &amp; 1372 ECS</li> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of ECS: 1775.50 m<sup>2</sup> &amp; 77 ECS</li> </ul>				
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 45.0 m wide road in S direction &amp; 30.00 m wide road in W direction</li> <li>• Number of Entry &amp; Exit provided on approach road/s: 5 gates proposed.</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 7 m &amp; 6 m.</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5 m</li> <li>• Width of all internal roads: 7.5 m, 7 m &amp; 6 m.</li> </ul>				
17.	Details of Green Building measures proposed.	Use of fly ash based material, flush tank instead of direct flushing in toilets, foam type aerated coke, rain water harvesting, use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles in common areas, maximum use of natural light, provision of sewage treatment plant & reuse of treated sewage etc.				
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply Maximum demand: 5000 KVA Connected load: Source: DGVCL</li> <li>• Energy saving measures: use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles in common areas, maximum use of natural light etc.</li> <li>• DG Sets No. and capacity of the DG sets: 2 x 125 KVA Fuel &amp; its quantity: Low Sulphur High speed Diesel (HSD) &amp; quantity 55 L/h in each</li> </ul>				
19.	Fire and Life Safety Measures	Fire extinguishers, hose reel, wet riser, yard hydrant, automatic sprinkler system (in passages of all floors & basements), manually operated electric fire alarm system, automatic detection & alarm system, underground fire water storage tank (150 KL x 4 nos), terrace tanks of 15 KL x 4 nos., provision of pump: one electric & one diesel pump of capacity 1620 L/min. & one electric pump of capacity 180 L/min. having pressure 3.5 kg/cm <sup>2</sup> at terrace level etc.				
20.	Details on staircase					
	No. of Floor	Floor Area (m <sup>2</sup> )	No. of staircase	Width of Staircase (m)	No. of Fire Lift	Maximum Travel Distance up to the Staircase < 30 m
	G(H.P)+08	8656.54	08	2.00	08	28.02

21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>Level of the Ground water table: ---</li> <li>No. &amp; dimensions of RWH tank(s) : 07 no. of RWH tanks; size: 4m x 3m x 3m size of Bore: 350 mm dia. size of pipe: 150 mm dia.</li> <li>No. and depth of percolations wells: 07 nos. of percolating wells de</li> <li>Details on Pre-treatment facilities: A de-silting chamber will be provided to de-silt and remove floating material through bar screen</li> </ul>
22.	Green area details	<ul style="list-style-type: none"> <li>Tree covered area (m<sup>2</sup>) : 495.00</li> <li>Area covered by shrubs and bushes (m<sup>2</sup>): --</li> <li>Lawn covered area (m<sup>2</sup>): 1239.00</li> <li>Total Green Area (m<sup>2</sup>): 1734.00</li> <li>Green Area % of plot area: 10.00 %</li> <li>No. of trees and species to be planted: 83 trees of Gulmohar, Neem tree, Coconut palm, Asopalav, Champa etc.</li> </ul>
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Capital cost of Rs. 86.75 lacs and recurring cost of Rs. 6.35 lacs has been allocated towards purposes like rain water harvesting & ground water recharge, greenbelt development, environment monitoring & management, waste management, sewage treatment & reuse etc.
24.	Proposed dust control measures.	Water sprinkling, covered shed for cement unloading activity, tarpaulin cover on excavated earth & construction material etc.
25.	Use of Eco – friendly building materials.	Use of fly ash bricks & aerated blocks for water partition, paving blocks for parking areas & walk ways, Portland Pozzolona Cement for RCC structure, plaster & flooring etc.
26.	Details on amenities to be provided to construction workers.	Drinking water & tap water, sanitation facilities, domestic waste water collection facility, lunch space, first aid box, free medicines, doctor service, PPEs etc.
27.	Documents related to land possession.	N.A order submitted by them shows that the land for residential & commercial use is in the name of applicant.

During the meeting, after detailed discussion, it was decided to consider the project only after submission of the following:

1. Copy of partnership deed of M/s Bhavani Constructions.
2. Parking plan showing the parking area designated for trucks/tempo for loading / unloading of goods.
3. Copy of permission obtained from Urban Development & Urban Housing Department, Gandhinagar for the proposed FSI.

7.	Sun City	B.No.1056/B/2, Village: Barbodhan, Ta: Olpad, Dist: Surat.	Screening / scoping
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This is a township project proposed on plot area of 6,87,960.0 m<sup>2</sup> and the built up area of the project will

be 2,39,225.32 m<sup>2</sup>. As the built up area of the project is >1,50,000 m<sup>2</sup> and land area of the project is > 50 ha., it falls in the project activity 8(b) as per the schedule annexed with the EIA Notification – 2006.

Project will comprise of 1549 residential units of G+1 structure and 2 nos. of community halls. It was presented that the baseline monitoring has already been carried out during the summer season of 2016 and requested to consider the same for its incorporation in preparation of the EIA report for the proposed township project. Committee considered the request as the monitored data are not older than 3 years.

Presentation made during the meeting included the details like the proposed TORs, sampling location map, layout plan, project details, water generation & management, resource requirement etc.

During the meeting, the Terms of Reference proposed by them were considered by the committee and the following Terms of Reference, in addition to the TORs proposed by them, were prescribed for preparation of the EIA report for study area of 5 km radial distance from boundaries of the proposed project site.

1. Land ownership documents.
2. Copy of CRZ map prepared by one of the agencies authorized by the MoEF for carrying out the CRZ demarcation, on which the project boundary / facilities are superimposed and clearly indicating the proposed project location.
3. Details regarding status of application for the CRZ clearance.
4. Layout plan/s showing location of buildings, roads, D.G.sets, STP, composting facility, parking space, green belt (tree covered area), common plot, location of percolation wells etc. with different colour codes.
5. Provision of separate entry & exit and adequate margin all round the periphery for easy unobstructed movement of fire tender without reversing.
6. Implementation schedule of the project along with the bar chart.
7. A map of the study area delineating the major topographical features such as land use, drainage, locations of habitats, environmental sensitive areas, major constructions including roads, railways, pipelines, industries if any in the area are to be mentioned.
8. Land use map of the study area based on high resolution satellite imagery delineating the forest, agricultural land, water bodies, settlements and other cultural features. Details of change / creation in land use / land cover due to the proposed project.
9. Details of site topography along with the contour plan of the project area. Details of change in topography of the area due to the project.
10. Scope of the buildings to come up in the project as well as exact details of the residential units, service and commercial units as well as other amenities to come up in the project.
11. Height of the buildings to come up in the project. Break up of FSI, built up area plot wise, block wise plan & area statement.
12. Proposed fixed population as well as floating population including visitors considered for the proposed project.
13. Source of water supply during the construction phase along with the expected quantity of the water requirement. Waste water disposal plan during the construction phase.
14. Detailed fresh water consumption based on activity and area of the project as per the NBC norms. Exact source of water supply during operation phase. Permission from the concerned authority for

water supply.

15. Domestic waste water disposal plan during operation phase and permission of concerned authority for sewage disposal.
16. Details of the STPs with size of each unit, its location on the plan and its adequacy. Measures proposed to prevent odour nuisance due to the STP operation. Provision of dual plumbing for reuse of treated sewage for purposes like flushing, cooling tower make up etc.
17. Details of water conservation measures including provision of low water consuming devices.
18. Application wise break up of treated sewage utilization. Adequacy of open land area available for utilizing treated sewage for plantation / gardening. Suitability of use of treated sewage on the land with respect to the soil characteristic etc. shall be studied and a report in this regard shall be submitted.
19. Details of storm water management. Detailed plan to manage treated sewage in monsoon season. How it will be ensured that treated sewage won't flow outside the premises linked with storm water during high rainy days.
20. Details of soil excavation / filling required for the project along with its quantification based on backup calculations. Details with respect to proposed use / disposal of excavated soil. Plan for management, use and disposal of construction debris including excavated materials during the construction phase.
21. Details of top soil management plan during construction phase. If the topsoil is proposed to be preserved, the details relating to the quantity of topsoil stored, demarcated area on plan where it is stored along with preservation plan is to be given.
22. Engineering controls proposed for dust control including barricading the site during the construction period.
23. Details on impacts of air emission from the vehicles during the construction and operation phases, emission during loading, unloading, transportation and storage of construction materials etc. and mitigation measures thereof should be incorporated in the EIA report.
24. Details of the D.G. sets including fuel, quantity, stack height, location as well as the acoustic measures proposed to abate noise pollution.
25. Map of the study area clearly delineating the location of monitoring stations for air, water, soil and noise, superimposed with location of habitats are to be shown.
26. Details of base line ambient air quality monitoring data of one season other than monsoon for at least five locations in 5 km study area and impact analysis due to the proposed project. Parameters namely PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>x</sub> and CO shall be considered. Air quality modelling shall be carried out for prediction of impact of the project on the air quality of the area. The details of the model used and the input parameters used for modelling shall be provided. The air quality contours shall be shown on the location map clearly indicating the location of site, location of sensitive receptors, if any, and habitation. Latest available IMD data shall be utilized.
27. Details of incremental pollution load on the ambient air quality, noise and water quality due to the project.
28. Plan to curb noise likely to be generated from the use of construction equipments like mixers, vibrators etc. Impact of project construction/operation on the noise on account of construction

- equipment, construction/demolition activities and road traffic is to be studied.
29. Details with respect to the quantity of the generation of the garbage / Municipal Solid waste (biodegradable & recyclable waste), Bio Medical waste, electronic waste and mode of its treatment and disposal. Details of composting facility, if any proposed for composting of biodegradable waste.
  30. Details of authorized municipal solid waste facilities, biomedical treatment facilities and hazardous waste disposal facilities in the area should be included. Copy of permission obtained from concerned authority/ies should be submitted. Management and disposal of temporary structures, made during construction phase are to be addressed.
  31. Detailed parking plan showing accommodation of two wheelers and four wheelers, its adequacy for the project and norms adopted for the calculations. The details shall include the parking requirement on the basis of footfalls, as per present GDCR and National Building Code (NBC) guidelines for each individual component of the township. The backup calculations showing the bifurcation of the built up area according to the activity vis-à-vis parking area required shall be furnished. Mark the area of parking on the drawing showing the parking. Also details of visitors parking, whether considered in total parking calculations / provisions or not.
  32. Detailed traffic study & traffic management plan considering the floating and fixed population including visitors as well as existing traffic density on adjacent road during peak hours, projected increase in traffic density in operation phase of the project, carrying capacity of the existing roads, its adequacy during operation phase of the project and the measures to avoid the traffic congestion in the interior as well as the exterior roads.
  33. Base line status of the existing traffic, impact on it due to the project activities (prior to construction, during construction and at full site operation), carrying capacity of the existing roads and details of traffic management in and outside the project during construction and operation phase of the project.
  34. Base line ecological status. In case of any scheduled fauna, conservation plan should be provided.
  35. Details of existing trees to be protected / preserved / transplanted / removed. Detailed green belt development plan as per the CPCB guidelines, including area of tree plantation, its demarcation on the map, number and types of trees and budget allocation thereof. Also provide the break-up of the greenbelt viz. the tree covered and lawn covered area.
  36. Details of use of eco-friendly building material including fly ash bricks, fly ash paving blocks, RMC, lead free paints, use of PPC in concrete etc.
  37. Perspective view of the building(s) to be constructed along with the materials used such as fibers, glass, etc. on the facades or external walls and the impacts thereof on the nearby buildings / residents due to heat island effect and emissions from the air conditioning systems.
  38. Details of Green Building Concept to be adopted for the project.
  39. Details of provisions to make the project energy efficient and adoption of modes of alternative eco friendly sources of energy, solar water heater, solar street lighting, LED lighting. Measures proposed to comply with the ECBC norms for energy conservation.
  40. Scheme for rain water harvesting and ground water recharge with proper scientific calculations considering rainfall in the region, catchment area, land / soil characteristics, ground water recharge

rate, duration of rain water harvesting etc. Details of provisions for pre-treatment of the rainwater in the case of surface run off is to be harvested. Location of recharge percolation wells on the layout plan.

41. Details of seismic zone of the project and design aspects required to be adhered to as per national standards for buildings to make it earthquake proof.
42. Details of the basic amenities and welfare facilities to be provided to the construction workers to ensure that they do not ruin the existing environment.
43. Details of safety measures proposed for the construction workers including provision of personal protection equipment. Details of registration and provisions to be made by the project proponent to follow Building and other Construction Workers Acts and Rules and undertaking for the same.
44. Plan showing emergency exits as well as location of stair cases, lifts and pathways etc. and compliance to the GDCR and NBC in this regard.
45. Details of first aid / fire fighting and other emergency services to be provided during construction phase and operation phase including the training to be provided to the residential staff of the project as first aid providers, fire fighters etc.
46. Details of disaster management plan during operation phase of the project should also include scenario of natural catastrophe like earth quake, cyclone and floods in addition to other disasters. The plan should include the details of (i) Emergency lighting plan (ii) details of power back up system in the case of emergency (iii) fire fighting arrangements (iv) first aid arrangement (v) Training and Mock drill (vi) Emergency announcement system (vii) Signages (viii) location of emergency stair cases and pathways etc.
47. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay. Details of monitoring / supervision cell to monitor environmental aspects during construction phase as well as operation phase including provision of qualified construction safety officer.
48. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
49. A tabular chart with index for point-wise compliance of above TORs.

The above mentioned TORs shall be considered for the preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The project shall be appraised on receipt of the EIA report.

8.	Building construction project by Khyati Realties Ltd.	Block No.1, S. P. No. 1& 2 of F.P.No.1/1, 1/2 & 1/3, Rakanpur, Kalol, Gandhinagar.	Screening / scoping.
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Details of the proposed project as presented before the committee are tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project

2.	Type of Project	Building & Construction Project															
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)															
4.	Name of the project	Residential & Commercial building construction project.															
5.	Name of Developer	Khyati Realities Ltd.															
6.	Estimated Project Cost (Rs. In Crores)	Rs . 60 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>• t Area (m<sup>2</sup>): 17,301.72</li> <li>• FSI area (m<sup>2</sup>): 20,297.85</li> <li>• Total BUA (m<sup>2</sup>): 28,354.51</li> </ul> <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area, (m<sup>2</sup>)</td> <td>20,762.07</td> <td>20,297.85</td> </tr> <tr> <td>Ground Coverage, (m<sup>2</sup>)</td> <td>-</td> <td>3,115.0</td> </tr> <tr> <td>Common Plot Area, (m<sup>2</sup>)</td> <td>1,038.10</td> <td>1,073.20</td> </tr> <tr> <td>Max. building height, (m)</td> <td>-</td> <td>15.02</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area, (m <sup>2</sup> )	20,762.07	20,297.85	Ground Coverage, (m <sup>2</sup> )	-	3,115.0	Common Plot Area, (m <sup>2</sup> )	1,038.10	1,073.20	Max. building height, (m)	-	15.02
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FSI Area, (m <sup>2</sup> )	20,762.07	20,297.85															
Ground Coverage, (m <sup>2</sup> )	-	3,115.0															
Common Plot Area, (m <sup>2</sup> )	1,038.10	1,073.20															
Max. building height, (m)	-	15.02															
9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 13</li> <li>• No. of Blocks: 13</li> <li>• Scope of buildings/blocks: ground floor + 4 floors.</li> <li>• No. of residential units: 592</li> <li>• No. of commercial units: 34</li> <li>• Details of amenities if any: -</li> </ul>															
10.	No. of expected residents / users	3062 person															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>• Water requirement (KL/day): 34</li> <li>• Source of water: Water tankers</li> <li>• Waste water generation quantity (KL/day): 3</li> <li>• Mode of disposal: Septic tank &amp; soak pit</li> <li>• Details of reuse of water, if any: No</li> </ul>															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Fresh water requirement (KL/day): 404</li> <li>• Source of water: Rakanpur Gram Panchayat or water supply from AMC/AUDA.</li> <li>• Waste water generation quantity (KL/day): 324</li> <li>• Mode of disposal: It is proposed to treat sewage in the proposed onsite STP &amp; to reuse treated sewage for gardening &amp; flushing.</li> <li>• In case of STP provision, capacity of STP: 450.0</li> <li>• STP Technology: MBR (Membrane Bioreactor)</li> </ul>															

		<ul style="list-style-type: none"> <li>• Purposes for treated water utilization: gardening &amp; flushing</li> <li>• Quantity of treated water to be reused: 1. Gardening (KL/day): 200 2. Flushing (KL/day): 124</li> <li>• Provision of dual plumbing system (Yes/No): ---</li> <li>• Quantity and type (treated/untreated) of water to be discharged: ---</li> <li>• Mode of disposal: Domestic wastewater generation is disposed off into Rakanpur Gram Panchayat.</li> </ul>									
13.	Status of water supply and drainage line	---									
14.	Solid waste Management	<p>Construction Phase:</p> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste -Papers, cartons, thermocol, plastic, polythene bags, glasses etc.</td> <td rowspan="2">1531</td> <td rowspan="2">Organic waste and In organic waste will be collected in different buckets.</td> <td rowspan="2">The recyclable waste will be sold off to recyclers. The non recyclable solid waste to be generated will be transferred to the nearest collection point of AUDA.</td> </tr> <tr> <td>Wet waste -Waste vegetables, food waste, horticulture waste</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Details of segregation if to be done: collection of organic and inorganic waste will be in different buckets and it will be subsequently collected by AUDA</li> <li>• Capacity and no. of community bins to be placed within premises: No of Bins: 52; Volume of Bins: 80 Lit each</li> <li>• Landfill site where waste will be ultimately disposed by local authority: ---</li> </ul>	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste -Papers, cartons, thermocol, plastic, polythene bags, glasses etc.	1531	Organic waste and In organic waste will be collected in different buckets.	The recyclable waste will be sold off to recyclers. The non recyclable solid waste to be generated will be transferred to the nearest collection point of AUDA.	Wet waste -Waste vegetables, food waste, horticulture waste
Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse								
Dry waste -Papers, cartons, thermocol, plastic, polythene bags, glasses etc.	1531	Organic waste and In organic waste will be collected in different buckets.	The recyclable waste will be sold off to recyclers. The non recyclable solid waste to be generated will be transferred to the nearest collection point of AUDA.								
Wet waste -Waste vegetables, food waste, horticulture waste											
15.	Parking Details	<ul style="list-style-type: none"> <li>• Total parking area requirement for the project as per GDCR: 3,204.43 m<sup>2</sup></li> <li>• Total number of CPS requirement for the project as per NBC: 311 CPS</li> <li>• Number of CPS requirement for residential units as per NBC: 296</li> <li>• Number of CPS requirement for commercial units as per NBC: 15</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of CPS: Area – 7,153.17 m<sup>2</sup> , CPS - 277</li> <li>• Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of CPS: CPS: 4,296.15 m<sup>2</sup> , CPS - 153</li> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of CPS: CPS: Area – 2,857.0 m<sup>2</sup> , CPS – 124</li> </ul>									
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 12.0 m TPS Road</li> <li>• Number of Entry &amp; Exit provided on approach road/s: 2 gates will be provided.</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 9 m &amp; 12 m.</li> </ul>									

		<ul style="list-style-type: none"> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m</li> <li>• Width of all internal roads: 7.5 &amp; 9.0 m &amp; 12 m.</li> </ul>
17.	Details of Green Building measures proposed.	Use of transformers and motors having minimum efficiency of 85%, use of CFL lights in the common areas, use of light colors to reduce the light absorption and minimize the cooling requirement, provision of STP & reuse of treated sewage, rain water harvesting through ground water recharge etc.
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply: by Torrent Power Limited Maximum demand: 1000 KW Connected load: -</li> <li>• Source : Torrent Power Limited</li> <li>• Energy saving measures: Use of transformers and motors having minimum efficiency of 85%, use of CFL lights in the common areas, use of light colors to reduce the light absorption and minimize the cooling requirement,</li> <li>• DG Sets: Not proposed.</li> </ul>
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• Fire extinguishers at each floor, underground fire water tank of 100 KL capacity, overhead tank of 5 KL capacity on each building etc.</li> <li>•</li> </ul>
20.	Details on staircase: One staircase of 1.5 m width will be provided in each building block.	
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table:</li> <li>• No. &amp; dimensions of RWH tank(s) :</li> <li>• No. and depth of percolations wells : 5 nos</li> <li>• Details on Pre-treatment facilities : No</li> </ul>
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) : 1,200</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>): 30.2</li> <li>• Lawn covered area (m<sup>2</sup>): 500</li> <li>• Total Green Area (m<sup>2</sup>): 1,730.2</li> <li>• Green Area % of plot area: as per GDCR</li> <li>• No. of trees and species to be planted: 262</li> </ul>
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Total 36 lac will be used for solid waste management, sewage disposal, green belt development and rain water harvesting etc.
24.	Proposed dust control measures during the construction phase	Covering the construction material with tarpaulin while storage & transportation, water sprinkling roads & storage areas,
25.	Eco friendly building material usage details.	Use of Ready Mix Concrete (RMC)
26.	Documents related to land possession	Village form no. 7 submitted by them shows that the N.A land of Block no. 1 is in the name of Khyati Realities Limited through its director.

During the meeting it was presented that hollow plinth of 4,296.17 m<sup>2</sup> can accommodate 186 CPS which was wrongly calculated, actually considering 28 m<sup>2</sup> of equivalent car parking space requirement for hollow plinth as per NBC norms, the hollow plinth area can accommodate 153 CPS. Further it was noticed that the hollow plinth area of 4,296.17 m<sup>2</sup> as proposed by them for parking may not be actually available as per the project plans submitted by them. Further, as proposed by them, 200 KL/day of treated sewage utilization for gardening purpose was also not convincing to the committee. After detailed discussion, it was decided to further appraise the project only after submission of the following:

1. Project plan showing total built up area table, FSI area table, floor area table & plot area statement. Details on size of residential units and typical floor plans.
2. Exact source of availability of water supply, drainage connection & municipal solid waste collection facility to the project along with copy of permission / letter of intent from the concerned competent authority for providing the water supply, drainage connection & municipal solid waste collection facility to the project.
3. Total water requirement for the project during operation phase of the project and quantity wise break up of water requirement to be met through fresh water & treated sewage.
4. Quantity wise break up of treated sewage utilization within premises and feasibility of using 200 KL/day of treated sewage for gardening purpose within premises. Complete treated sewage management plan along with disposal plan of remaining quantity of treated sewage. Permission from concerned authority for disposal of sewage. Design drawing of dual plumping system to be provided for reuse of treated sewage for flushing purpose.
5. Revised details on parking area provision for the project with back up calculation based on the actual parking requirement for commercial units of the project as per NBC norms and the actual parking space available in hollow plinth.
6. Details on budget allocated for the installation, operation & maintenance of the proposed Sewage Treatment Plant. Location of the proposed Sewage Treatment plant on the layout plan.
7. Details with respect to proposed use / disposal of excavated soil. Plan for management, use and disposal of construction debris including excavated materials during the construction phase. Details of top soil management plan during construction phase.
8. Details of the basic amenities and welfare facilities to be provided to the construction workers to ensure that they do not ruin the existing environment.

9.	Building construction project by Balvantbhai Chodavadiya.	Block no. 10,11, F.P.No.55,56, O.P.No.55,56, T.P.S.No.22 (Sarhana - Valak), Ta: Choryasi, Dist: Surat.	Screening / scoping & appraisal.
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The SEIAA, Gujarat has accorded environmental clearance to Mr. Balvantbhai Chodavadiya for the residential building construction project at Block no. 10,11, F.P.No.55,56, O.P.No.55,56, T.P.S.No.22 (Sarhana - Valak), Ta: Choryasi, Dist: Surat vide order no. SEIAA/GUJ/EC/8(a)/4382/2015 dated 30/12/2015 for the built up area of 40,736.07 m<sup>2</sup> comprising of 8 buildings housing total 176 nos. of residential units.

The project proponent vide their online proposal no. SIA/GJ/NCP/53793/2016 dated 25/05/2016 requested for amendment of Environmental Clearance order dated 30/12/2015 for the proposed expansion of the project.

The request for amendment in terms of proposed expansion was considered during the meeting. Details of the project after the proposed expansion as presented before the committee is tabulated below:

Sr. No.	Particulars	Details															
1.	Proposal is for	Expansion [SIA/GJ/NCP/53793/2016]															
2.	Type of Project	Residential building construction project.															
3.	Project / Activity No. [8(a) or 8(b)]	8(a)															
4.	Name of the project	Residential building construction project.															
5.	Name of Developer	Balvantbhai Chodavadiya															
6.	Estimated Project Cost (Rs. In Crores)	115 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No.															
8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 14,532.0</li> <li>• FSI area (m<sup>2</sup>): 32,386.08</li> <li>• Total BUA (m<sup>2</sup>): 51,953.94</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>32,389.59</td> <td>32,386.08</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>4,130.19</td> <td>3,174.48</td> </tr> <tr> <td>Common Plot area (m<sup>2</sup>)</td> <td>1,449.20</td> <td>1,449.40</td> </tr> <tr> <td>Max. building height (m<sup>2</sup>)</td> <td>--</td> <td>39.19 m</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	32,389.59	32,386.08	Ground Coverage (m <sup>2</sup> )	4,130.19	3,174.48	Common Plot area (m <sup>2</sup> )	1,449.20	1,449.40	Max. building height (m <sup>2</sup> )	--	39.19 m
	Permissible	Proposed															
FSI Area (m <sup>2</sup> )	32,389.59	32,386.08															
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Common Plot area (m <sup>2</sup> )	1,449.20	1,449.40															
Max. building height (m <sup>2</sup> )	--	39.19 m															
9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 4 Nos.</li> <li>• No. of Blocks: 4</li> <li>• Scope of buildings/blocks: Basement + hollow plinth + 12 floors</li> <li>• &amp; size of Residential Units: 288 Nos. (3 BHK)</li> <li>• No. &amp; type of Commercial Units: --</li> <li>• Details of amenities if any: No</li> </ul>															
10.	No. of expected residents / users	1296 nos. residential users															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>• Water requirement (KL/day): 15.95</li> <li>• Source of water: Water supply from Surat Municipal Corporation (SMC)</li> <li>• Waste water generation quantity (KL/day): 1.15</li> <li>• Mode of disposal: disposed through onsite septic tank and soak pit</li> <li>• Details of reuse of water, if any: washing water of construction equipments will be reused for curing</li> </ul>															

12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Total water requirement (KL/day): 187.0</li> <li>• Fresh water requirement (KL/day): 105.0</li> <li>• Source of water: Water supply from Surat Municipal Corporation (SMC)</li> <li>• Waste water generation quantity (KL/day): 157.0</li> <li>• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated Sewage will be reused in gardening and flushing purpose within premises and remaining treated sewage will be disposed into underground drainage line of Surat Municipal Corporation (SMC).</li> <li>• In case of STP provision, capacity of STP: Yes,200 KL/day</li> <li>• STP Technology: MBBR type</li> <li>• Purposes for treated water utilization: Gardening &amp; Flushing</li> <li>• Quantity of treated water to be reused: 1.Gardening (KL/day): 9.0 2. Flushing (KL/day): 70.0</li> <li>• Provision of dual plumbing system (Yes/No): Yes</li> <li>• Quantity and type (treated/untreated)of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated Sewage will be reused in gardening and flushing purpose within premises and remaining treated sewage will be disposed into underground drainage line of Surat Municipal Corporation (SMC).</li> <li>• Mode of disposal: As above.</li> </ul>																				
13.	Status of water supply and drainage line	Water supply & drainage line of SMC are available at the project site.																				
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1" data-bbox="539 1205 1484 1839"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td rowspan="2">38,095</td> <td rowspan="2">38,095</td> <td rowspan="3">Excavated surplus earth and construction debris will be refilled at low lying areas within the project premises and top soil will be reused for development of greenbelt.</td> </tr> <tr> <td>Other excavated earth</td> </tr> <tr> <td>Construction debris</td> <td>48</td> <td>48</td> </tr> <tr> <td>Steel scrap</td> <td>5.6 MT</td> <td>---</td> <td>Disposal to recycler</td> </tr> <tr> <td>Discarded packing materials</td> <td>1 MT</td> <td>--</td> <td>Disposal to recycler</td> </tr> </tbody> </table> <p>Operation Phase:</p>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	38,095	38,095	Excavated surplus earth and construction debris will be refilled at low lying areas within the project premises and top soil will be reused for development of greenbelt.	Other excavated earth	Construction debris	48	48	Steel scrap	5.6 MT	---	Disposal to recycler	Discarded packing materials	1 MT	--	Disposal to recycler
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		Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
		Dry waste	777 Kg	Will be collected in the bins to be provided to each unit.	Final disposal through SMC.
		Wet waste			
		STP Sludge	210 Kg/Week	Dewatering will be done through Filter press.	Dry sludge will be used as manure in gardening.
		<ul style="list-style-type: none"> <li>• Details of segregation if to be done: The solid wastes generated will be segregated into biodegradable and non-biodegradable wastes and collected in separate bins.</li> <li>• Capacity and no. of community bins to be placed within premises: 140 liter each; 15 nos. of bins;</li> <li>• Landfill site where waste will be ultimately disposed by local authority: M.S.W Transported from transfer station reaches to the final disposal site at Khajod</li> </ul>			
15.	Parking Details	<ul style="list-style-type: none"> <li>• Total number of CPS requirement for the project as per NBC: 288 nos.</li> <li>• Number of CPS requirement for residential units as per NBC: 288 nos.</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of ECS: 11,660.73 m<sup>2</sup>, 373 nos.</li> <li>• Parking area provided in basement (m<sup>2</sup>) &amp; No. of ECS: 9,661.90 m<sup>2</sup>, 302 nos</li> <li>• Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of ECS: 1,998.83 m<sup>2</sup>, 71 nos.</li> </ul>			
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 18 m &amp; 12 m wide road</li> <li>• Number of Entry &amp; Exit provided on approach road/s: 2 nos.</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 7.5 m</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): --</li> <li>• Width of all internal roads: 7.5 m</li> </ul>			
17.	Details of Green Building measures proposed.	Maximum utilization of natural light, CFL lighting fixtures in common areas, use of solar energy in landscape lighting, rain water harvesting & ground water recharge, provision of STP & reuse of treated sewage for gardening & flushing purpose within premises etc.			
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply Maximum demand: 1000 KW Connected load: --</li> <li>• Source: D.G.V.C.L</li> <li>• Energy saving measures: Maximum utilization of natural light, CFL lighting fixtures in common areas, use of solar energy in landscape lighting etc.</li> </ul>			

		<ul style="list-style-type: none"> <li>• DG Sets No. and capacity of the DG sets: 2 x 60 KVA Fuel &amp; its quantity: Diesel &amp; 10 lit/hr.</li> </ul>				
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• Fire extinguishers &amp; hose reel at each floor, wet riser opening at each floor, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 100 KL capacity for each building, terrace water tank of 25 KL on each building block etc.</li> <li>• Nearest fire station: Kapodara fire station. Distance from the project site: approximate at about 5 km.</li> </ul>				
20.	Details on staircase					
	Name of Building	No. of floors	Floor area	No. of staircase	Width of the staircase(m)	Travel distance (m)
	A to D	B+H.P.+12	674.71	3 nos. in each building	1.50	<30
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table: 80-100 ft</li> <li>• No. &amp; dimensions of RWH tank(s) :</li> <li>• No. and depth of percolations wells : 4 nos.</li> <li>• Details on Pre-treatment facilities : Gravity filter, MOC: PE</li> </ul>				
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) : 417.32</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>): inclusive in lawn covered area</li> <li>• Lawn covered area (m<sup>2</sup>): 1,449.40</li> <li>• Total Green Area (m<sup>2</sup>): 1,866.72</li> <li>• Green Area % of plot area: 9.2 %</li> <li>• No. of trees and species to be planted: 140 nos. of trees like Asopalav, Gulmohar, Palm, Ficus ,Badam etc.</li> </ul>				
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Sr. No.	Description	Capital Cost (Rs. In Lacs)		
		1	Landscaping	20 Lacs		
		2	Groundwater Recharge Structure	8 Lacs		
		3	Solar Energy Utilization	3 lacs		
		4	Energy Efficient Lighting	2 lacs		
		5	Solid Waste Management	3 lacs		
		6	Monitoring of Air, Water, Noise & Soil	0.75 lacs		
			Total	36.75 Lacs		
24.	Proposed dust control measures during the construction phase	Vertical curtains, water sprinkling, covering the building materials with the tarpaulin sheet etc.				
25.	Eco friendly building material usage details.	Fly ash based bricks, Ready Mix Concrete, A.C.C Blocks will be used.				
26.	Amenities for the construction	Sanitation facility, drinking water & tap water, soak pit for domestic waste water collection, first aid box, free medicine, doctor service, PPEs etc.				

	workers.	
27.	Documents related to land possession.	Village form no. 7 & 12 submitted by them shows that the agricultural land is in the name of applicant & others. Copy of application made for obtaining N.A permission has been submitted. Zoning certificate obtained from Surat Urban Development Authority shows that the project site falls in the residential zone.

During the meeting, while discussing layout plan of the project, the project proponent was suggested that the ramps to be provided in margin areas should be relocated / shifted at suitable places so as to provide unobstructed open peripheral margin for movement of fire tender in case of emergency like fire. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Compliance report in respect of the stipulated terms and conditions in the Environmental Clearance order no. SEIAA/GUJ/EC/8(a)/4382/2015 dated 30/12/2015.
2. Justification for the proposed expansion with supporting documents and/or copy of permission obtained from concerned authority for the proposed expansion.
3. Design details of dual plumbing system to be provided for reuse of treated sewage within premises. Details on operation & maintenance of STP during operation phase of the project along with financial provision made for its installation, operation & maintenance.
4. Revised layout plan showing location of ramps in such way to provide unobstructed open peripheral margin all along the boundary wall.
5. Exact source of water supply during operation phase of the project with supporting documents.

10.	Shayona Aagman by M/s Shree Hari Enterprise	S.No.206, O.P.No.25, F.P.No.24/1, DTPS No.33 (Gota), Ahmedabad (West), Dist: Ahmedabad.	Screening / scoping & appraisal.
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Project proponent along with their expert / consultant attended the meeting and made presentation before the committee. It was found that SEIAA vide order no. SEIAA/GUJ/EC/8(a)/44/2011 dated 04/04/2011 has accorded Environmental Clearance to M/s Anmol Enterprise for residential building construction project having plot area of 15,706 m<sup>2</sup> and built-up area of 58,458 m<sup>2</sup> at Survey No.204 + 206, F.P. No. 23 + 25/1, T.P.S. No. 33, Vill. Gota, Tal. Dascroi, Dist. Ahmedabad. Construction activity for the project was completely stopped because the developer went bankrupt. Afterwards from the total plot area of 15,706.0 m<sup>2</sup>, land area admeasuring 10,548.0 m<sup>2</sup> was purchased by M/s Shree Hari Enterprise through auction from Court receiver pursuant to the order dated 01/09/2014 passed by the Hon'ble Debt Recovery Tribunal-1. Copy of certificate, dated 23/03/2016 for Sale of Immovable Property before the Debt Recovery Tribunal-1 at Ahmedabad, submitted by them shows that the land of F.P.No.24/1, admeasuring 10,548.0 m<sup>2</sup> with its secured assets having built up area of 14,803.0 m<sup>2</sup> comprising of flats & shops has been transferred & conveyed in favour of M/s Shree Hari Enterprise. It was presented that they have not started any kind of construction activity for the proposed project. The project proponent was asked to maintain status quo and to start the construction activity only after obtaining Environmental Clearance from SEIAA Gujarat. Further the committee, unanimously, was of the opinion that the Environmental Clearance order no. SEIAA/GUJ/EC/8(a)/44/2011 dated 04/04/2011 shall be treated as cancelled and the project was appraised as fresh proposal for obtaining Environmental Clearance based on the Form-1 Form-1A submitted by them as well as facts presented before the committee.

Details of the project as presented before the committee are tabulated below:

Sr. No.	Particulars	Details															
1.	Proposal is for	New Project [SIA/GJ/NCP/53802/2016]															
2.	Type of Project	Residential & commercial project															
3.	Project / Activity No. [8(a) or 8(b)]	8(a)															
4.	Name of the project	"Shayona Agman"															
5.	Name of Developer	Shree Hari Enterprise															
6.	Estimated Project Cost (Rs. In Crores)	40 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 10,548.0</li> <li>• FSI area (m<sup>2</sup>): 27,174.16</li> <li>• Total BUA (m<sup>2</sup>): 36,409.59</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>---</td> <td>27,174.16</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>---</td> <td>4,515.42</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>1,054.80</td> <td>1,054.80</td> </tr> <tr> <td>Max. building height (m)</td> <td>---</td> <td>49.55</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	---	27,174.16	Ground Coverage (m <sup>2</sup> )	---	4,515.42	Common Plot Area (m <sup>2</sup> )	1,054.80	1,054.80	Max. building height (m)	---	49.55
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Common Plot Area (m <sup>2</sup> )	1,054.80	1,054.80															
Max. building height (m)	---	49.55															
9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 14 Nos.</li> <li>• No. of Blocks: 14 Nos.</li> <li>• Scope of buildings/blocks: 2 buildings: Basement + H.P.+ 15 floors. 12 buildings: Hollow plinth + 5 floors.</li> <li>• No.&amp; size of Residential Units:330 flats.</li> <li>• No. &amp; type of Commercial Units: 33 Shops</li> <li>• Details of amenities if any:</li> </ul>															
10.	No. of expected residents / users	1500 users with floating population															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>• Water requirement (KL/day): 30.0</li> <li>• Source of water: AMC Water Supply</li> <li>• Waste water generation quantity (KL/day): 4.5</li> <li>• Mode of disposal: Into soak pit through septic tank</li> <li>• Details of reuse of water, if any:</li> </ul>															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Fresh water requirement (KL/day): 192.0</li> <li>• Source of water: AMC Water Supply</li> <li>• Waste water generation quantity (KL/day): 167.0</li> <li>• Mode of disposal: Into AMC drainage system.</li> </ul>															
13.	Status of water supply and	Water supply & drainage connection of AMC will be available to the project during operation phase of the project.															

	drainage line																																			
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>12,200</td> <td>12,200</td> <td>Green Belt Development</td> </tr> <tr> <td>Other excavated earth</td> <td>14,106</td> <td>7,052 m<sup>3</sup> will be reused for internal roads &amp; other paved areas, back fillings</td> <td>Remaining will be sent to the other project sites for back filling.</td> </tr> <tr> <td>Construction debris</td> <td>670</td> <td>670</td> <td>Back filling &amp; internal roads development</td> </tr> <tr> <td>Steel scrap</td> <td>3.10 MT</td> <td>--</td> <td>Sold to vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>325</td> <td>--</td> <td>Sold to vendors</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste</td> <td>418</td> <td rowspan="2">Will be collected in the bins to be provided to each unit.</td> <td rowspan="2">Collection &amp; final disposal through agency appointed by AMC.</td> </tr> <tr> <td>Wet waste</td> <td>278</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Details of segregation if to be done: No.</li> <li>• Capacity and no. of community bins to be placed within premises: 80 lit capacity &amp; 34 bins for residential blocks &amp; 10 bins of 20 lit capacity will be used for commercial use.</li> <li>• Landfill site where waste will be ultimately disposed by local authority: At the nearby MSW collection point of AMC.</li> </ul>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	12,200	12,200	Green Belt Development	Other excavated earth	14,106	7,052 m <sup>3</sup> will be reused for internal roads & other paved areas, back fillings	Remaining will be sent to the other project sites for back filling.	Construction debris	670	670	Back filling & internal roads development	Steel scrap	3.10 MT	--	Sold to vendors	Discarded packing materials	325	--	Sold to vendors	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	418	Will be collected in the bins to be provided to each unit.	Collection & final disposal through agency appointed by AMC.	Wet waste	278
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15.	Parking Details	<ul style="list-style-type: none"> <li>• Total number of CPS requirement for the project as per NBC : 234 CPS</li> <li>• Number of CPS requirement for residential units as per NBC: 211 CPS</li> <li>• Number of CPS requirement for commercial units as per NBC: 22 CPS</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of ECS: 8,472.62 m<sup>2</sup> 299 CPS</li> <li>• Parking area provided in basement (m<sup>2</sup>) &amp; No. of CPS: 3,652.91 m<sup>2</sup> &amp; 114 CPS</li> <li>• Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of CPS:</li> </ul>																																		

		3,217.67 m <sup>2</sup> & 115 CPS																									
		<ul style="list-style-type: none"> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of CPS: 1,602.04 m<sup>2</sup>&amp; 70 CPS</li> </ul>																									
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 30.0 m.</li> <li>• Number of Entry &amp; Exit provided on approach road/s: 1gate is proposed to provide.</li> <li>• Width of entry &amp; exit provided on approach road/s: 9.08</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m.</li> </ul> <p>Width of all internal roads: 7.5 m.</p>																									
17.	Details of Green Building measures proposed.	Use of energy efficient electrical appliances, use of CFL & PL, maximum use of natural day light, the rain water harvesting through ground water recharge etc.																									
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply: Maximum demand: 1.5 MW Connected load: 1.7 MW</li> <li>• Source: Torrent Power Ltd.</li> <li>• Energy saving by Non-conventional Methods: maximum utilization of natural light, roof top thermal insulation, CFL lighting fixtures in the common areas, use of solar energy in external lighting.</li> <li>• DG Sets: No. and capacity of the DG sets:2 x 120 KVA Fuel &amp; its quantity: 30 Lit. / Hr. Of HSD</li> </ul>																									
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• Two nos. of underground fire water storage tanks each of 100 KL capacity, overhead tank of 20 KL on each building, fire extinguishers, fire alarms, hose reel, external hydrants, wet risers, system riser with pressure, sprinkler system in shops &amp; basement etc.</li> <li>• The nearest fire station is Sabarmati fire station which is 9 km away from the project site and a fire tender will take about 15-20 minutes to reach the project site.</li> </ul>																									
20.	Details on staircase <table border="1" data-bbox="287 1451 1412 1848"> <thead> <tr> <th>Type &amp; no. of buildings</th> <th>No. of floors</th> <th>Maximum floor area</th> <th>No. of staircase</th> <th>Width of the staircase</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>Block A,B</td> <td>B+H.P+15</td> <td>476.0</td> <td>2</td> <td>2.01</td> <td>15.51</td> </tr> <tr> <td>Block D,I, J,K,</td> <td>H.P.+ 5</td> <td>198.0</td> <td>1</td> <td>1.22</td> <td>&lt;15.0</td> </tr> <tr> <td>Block E &amp; F, G &amp; H, L&amp;M, N&amp;O</td> <td>H.P.+ 5</td> <td>404.0</td> <td>2</td> <td>1.22</td> <td>&lt;15.0</td> </tr> </tbody> </table>			Type & no. of buildings	No. of floors	Maximum floor area	No. of staircase	Width of the staircase	Travel distance (m)	Block A,B	B+H.P+15	476.0	2	2.01	15.51	Block D,I, J,K,	H.P.+ 5	198.0	1	1.22	<15.0	Block E & F, G & H, L&M, N&O	H.P.+ 5	404.0	2	1.22	<15.0
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Block E & F, G & H, L&M, N&O	H.P.+ 5	404.0	2	1.22	<15.0																						
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table:</li> <li>• No. &amp; dimensions of RWH tank(s) :</li> <li>• No. and depth of percolations wells: 02 Nos.</li> </ul>																									

		<ul style="list-style-type: none"> <li>• Details on Pre-treatment facilities :Desilting &amp; filter chamber</li> </ul>
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) : 150 m<sup>2</sup></li> <li>• Lawn covered area (m<sup>2</sup>): 1000 m<sup>2</sup></li> <li>• Total Green Area (m<sup>2</sup>): 1,150.0 m<sup>2</sup></li> <li>• Green Area % of plot area: 10.00 %</li> <li>• No. of trees and species to be planted: 160 Nos.</li> </ul>
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	---
24.	Proposed dust control measures during the construction phase	Regular water sprinkling, vertical curtains, covered shed for cement unloading, covering excavated earth with tarpaulin sheet etc.
25.	Eco friendly building material usage details.	Fly ash bricks, aerated blocsk, maximum use of RMC, lead free points etc.
26.	Basic amenities to be provided to construction workers.	Drinking water & tap water, sanitation facilities, first aid box, free medicines, doctor service, PPEs etc.
27.	Documents related to land possession.	Copy of certificate, dated 23/03/2016 for Sale of Immovable Property before the Debt Recovery Tribunal-1 at Ahmedabad, submitted by them shows that the land of F.P.No.24/1, admeasuring 10,548.0 m <sup>2</sup> with its secured assets having built up area of 14,803.0 m <sup>2</sup> comprising of flats & shops has been transferred & conveyed in favour of M/s Shree Hari Enterprise.

During the meeting, it was found that the parking area requirement was not properly calculated as per requirement of the NBC norms, especially parking requirement for commercial units. Further it was observed that the Environmental Clearance was granted for the project located at F.P.No. 23+25/1 whereas the certificate dated 23/03/2016 for Sale of Immovable Property before the Debt Recovery Tribunal-1 at Ahmedabad, submitted by them mentions that the land of F.P.No.24/1 admeasuring 10,548.0 m<sup>2</sup> has been transferred & conveyed to M/s Shree Hari Enterprise. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Explore the possibility of increasing the parking area provision for the proposed project and revised details on parking area provision as per requirement of the NBC norms.
2. Details on the proposed & the permissible FSI for the project with authentic supporting documents and /or permission from concerned competent authority in this regard.
3. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay.
4. Details on number & floors of the buildings already constructed, number of buildings to be demolished

or modified, complete C & D waste management details should be submitted in case of demolition of any of the existing building/s if to be carried out.

5. Clarification with regards to discrepancy observed in mentioning of Final Plot number in the Environmental Clearance order dated 04/04/2011 & in certificate, dated 23/03/2016 for Sale of Immovable Property before the Debt Recovery Tribunal-1.

6. Copy of order dated 01/09/2014 passed by the Hon'ble Debt Recovery Tribunal-1.

11.	Building construction project by Bharatbhai Gandabhai.	Survey Number: 406/1/1, F.P. No: 53/2, T.P.S No. 42 (Sola Thaltej), Sola, Ahmedabad	Screening/scoping
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Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details															
1.	Proposal is for	New Project															
2.	Type of Project	Commercial Project															
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)															
4.	Name of the project	Commercial Project															
5.	Name of Developer	Bharatbhai Gandabhai															
6.	Estimated Project Cost (Rs. In Crores)	50 Crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 3,550.0</li> <li>• FSI area (m<sup>2</sup>): 14,193</li> <li>• Total BUA (m<sup>2</sup>):28,598.18</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>14,200</td> <td>14,193</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>NA</td> <td>1,415.49</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>355</td> <td>357.82</td> </tr> <tr> <td>Max. building height (m)</td> <td>70</td> <td>45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	14,200	14,193	Ground Coverage (m <sup>2</sup> )	NA	1,415.49	Common Plot Area (m <sup>2</sup> )	355	357.82	Max. building height (m)	70	45
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Common Plot Area (m <sup>2</sup> )	355	357.82															
Max. building height (m)	70	45															
9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings:1</li> <li>• No. of Blocks:1</li> <li>• Scope of buildings/blocks: 3 level basement +Ground floor + 14 floors.</li> <li>• No.&amp; size of Residential Units: NA</li> <li>• No. &amp; type of Commercial Units: 35 shops and 235 offices</li> </ul>															

		• Details of amenities if any: No																																				
10.	No. of expected residents / users	1500 occupants and 200 visitors																																				
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>• Water requirement (KL/day): 21.75</li> <li>• Source of water: Water tankers</li> <li>• Waste water generation quantity (KL/day): 5.73</li> <li>• Mode of disposal: septic tank</li> <li>• Details of reuse of water, if any: No</li> </ul>																																				
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Fresh water requirement (KL/day):71.93</li> <li>• Source of water: Water supply from AMC</li> <li>• Waste water generation quantity (KL/day):56.40</li> <li>• Mode of disposal: Into drainage line of AMC.</li> </ul>																																				
13.	Status of water supply and drainage line	Available at site																																				
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>1600</td> <td>1600</td> <td>Development of landscape area</td> </tr> <tr> <td>Other excavated earth</td> <td>30,400</td> <td>5440 m<sup>3</sup> will be used for back filling and raising plinth level.</td> <td>Balance earth will be used at other projects as per requirement.</td> </tr> <tr> <td>Construction debris</td> <td>250</td> <td>150 m<sup>3</sup> will be used for development of internal road.</td> <td>Balance debris will be handed over to local authority or fill in low laying area</td> </tr> <tr> <td>Steel scrap</td> <td>10</td> <td>0</td> <td>Sold to vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>8</td> <td>0</td> <td>Sold to vendors</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste</td> <td>224.8</td> <td>White bins</td> <td>Sold to vendors</td> </tr> <tr> <td>Wet waste</td> <td>337.2</td> <td>Green Bins</td> <td>Municipal bins</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Details of segregation if to be done: yes</li> <li>• Capacity and no. of community bins to be placed within premises: 15 kg and 12 number of community bins to be placed in common area</li> </ul>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	1600	1600	Development of landscape area	Other excavated earth	30,400	5440 m <sup>3</sup> will be used for back filling and raising plinth level.	Balance earth will be used at other projects as per requirement.	Construction debris	250	150 m <sup>3</sup> will be used for development of internal road.	Balance debris will be handed over to local authority or fill in low laying area	Steel scrap	10	0	Sold to vendors	Discarded packing materials	8	0	Sold to vendors	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	224.8	White bins	Sold to vendors	Wet waste	337.2	Green Bins	Municipal bins
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		<ul style="list-style-type: none"> <li>• Landfill site where waste will be ultimately disposed by local authority: at the nearby MSW collection point of AMC.</li> </ul>
15.	Parking Details	<ul style="list-style-type: none"> <li>• Total parking area requirement for the project as per GDCR: 7,096.5 m<sup>2</sup></li> <li>• Parking area requirement for Commercial units as per GDCR:7,096.5 m<sup>2</sup></li> <li>• Total number of CPS requirement for the project as per NBC :568</li> <li>• Number of CPS requirement for commercial units as per NBC:568</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of CPS: 17,647.49 &amp; 568 CPS</li> <li>• Parking area provided in basement (m<sup>2</sup>) &amp; No. of CPS: 7,806 &amp; 243 CPS</li> <li>• Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of CPS: 723.49 &amp; 25 CPS</li> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of CPS:1,312 &amp;57 CPS</li> <li>• Parking area provided (at any other place-specify) (m<sup>2</sup>) &amp; No. of CPS: Mechanical 7,806 &amp; 243 CPS.</li> </ul>
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 36 m wide road</li> </ul> <p>Number of Entry &amp; Exit provided on approach road/s: 2 gates will be provided.</p> <ul style="list-style-type: none"> <li>• Width of Entry &amp; Exit provided on approach road/s:6 m</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5.0 m</li> <li>• Width of all internal roads: minimum 6.0 m</li> </ul>
17.	Details of Green Building measures proposed.	<p>Maximum use of natural lighting through architectural design, energy efficient motors &amp; pumps, water efficient taps, maximum use of RMC &amp; aerated blocks, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas- 8 numbers of solar lighting, roof-top thermal insulation, rain water harvesting &amp; ground water recharge through 1 number of percolating well etc.</p>
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply: Maximum demand: 1300 KVA Connected load: 1500 KVA Source: Torrent Power Limited</li> <li>• % of saving with calculations: ~40% by use of LED and star rated energy efficient electronic consumer durables</li> <li>• Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area</li> <li>• DG Sets: No. and capacity of the DG sets:1 x 125 KVA Fuel &amp; its quantity: HSD, 25 litre/hr</li> </ul>
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• During Construction Phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor &amp; ambulance service.</li> <li>• During operation phase: Fire extinguishers, hose reel, manually</li> </ul>

		operated electric fire alarm system, wet riser, automatic sprinkler system, underground static water storage tank-200 KL capacity, terrace tank -20 KL capacity (total capacity), provision of refuge area as per the requirement of GDCR & NBC, pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm <sup>2</sup> at terrace level, one electric and one diesel pump of capacity 2 280 lit/min and one electric pump of capacity 180 lit/min.												
20.	Details on staircase	<table border="1"> <thead> <tr> <th>Type &amp; no. of buildings</th> <th>No. of floors</th> <th>Floor area m<sup>2</sup></th> <th>No. of staircase</th> <th>Width of the staircase (m)</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>Commercial</td> <td>3B+G + 14</td> <td>1,071.0</td> <td>2</td> <td>2.1</td> <td>26</td> </tr> </tbody> </table>	Type & no. of buildings	No. of floors	Floor area m <sup>2</sup>	No. of staircase	Width of the staircase (m)	Travel distance (m)	Commercial	3B+G + 14	1,071.0	2	2.1	26
Type & no. of buildings	No. of floors	Floor area m <sup>2</sup>	No. of staircase	Width of the staircase (m)	Travel distance (m)									
Commercial	3B+G + 14	1,071.0	2	2.1	26									
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table:</li> <li>• No. &amp; dimensions of RWH tank(s) : 1 No and 2.5m X 2.0 m X 3.0 m</li> <li>• No. and depth of percolations wells : 1 no</li> <li>• Details on Pre-treatment facilities : oil and grease removal and filter.</li> </ul>												
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) :125</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>):100</li> <li>• Lawn covered area (m<sup>2</sup>):132.82</li> <li>• Total Green Area (m<sup>2</sup>):357.82</li> <li>• Green Area % of plot area: 10%</li> <li>• No. of trees and species to be planted: 54 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar</li> </ul>												
23.	Dust control Measures	Spraying of water, Peripheral barricading,, covered shed for cement Loading area, covering the excavated earth with tarpaulin sheet etc.												
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Allocation of Rs. 12.5 lacs & Rs.7.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.												
25.	Details of ecofriendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.												
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.												
27.	Documents related to land possession.	Village form no. 7 submitted by them shows that the agricultural land is in the name of applicant Mr. Bharatbhai Gandabhai Patel & his family members.												

During the meeting, it was presented that the travel distance to any of the two staircases from the farthest

corner of the floor will be less than 30 m. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained from Airports Authority of India for the proposed building height.
2. Copy of N.A permission obtained for commercial use of the project site or copy of correspondences made with concerned competent authority for obtaining N.A permission.
3. Details on solar energy utilization for the proposed project and how much of the total energy requirement of the project will be met through the solar energy.
4. Permission from the concerned competent authority or authentic documents showing the availability of the proposed FSI to the project.
5. Plans showing fire fighting installations & floor wise evacuation plan in case of emergency.
6. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
7. Type of activities to be carried out in the commercial units of the proposed project. Notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and any commercial unit shall not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.
8. Details on provision to be made for ventilation, natural lighting and CO sensors in basement.
9. Perspective view of the building(s) to be constructed along with the materials used such as fibers, glass, etc. on the facades or external walls and the impacts thereof on the nearby buildings / residents due to heat island effect and emissions from the air conditioning systems.

12	Building construction project by Mr. Narendrabhai B Hirapara	B.No. 351, F.P.No.41, O.P.No.41, T.P.S. No-25 (Mota-Varachha), Moje - Mota-Varachha, Dist. – Surat	Screening/scoping & appraisal.
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The SEIAA, Gujarat has accorded environmental clearance to Mr. Narendra B. Hirapara for the building construction project at Block No.351, F.P.No.41, O.P.No.41, T.P.S.No. 25 (Mota Varachha), Moje Mota Varachha, Dist: Surat vide order no. SEIAA/GUJ/EC/8(a)/2729/2015 dated 30/06/2015 for the built up area of 69,091.52 m<sup>2</sup> comprising of 29 buildings housing total 636 nos. of residential units and 108 shops.

The project proponent vides their online proposal no. SIA/GJ/NCP/53596/2016 dated 25/05/2016 requested for amendment of Environmental Clearance order dated 30/06/2015 for the proposed expansion of the project.

The request for amendment in terms of proposed expansion was considered during the meeting of SEAC. Details of the project after the proposed expansion as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project
2.	Type of Project	Residential & Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)

4.	Name of the project	Residential & Commercial building construction project.															
5.	Name of Developer	Narendrabhai B. Hirapara															
6.	Estimated Project Cost (Rs. In Crores)	60 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No.															
8.	Project Details	<ul style="list-style-type: none"> <li>Land / Plot Area (m<sup>2</sup>): 26,158.0</li> <li>FSI area (m<sup>2</sup>): 58,427.66</li> <li>Total BUA (m<sup>2</sup>): 82,399.28</li> </ul> <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>58,855.50</td> <td>58,427.66</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>7,454.94</td> <td>6,285.88</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>2,615.80</td> <td>2,616.45</td> </tr> <tr> <td>Max. building height (m)</td> <td>--</td> <td>40.0</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	58,855.50	58,427.66	Ground Coverage (m <sup>2</sup> )	7,454.94	6,285.88	Common Plot Area (m <sup>2</sup> )	2,615.80	2,616.45	Max. building height (m)	--	40.0
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Max. building height (m)	--	40.0															
9.	Building Details	<ul style="list-style-type: none"> <li>No. of Buildings: 18 Nos.</li> <li>No. of Blocks: 20 Nos.</li> <li>Scope of buildings/blocks: 3 buildings – Basement +Hollow plinth +13 floors, 6 buildings - Basement +Hollow plinth +11 floors, 7 buildings - Basement +Hollow plinth +12 floors, 2 buildings – Basement + Ground floor + 3 floors.</li> <li>No. &amp; Size of Residential Units: 694 Nos. (2 BHK), 152 Nos. (3 BHK)</li> <li>No. &amp; type of Commercial Units: 24 Nos. of Shops</li> <li>Details of amenities if any: No</li> </ul>															
10.	No. of expected residents / users	3807 nos. residential users															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> <li>Water requirement (KL/day): 15.95</li> <li>Source of water: water supply from S.M.C</li> <li>Waste water generation quantity (KL/day): 1.15</li> <li>Mode of disposal: disposed through onsite septic tank and soak pit</li> <li>Details of reuse of water, if any: washing water of construction equipments will be reused for curing.</li> </ul>															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>Total water requirement (KL/day): 526.0</li> <li>Fresh water requirement (KL/day): 312.0</li> <li>Source of water: Water supply from S.M.C</li> <li>Waste water generation quantity (KL/day): 455.0</li> <li>Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening and flushing purpose within premises and remaining quantity of treated sewage will be discharged into the underground drainage line</li> </ul>															

		<p>of Surat Municipal Corporation.</p> <ul style="list-style-type: none"> <li>In case of STP provision, capacity of STP: Yes, 500 KL/day</li> <li>STP Technology: MBBR Type</li> <li>Purposes for treated water utilization: Gardening &amp; Flushing</li> <li>Quantity of treated water to be reused: 1. Gardening (KL/day): 8.7 2. Flushing (KL/day): 205.3</li> <li>Provision of dual plumbing system (Yes/No): Yes</li> <li>Quantity and type (treated/untreated) of water to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening and flushing purpose within premises and remaining quantity of treated sewage will be discharged into the underground drainage line of Surat Municipal Corporation.</li> <li>Mode of disposal: As above.</li> </ul>																																	
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STP Sludge	--	--	--																																

		<p>be segregated into biodegradable and non-biodegradable wastes and collected in separate bins.</p> <ul style="list-style-type: none"> <li>• Capacity and no. of community bins to be placed within premises: 140 liter each; 15 nos. of bins;</li> <li>• Landfill site where waste will be ultimately disposed by local authority: M.S.W Transported from transfer station reaches to the final disposal site at Khajod</li> </ul>
15.	Parking Details	<ul style="list-style-type: none"> <li>• Total number of CPS requirement for the project as per NBC: 442 nos.</li> <li>• Number of CPS requirement for residential units as per NBC: 423 nos.</li> <li>• Number of CPS requirement for commercial units as per NBC: - 19 nos.</li> <li>• Total Parking area provided (m<sup>2</sup>) &amp; No. of ECS: 16,279.70 m<sup>2</sup>, 596 nos.</li> <li>• Parking area provided in basement (m<sup>2</sup>) &amp; No. of ECS: 5,784.42 m<sup>2</sup>, 181 nos.</li> <li>• Parking area provided in hollow plinth (m<sup>2</sup>) &amp; No. of ECS: 5,347.62 m<sup>2</sup>, 190 nos.</li> <li>• Parking area provided as open surface (m<sup>2</sup>) &amp; No. of ECS: 5,167.48 m<sup>2</sup>, 225 nos.</li> </ul>
16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 18 m wide road</li> <li>• Number of Entry &amp; Exit provided on approach road/s: It is proposed to provide 4 gates..</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 7.5 m</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5 m</li> <li>• Width of all internal roads: , 7.5 m</li> </ul>
17.	Details of Green Building measures proposed.	Maximum utilization of natural light, CFL lighting fixtures in common areas, use of solar energy in landscape lighting, rain water harvesting & ground water recharge, provision of STP & reuse of treated sewage for gardening & flushing purpose within premises etc.
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> <li>• Power supply Maximum demand: 2500 KW Connected load: --</li> <li>• Source: D.G.V.C.L</li> <li>• Energy saving measures: Maximum utilization of natural light, CFL &amp; LED lighting fixtures in common areas, use of solar energy in landscape lighting etc.</li> <li>• DG Sets No. and capacity of the DG sets- 2 x 65 KVA Fuel &amp; its quantity: Diesel &amp; 10 lit/hr.</li> </ul>
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> <li>• Fire extinguishers &amp; hose reel at each floor, wet riser opening at each floor, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 75 KL capacity</li> </ul>

		for each building, terrace water tank of 25 KL on each building block etc. <ul style="list-style-type: none"> <li>• Nearest fire station: Kapodara fire station. Distance from the project site: approximate at about 5 km.</li> </ul>																																																																						
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21.	Rain Water Harvesting (RWH)	No. and depth of percolations wells : 7 nos., 40 m Details on Pre-treatment facilities : Gravity filter, MOC: PE																																																																						
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) : 883.04</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>): inclusive in lawn covered area</li> <li>• Lawn covered area (m<sup>2</sup>): 1,311.88</li> <li>• Total Green Area (m<sup>2</sup>): 2,194.92</li> <li>• Green Area % of plot area: 8.3 %</li> <li>• No. of trees and species to be planted: 300 nos. of trees like Asopalav, Gulamhor, Palm, Ficus ,Badam etc.</li> </ul>																																																																						
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Capital Cost (Rs. In Lacs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Landscaping</td> <td>15 Lacs</td> </tr> <tr> <td>2</td> <td>Groundwater Recharge Structure</td> <td>12 Lacs</td> </tr> <tr> <td>3</td> <td>Solar Energy Utilization</td> <td>5 lacs</td> </tr> <tr> <td>4</td> <td>Energy Efficient Lighting</td> <td>3 lacs</td> </tr> <tr> <td>5</td> <td>Solid Waste Management</td> <td>1 lacs</td> </tr> <tr> <td>6</td> <td>Monitoring of Air, Water, Noise &amp; Soil</td> <td>0.75 lacs</td> </tr> <tr> <td colspan="2">Total</td> <td>36.75 Lacs</td> </tr> </tbody> </table>	Sr. No.	Description	Capital Cost (Rs. In Lacs)	1	Landscaping	15 Lacs	2	Groundwater Recharge Structure	12 Lacs	3	Solar Energy Utilization	5 lacs	4	Energy Efficient Lighting	3 lacs	5	Solid Waste Management	1 lacs	6	Monitoring of Air, Water, Noise & Soil	0.75 lacs	Total		36.75 Lacs																																														
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24.	Proposed dust control measures during the	Vertical curtains, water sprinkling, covering the building materials with the tarpaulin sheet etc.																																																																						

	construction phase	
25.	Eco friendly building material usage details.	Fly ash based bricks, Ready Mix Concrete, A.C.C Blocks will be used.
26.	Amenities for the construction workers.	Sanitation facility, drinking water & tap water, soak pit for domestic waste water collection, first aid box, free medicine, doctor service, PPEs etc.
27.	Documents related to land possession.	Village form no. 7 submitted by them shows that the land for residential use is in the name of applicant & others.

During the meeting, while asking by the committee it was presented that because of change in planning of the project construction activity has not been started for the project. Further it was observed that an overhead high tension line is passing through the project site. It was also observed that all the four gates proposed for the project are opening at the adjacent plot / divisional plot. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Compliance report in respect of the stipulated terms and conditions in the Environmental Clearance order no. SEIAA/GUJ/EC/8(a)/2729/2015 dated 30/06/2015.
2. Justification for the proposed expansion with supporting documents and/or copy of permission obtained from concerned authority for the proposed expansion.
3. Design details of dual plumbing system to be provided for reuse of treated sewage within premises. Details on operation & maintenance of STP during operation phase of the project along with financial provision made for its installation, operation & maintenance.
4. Layout plan showing location of the proposed entry / exit gates to be provided along with approach road details.
5. Copy of permission, if any, from concerned competent authority with regards to the overhead high tension line passing through the project site.
6. Explore the possibility of increasing the parking area provision for the proposed project and revised details considering increased parking area provision with back up calculation.

The following project was also discussed during the meeting.

**Shyam Sangini - II** at Block No:31+32/P+48/B, O.P.No.176+177+ 171/B, F.P.No.176+177+171/2, T.P.S.No.35 (Kumbharia-Saroli –Sania-Hemad-Devadh), Moje: Kumbhariya, Dist: Surat proposed by **Mr. Jigneshbhai P. Patel**.

This office has received an application for Environment Clearance of the above project on 17/03/2015.

The project proponent has originally applied for the commercial building construction project with plot area of 12,917.0 m<sup>2</sup>, FSI area of 50,949.52 m<sup>2</sup> (FSI of 3.94) and built up area of 79,328.56 m<sup>2</sup>. Based on their original application, the project proponent was called for presentation and discussion in the meeting of SEAC held on 09/06/2015.

The project proponent along with their expert / consultants attended the SEAC meeting held on 09/06/2015 and made presentation before the committee. During the meeting held on 09/06/2015, after

detailed discussion, it was decided to further appraise the project only after submission of certain additional details regarding the project.

Project proponent submitted the above mentioned details sought during the meeting of SEAC held on 09/06/2015 vide their letter dated 25/11/2015.

The project proponent along with their expert / consultant remained present during the meeting of SEAC held on 29/12/2015 and during the meeting of SEAC held on 29/12/2015, the project was appraised based on the details submitted as well as facts presented before the committee.

During the meeting held on 29/12/2015, it was presented that the commercial units of the proposed project will be used for storage of finished goods. Basement ventilation fans with adjustable speed level to ensure 2-3 air changes per hour, multiple speed fans interlocked with CO detectors & alarm system, natural ventilation in the form of air cut outs, lights with easily accessible switches etc. will be provided in basement. Separate sanitary blocks for male & female, first aid facilities and drinking water facility will be provided at each floor. Plans showing fire safety installations approved by the Fire & Emergency Services of SMC have been submitted. Fire fighting facilities like automatic sprinkling system along with smoke alarm in entire premises, wet riser, external hydrant, underground fire water tank of 400 KL capacity, DCP type of fire extinguishers in buildings, CO2 type fire extinguishers for electrical rooms & AHU areas etc. will be provided. They have also submitted specifications of flame proof electrical fittings to be provided. During the meeting, after detailed discussion, it was decided to consider the project only after submission of the following:

1. Notarized undertaking stating that all the flame proof electrical fittings as proposed by them will be provided during the operation phase of the project.

Project proponent vide their letter dated 30/12/2015 submitted the above mentioned undertaking.

During the meeting of SEAC held on 04/05/2016, it was brought to the notice of the committee that many building construction projects, including the proposed project, falling under the limits of Surat Municipal Corporation & Surat Urban Development Authority have applied for obtaining Environmental Clearance with the additional FSI, which is not available as per the provisions of existing General Development Control Regulation (GDCR) of Surat Urban Development Authority (SUDA) & Surat Municipal Corporation (SMC) and require to obtain permission from Urban Development & Urban Housing Department, Gandhinagar for the additional FSI with associated additional ground coverage, building height, relaxation in margin etc. The matter was discussed during the meeting of SEAC held on 04/05/2016 and it was decided to seek opinion from SMC & SUDA for processing of applications of such projects which require to obtain permission from Urban Development & Urban Housing Department, Gandhinagar for the FSI which is more than the provisions of existing GDCR of SUDA & SMC. The opinion was sought vide this office letter no. EIA-10-2007-29-P/1290 dated 25/05/2016.

Meanwhile, the project proponent submitted revised Form-I & Form IA to this office on 20/06/2016 for the proposed project with the FSI of 1.19 i.e FSI area of 15,450.88 m<sup>2</sup> & built up area of 39,042.39 m<sup>2</sup> on the same land area of 12,917.0 m<sup>2</sup> instead of originally proposed FSI of 3.94. It was mentioned that as the permission from the Urban Development & Urban Housing Department is awaited for FSI of 3.94, till the time they want to develop the project with the FSI available i.e 1.19 (17,936.82 m<sup>2</sup>) to the project as per the provisions of the prevailing GDCR and requested to consider the revised application for grant of

Environmental Clearance. The proposed commercial building will be of ground floor + 2 floors instead of ground floor + 9 floors as proposed earlier. They have submitted revised project details like water requirement & sewage generation, solid waste generation & management during construction & operation phase of the project, parking area provision, greenbelt development etc.

Details submitted vide their revised proposal dated 20/06/2016 are tabulated below:

Sr. No.	Particulars	Details															
1.	Proposal is for	New Project															
2.	Type of Project	Warehouse textile market project															
3.	Project / Activity No. [8(a) or 8(b)]	8(a)															
4.	Name of the project	Shyam Sangini-II															
5.	Name of Developer	Mr. Jigneshbhai Papatbhai Patel															
6.	Estimated Project Cost (Rs. In Crores)	Rs. 30 crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> <li>• Land / Plot Area (m<sup>2</sup>): 12,917.0</li> <li>• FSI area (m<sup>2</sup>): 15,450.88</li> <li>• Total BUA (m<sup>2</sup>): 39,042.39</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m<sup>2</sup>)</td> <td>23,250.60</td> <td>15,450.88</td> </tr> <tr> <td>Ground Coverage (m<sup>2</sup>)</td> <td>5,813.69</td> <td>5,813.69</td> </tr> <tr> <td>Common Plot Area (m<sup>2</sup>)</td> <td>1,291.70</td> <td>1,292.44</td> </tr> <tr> <td>Max. building height (m)</td> <td>65</td> <td>19.44</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m <sup>2</sup> )	23,250.60	15,450.88	Ground Coverage (m <sup>2</sup> )	5,813.69	5,813.69	Common Plot Area (m <sup>2</sup> )	1,291.70	1,292.44	Max. building height (m)	65	19.44
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9.	Building Details	<ul style="list-style-type: none"> <li>• No. of Buildings: 1</li> <li>• No. of Blocks: 1</li> <li>• Scope of buildings/blocks: 2 level basement + ground floor + 2 floors.</li> <li>• No. &amp; size of Residential Units:-</li> <li>• No. &amp; type of Commercial Units: 146 storage type warehouses.</li> <li>• Details of amenities if any:-</li> </ul>															
10.	No. of expected residents / users	2160															
11.	Water & waste water details during	<ul style="list-style-type: none"> <li>• Water requirement (KL/day):30.0</li> <li>• Source of water: local water tanker suppliers</li> <li>• Waste water generation quantity (KL/day):2.28</li> </ul>															

	construction phase	<ul style="list-style-type: none"> <li>• Mode of disposal: into septic tank/soak pit system.</li> </ul>																											
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> <li>• Total water requirement (KL/day): 30.0</li> <li>• Fresh water requirement (KL/day):15.0</li> <li>• Source of water: water supply from Surat Urban Development Authority.</li> <li>• Waste water generation quantity (KL/day):24.0 KL/day</li> <li>• Mode of disposal: Treated sewage will be reused back for flushing &amp; gardening purpose and excess treated sewage, if any, will be discharged into the underground drainage line of SUDA.</li> <li>• In case of STP provision, capacity of STP:- 100 KL/day</li> <li>• STP Technology:- FMR</li> <li>• Purposes for treated water utilization:- Treated sewage will be reused back for flushing &amp; gardening purpose and excess treated sewage, if any, will be discharged into the underground drainage line of SUDA.</li> <li>• Quantity of treated water to be reused:             <ol style="list-style-type: none"> <li>1.Gardening (KL/day):5 KL/day</li> <li>2. Flushing (KL/day): 10 KL/day</li> </ol> </li> <li>• Provision of dual plumbing system (Yes/No): - Yes</li> <li>• Quantity and type (treated/untreated)of water to be discharged: Treated sewage will be reused back for flushing &amp; gardening purpose and only excess treated sewage, if any, will be discharged into the underground drainage line of SUDA.</li> <li>• Mode of disposal: As above.</li> </ul>																											
13.	Status of water supply and drainage line	Both drainage and water supply lines exist in the area.																											
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m<sup>3</sup>)</th> <th>Quantity to be reused (m<sup>3</sup>)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>12,547.2</td> <td>9,250.2</td> <td rowspan="2">Utilized for backfilling and greenbelt development within project site, Excess soil will be sold to nearby project after payment of royalty to Government</td> </tr> <tr> <td>Other excavated earth</td> <td>57,720.48</td> <td>-</td> </tr> <tr> <td>Construction debris</td> <td>15 kg/day</td> <td rowspan="3">Nil</td> <td rowspan="3">Sold off to recyclers</td> </tr> <tr> <td>Steel scrap</td> <td>15 kg/day</td> </tr> <tr> <td>Discarded packing materials</td> <td>6 kg/day</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Generation (m <sup>3</sup> )	Quantity to be reused (m <sup>3</sup> )	Mode of Disposal / Reuse	Top Soil	12,547.2	9,250.2	Utilized for backfilling and greenbelt development within project site, Excess soil will be sold to nearby project after payment of royalty to Government	Other excavated earth	57,720.48	-	Construction debris	15 kg/day	Nil	Sold off to recyclers	Steel scrap	15 kg/day	Discarded packing materials	6 kg/day	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse				
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16.	Traffic Management	<ul style="list-style-type: none"> <li>• Width of adjacent public roads: 45 m TP road</li> <li>• Number of Entry &amp; Exit provided on approach road/s: Two gates will be provided.</li> <li>• Width of Entry &amp; Exit provided on approach road/s: 9.0 m</li> <li>• Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 6 m</li> <li>• Width of all internal roads: 9.0 m.</li> </ul>										
17.	Details of Green Building measures proposed.	Provision to install aerated coke (Foam Type) in wash basins, kitchen, low flush water closets in toilet and pressure reducing valves in water pipeline, rain water harvesting and ground water recharge, provision of STP & reuse of treated sewage for gardening & flushing purposes etc.										
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19.	Fire and Life Safety Measures	Fire extinguishers, hose reel, wet riser, manually operated electric fire alarm system, terrace water storage tank etc.				
20.	Details on staircase					
	Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)
	A	2B+G+2	5,168.3 m <sup>2</sup>	5	2.0 m	Less than 30 m
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> <li>• Level of the Ground water table:15 m</li> <li>• No. &amp; dimensions of RWH tank(s) :-</li> <li>• No. and depth of percolations wells :4</li> <li>• Details on Pre-treatment facilities :only roof top rainwater harvesting is proposed</li> </ul>				
22.	Green area details	<ul style="list-style-type: none"> <li>• Tree covered area (m<sup>2</sup>) :700</li> <li>• Area covered by shrubs and bushes (m<sup>2</sup>):200</li> <li>• Lawn covered area (m<sup>2</sup>):392.44</li> <li>• Total Green Area (m<sup>2</sup>):1,292.44</li> <li>• Green Area % of plot area:10%</li> <li>• No. of trees and species to be planted:250</li> </ul>				
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	<ul style="list-style-type: none"> <li>• Green belt development : 30Lacs</li> <li>• Drainage and rain water harvesting: 25 lacs</li> <li>• Solar and energy saving: 25 lacs</li> <li>• STP &amp; dual plumbing:130 lacs</li> <li>• Total: 210 Lakhs</li> </ul>				
24.	Proposed dust control measures during the construction phase	Loading & transportation in covered trucks, covered shed for cement unloading activity, temporarily wind screen around project site will be constructed, sprinkling of water on roads and in vicinity of storage area etc.				
25.	Eco friendly building material usage details.	Fly as brick, aerated block, paving block, RMC, Lead free points.				
26.	Facilities to construction workers	Sanitation facilities, drinking water & tap water, sewage disposal facility, first box, free medicines, doctor service, PPEs etc.				
27.	Documents related to Land Possession	For B.No. 31 & 32, 7/12 in the name of applicant & others and submitted a copy of application made for obtaining N.A. permission. 7/12 for block no. 48/B shows that the land is in the name of land owner & land owner has submitted an application for obtaining N.A permission. The land owner has given authority to applicant though Memorandum of Authorization.				

The said submissions dated 30/12/2015 & 20/06/2016 of the project proponent was considered by the committee in the meeting. During the meeting, the committee was of the view that the project was appraised during the meetings of SEAC held on 09/06/2015 & 29/12/2015 with FSI of 3.94 and now as the project proponent wants to scale down the project with FSI of 1.19 which is available as per the prevailing

GDCR of SMC/SUDA as well as the revised project details submitted by them was found satisfactory, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance with the project features tabulated above.

**Industrial projects :**

13	Dain Colour Chem	Plot no.5, Nilkanth estate, nr. Ravi industrial estate, b/h. Gaytri Dairy, Chhatral, Ta - Kalol, Dist – Gandhinagar	Screening & Scoping
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**Project / Activity No.: 5(f)**

- M/s: Dain Colour Chem (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/5262/2015 dated 19/12/2015.
- This project was considered in the meeting of the SEAC held on 03/02/2016.
- During the meeting, Committee observed that the proposed project is located outside the notified area and it is required to comply three conditions for small unit [i.e. water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989] as per the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014. PP presented that they are complying these conditions as per said amendment to EIA Notification 2006. However, Committee felt that product wise exact quantity of water consumption per day, copy of CC&A and its compliance and sound management of waste water treatment is required to be submitted. After detailed deliberations, It was decided to reconsider the project for screening / scoping in one of the upcoming meetings only after submission of the following: (1) Satellite image and map showing nearest residential area/habitats from the outer periphery of the proposed site. Distance of the project site from the nearest (1) Anganwadi, School, College, Institute etc. (2) Water Body: Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) Eco Sensitive zone, National Park / Wild Life Sanctuary etc. and impact of proposed project. (2) Legal Undertaking stating that unit is complying the three conditions for small unit [i.e. water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989] as per the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014. Give detailed justification for Non-MAH unit. (3) Water consumption per MT of each product and per day consumption per product. (4) Status of the existing Consent to Operate and Authorization accorded by the SPCB. Compliance status of the existing unit with respect to various conditions of CC&A order obtained from the Gujarat Pollution Control Board (GPCB). (5) Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for prevention of pollution.

- PP has submitted additional details sought vide their letter on 06/04/2016.

**Project status:** Expansion

**Project / Activity Details:**

This is an existing unit and now proposes for the manufacturing of the Synthetic Organic chemicals as tabulated below:

Sr. no.	Name of Products	Quantity MT/Month		
		Existing	Proposed	Total
1	Ferrous Sulphate	70	0	70
2	Tatrazine	0	15	15
3	Sunset Yellow FCF	0	15	15
4	Chocolate Brown HT	0	10	10
5	Allura Red	0	8	8
6	Ponceau 4R	0	7	7
7	Carmoisine	0	5	5
8	Amrenth	0	5	5
9	Reactive Black B	0	1	1
10	Reactive Black WNN	0	1	1
11	Super Black G	0	1	1
12	Super Black R	0	1	1
13	Reactive Red ME4BL	0	1	1
14	Reactive Red 195	0	1	1
15	Reactive Red BS	0	1	1
16	Reactive Blue 220	0	1	1
17	Reactive Blue 222	0	1	1
18	Reactive Orange 78	0	1	1
19	Reactive Orange 122	0	1	1
20	Golden Yellow – MERL	0	1	1

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.

Plot area is approx. 6179.5 sq. m. Unit has proposed 1900 sq. m area for green belt/tree plantation. Estimated cost of proposed expansion is Rs. 0.5 Crores. Fresh water requirement after proposed expansion will be 23.5 KL/day which will be supplied by the tanker supply. At present there is no industrial waste water generation from the manufacturing activity. Wastewater generation after the expansion will be 6.5 KL/day. Unit has proposed primary ETP followed by common spray dryer of M/s: Chhatral Environment Management System Pvt. Ltd. (CEMSPL) Unit has also proposed in-house spray dryer of capacity 1000 Lit./hr which will be operated in case of non-operation of Common facility. There is no flue gas emission from Existing manufacturing activity. Unit has proposed one Boiler (1 TPH), one TFH (2 Lac KCAL/hr) and one HAG (6.5 Lac Kcal/hr). Bio Coal (2.5 MT/day) will be used as a fuel for Boiler, TFH and HAG. Multi Cyclone separator followed by bag filter is proposed as a fuel. Alkali scrubber is provided as APCM with reaction vessel for control of SO<sub>2</sub>. There will be no process emission from the proposed manufacturing activity. Multi cyclone dust collector followed by wet scrubber is proposed as APCM with spray dryer. Hazardous waste to be generated are ETP waste (9 MT/Year), Discarded containers (1.5 MT/Year), Used Oil (0.05 KL/Year), Process waste (106 MT/Month). ETP waste & process waste will be disposed off at the nearby common TSDF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized re-processors. Used oil will be sold only to the registered recyclers.

**Discussions/Observations:**

Technical presentation made during the meeting by project proponent. PP has submitted point wise additional information sought during the SEAC meeting dated 03/02/2016. PP submitted that there is no National Park/Wild life sanctuary within 10 KM from the project site. Legal Undertaking submitted stating that unit is complying the three conditions for small unit [i.e. water consumption less than 25 M<sup>3</sup>/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989] as per the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014. Give detailed justification for Non-MAH unit. Water consumption and waste water generation per day per MT of each product is also submitted. Copy of valid CC&A for manufacturing of Ferrous Sulphate and its point wise compliance status is submitted. Copy of SCN issued by GPCB is submitted. During the meeting, the project proponent requested for categorizing the project as B2 and to exempt them from carrying out detailed EIA study which was not considered by the committee and the project proponent was asked to include the following TORs for the EIA study to be done covering 5 km radial distance from the boundary of the project.

1. Land Possession Documents of the proposed site. NA permission letter from concern authority.
2. Details of surrounding industrial units within 5 KM radius with details like Name and address of the unit, type and nature of industrial activity etc.
3. Project site specific details such as aerial distance of the project site from the nearest (1)

Village-Nearest residential area N(2) Water Body: Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) National Park / Wild Life Sanctuary (8) Aanganwadi/School/College/Institute etc. and likely impact on them due to the proposed project along with the mitigation measures proposed to minimize the likely impact. Give satellite image of 5 KM radius.

4. Need for the proposed expansion should be justified in detail.
5. Demarcation of proposed expansion activities in lay out of the existing premises.
6. Exact details about additional infrastructural facilities, plant machineries etc. required for the proposed expansion.
7. Detailed manufacturing process along with chemical reactions and mass balance (including reuse-recycle, if any) for each product to be manufactured. Details on end use of each product.
8. Give full name and chemical formula of all the raw materials and products.
9. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the proposed expansion. Copy of permission obtained from concern authority for additional water supply.
10. Water consumption and consumption of each raw material per MT of each product.
11. Water balance diagram (including reuse-recycle, if any) along with qualitative and quantitative analysis of the each waste stream to be generated. A detailed treatability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated.
12. Complete waste water management plan for existing as well as proposed production. Detailed effluent treatment scheme and disposal method.
13. Technical details of the ETP including size of each unit, retention time etc. including modifications / up gradation to be done in existing ETP to take care of increased effluent quantity along with its adequacy report. Provision of online continuous pH meter, TOC analyzer and flow meter at the final outlet of the ETP with an arrangement to reflect the results on company's server, which can be accessed by the GPCB on real time basis along with the time bound program for installation of the same.
14. Technical details of proposed Spray dryer including capacity, fuel to be used, adequacy etc. Techno-economical viability of the proposed Incinerator. Control measures proposed for the spray dryer in order to avoid/reduce gaseous emission/VOC from spray drying of industrial effluent containing solvents & other chemicals.
15. Action plan for complete "Zero Liquid Discharge" (ZLD) system for proposed project.
16. Certificate of membership certificate from M/s: Chhatral Environment Management System Pvt. Ltd. (CEMSPL) with inlet norms and quantity. Copy of CTE & CCA of the common facility with compliance status shall be included.
17. Plan for management and disposal of waste streams to be generated from spillage, leakages, occasional reactor washing and exhausted media from Scrubber etc.
18. Explore the possibility of reuse / recycle and other cleaner production options for reduction of

- wastes. Details of methods to be adopted for the water conservation.
19. Details of availability of Bio-Coal and management of Bio-Coal availability during monsoon season.
  20. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
  21. Anticipated environmental impacts due to the proposed project/production may be evaluated for significance and based on corresponding likely impacts VECs (Valued Environmental Components) may be identified. Baseline studies may be conducted within the study area of 5 km for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
  22. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
  23. Modeling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.
  24. Base line status of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
  25. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution control measures for process gas emission measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate emission from each utility (vii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (viii) List the sources of fugitive emission along with its quantification and proposed measures to control it.
  26. Details on management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual handling of the hazardous wastes will be minimized.
  27. Explore the possibilities for co-processing of the Hazardous waste/Solid waste prior to disposal into TSDF/CHWIF.

28. Methodology of de-contamination and disposal of discarded containers and its record keeping.
29. Membership of Common Environmental Infrastructure including TSDF, Common Hazardous Waste Incineration Facility (CHWIF), Common spray dryer etc. along with an assessment to accommodate the additional quantity of wastes to be generated.
30. Complete Management plan for By-products/spent acid to be generated, (if any) from the project including their quantity, quality, characteristics, end use etc. along with the name and address of end consumers to whom the by-product will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/spent acids from the proposed project.
31. Name and quantity of each type of solvents to be used for proposed production. Details of solvent recovery system including mass balance, solvent loss, recovery efficiency feasibility of reusing the recovered solvents etc. for each type of solvent.
32. Data on air emissions, wastewater generation and solid / hazardous waste generation and management for the existing plant should also be incorporated. (Comparative data in tabular format).
33. Details of measures proposed for the noise pollution abatement and its monitoring.
34. A detailed EMP including the protection and mitigation measures for impact on human health and environment as well as detailed monitoring plan and environmental management cell proposed for implementation and monitoring of EMP. The EMP should also include the concept of waste-minimization, recycle/reuse/recover techniques, energy conservation, and natural resource conservation. Total capital cost and recurring cost/annum earmarked for environment pollution control measures.
35. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
36. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment (PPE) to be provided to the workers. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers. Plan for periodic medical check up of the workers exposed. Details of work place ambient air quality monitoring plan as per Gujarat Factories Rules.
37. MSDS of all the products and raw materials to be used.
38. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impact.
39. Details of quantity of each hazardous chemical to be stored, material of construction of major hazardous chemical storage tanks, threshold storage quantity as per schedules of Manufacture, Storage & Import of Hazardous Chemicals (MSIHC) Rules of major hazardous chemicals.
40. Details of the separate isolated storage area for flammable chemicals. Details of flame proof electrical fittings, DCP extinguishers and other safety measures proposed. Detailed fire control plan for flammable substances and processes showing hydrant pipeline network, provision of

- DG Sets, fire pumps, jockey pump, toxic gas detectors etc.
41. Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios should be carried out. The worst-case scenario should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the map clearly showing which of the facilities and surrounding units would be affected in case of an accident taking place. Based on the same, proposed safeguard measures including On-Site / Off-Site Emergency Plan should be provided.
  42. Details of fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site. Submit line diagram of the fire hydrant network.
  43. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
  44. Status of the existing Consent to Operate and Authorization accorded by the SPCB. Compliance status of the existing unit with respect to various conditions of CC&A order obtained from the Gujarat Pollution Control Board (GPCB).
  45. Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for prevention of pollution.
  46. Status of submission of half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions of existing Environmental clearance.
  47. Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project. Also include inspection reports of GPCB for last two years.
  48. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
  49. Detailed five year greenbelt development program including annual budget, types & number of trees to be planted, area under green belt development [with map], budgetary outlay; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere.
  50. Details of fatal / non-fatal accidents, loss of life or man hours, if any, occurred in the existing unit in last three years and measures proposed to be taken for avoiding reoccurrence of such accidents in future.
  51. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions? Details of this system may be given.
  52. A tabular chart with index for point-wise compliance of above

The above mentioned project specific TORs/additional TORs and the model TORs available in the MoEF's sector specific EIA Manual for Integrated Paint Industry shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

**Validity of ToR:**

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 21/06/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

14	Paradise Healthcare	Plot no:C-1/42/15, GIDC Nandesari, Nandesari, Dist.: Vadodara	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** New

**Chronology of EC Process:**

- This project proposed by M/s: Paradise Healthcare (herein after Project Proponent – PP) has submitted an application vide their letter dated 17/12/2014.
- The project proponent was called for brief presentation and discussion in the meeting of SEAC held on 24/02/2015. During the meeting held on 24/02/2015, certain additional TOR was prescribed for the EIA study to be done covering 5 Km of study area.
- EIA Report prepared by M/s: Jyoti OM Chemical Research Centre Pvt. Ltd., Ankleshwar was submitted by project proponent vide online proposal no. SIA/GJ/IND2/9679/2015 dated 28/01/2016.
- Technical presentation during the meeting included the Point wise ToR compliance. The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic. The baseline environmental study has been conducted for the study area of 5 km radial distance from project site for the period December 2014 to February 2015. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, HCl, VOC, CL<sub>2</sub> and HBr at seven locations, including the project site. During the study period the value of PM10 at monitored locations is ranged between 164-67µg/m<sup>3</sup> while the value PM2.5 fluctuates in the range of 69-27µg/m<sup>3</sup>. The value of SO<sub>2</sub> and NO<sub>x</sub> were observed to be in the range of 30.2-7.1µg/m<sup>3</sup> and 45.1-11.3µg/m<sup>3</sup> respectively.

The values of HCl and Cl<sub>2</sub> were found Below Detectable Limit. The value of VOC at monitored locations is ranged between 0.7- 0.3 ppm. The average concentration of PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are within prescribed limit at all locations. Only PM<sub>10</sub>, concentration is higher side due to construction of new 6 lane highway and regular traffic of heavy trucks on the rough roads. These concentrations at all AAQM locations were primarily caused by local phenomena including vehicular movement and natural dusting due to human activities and wind movement. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. From the dispersion modeling studies conducted, it was observed that the maximum ground level concentration occurs in the South west direction. The maximum incremental increase in concentration for PM, NO<sub>x</sub> and SO<sub>2</sub> is 1.532 µg/m<sup>3</sup>, 0.739 µg/m<sup>3</sup> and 1.783 µg/m<sup>3</sup> respectively at a distance of about 1 km in the South west direction. Whereas, the maximum incremental increase in concentration for HBr & Br<sub>2</sub> is 0.118 µg/m<sup>3</sup> & 0.079 µg/m<sup>3</sup> respectively in the premises itself. The resultant concentrations are within the NAAQS.

- During the meeting, Committee was not convinced about the effluent concentration and its stage wise reduction. Unit has proposed ETP comprises of primary ETP followed by Advanced Oxidation (Hydrodynamic Cavitation). The treatment methodology was discussed in detail. PP was asked to submit details of treatment technology and its performance assurance.
- Committee noted that PP has not shown existing scenario in the Form-1 & PFR submitted for TOR. Committee observed that there is a discrepancy in water consumption and waste water generation details submitted in Form-1-PFR and EIA report.
- Committee also observed that compliance of ToR no.1, 4, 5, 22, 23, 25, 27 & 38 is not addressed properly.
- Committee asked to not use fire wood as a fuel for Boilers which was agreed to by the project proponent. After detailed deliberations the Committee sought following additional information for further consideration of the proposal: (1) Compliance of ToR no. 1 (Plot holding certificate from GIDC), 4 (Chemical reactions and full chemical names of raw material & Products with complete mass balance), 5 (Chemical name of each proposed products and Raw materials), 22 (By-product details), 23 (Details about Solvent management), 25 (Which hazardous chemicals require e permission from PESO) and 27. (2) Revised Form-1 & PFR considering changes made as per EIA report and all relevant details. (Give specific details of existing, additional and proposed after expansion details in Tabular format for Air, Water & Hazardous waste). (3) Technical details of Hydro dynamic cavitation technology. Working principle, Process features and Chemistry of this technology. Stage wise removal of COD, TDS, Ammonical Nitrogen and other important parameters for waste water to be treated for proposed project considering worst case scenario. Agreement and assurance from the technology supplier to ensure that the technology is suitable for waste water to be generated from the proposed project. (4) Final letter from CETP-Nandesari regarding certificate confirming the acceptance of treated effluent at CETP. (As per CETP letter dated 17/12/2015). (5) Copies of consent to Establish and Consent to Operate orders obtained along with point

wise compliance status of all the conditions stipulated therein. (6) Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for prevention of pollution. (7) Details of fatal / non-fatal accidents, loss of life or man hours, if any, occurred in the existing unit in last three years and measures proposed to be taken for avoiding reoccurrence of such accidents in future. (8) (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA. (9) Latest status of stay order from Hon'ble Gujarat High Court against the implementation of the NABET accreditation or copy of Certificate of accreditation issued by the NABET, QCI to the environmental consultant.

**Project / Activity Details:**

This unit has applied for manufacturing of Bulk Drugs Intermediates. List of Products and By-products is as below:

Sr. no.	Name of Product	Production Capacity (MT/Month)
1.	Adapalene	0.05
2.	Atovaquone	0.2
3.	Bupropion	1.0
4.	Colistimethate Sodium	0.05
5.	Dimethyl fumarate	3.0
6.	Fluonazole	5.0
7.	Glimipride	0.2
8.	Lornoxicam	0.125
9.	Levocettrizine	0.5
10.	Oxcarbazipine	0.2
11.	Olmisartanmedoxomil	0.1
12.	Telmisartan	0.1
	Total	10.525 MT

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.

Cost of the proposed project will be Rs. 2.5 Crores. Approximately capital cost on environmental protection measures will be INR 28 Lacs and recurring cost will be INR 13.2 Lacs/Annum. Total area acquired for the proposed project is 786 sq. meter. Fresh Water Requirement for the proposed project will be 28 KL/day (Domestic: 1 KL/day, Ind. –27 KL/day) which will be sourced from GIDC water supply system. Industrial waste water generation will be 8.8 KL/day (Process- 6

KL, washings- 0.5 KL, Boiler- 0.3 KL & Cooling- 2 KL). After oxidation and neutralization, Primary treated effluent will be sent to CETP Nandesari. Domestic waste water (0.5 KL/day) will be disposed off into soak pit system. Unit has proposed to use Briquettes of Bio fuel (1.8 MT/day) as a fuel for Boiler (1.2 TPH) and Diesel (40 ltrs/hr) for DG set (200 KVA). Unit has proposed to install Water scrubber followed by Alkali Scrubber for control of gaseous emission from Reactor. Hazardous waste to be generated are ETP waste (18 MT/year), Discarded Drums/Containers (1200 no.s/Year) & Bags with liners (12000 no.s/Year), Used oil (0.05 MT/Year), Spent carbon (16.5 MT/Year), Distillation residue ( 0.5 MT/Year) & Spent solvent (1686 MT/Year). Hydrogen Bromide Solution (2.5 MT/Month) and Ethyl Acetate (5 MT/Month) will be generated as hazardous waste from the proposed products.

**Observations/Discussions:**

Technical presentation made during the meeting also covered the point wise reply of additional information sought. PP has submitted Plot holding certificate from GIDC, Chemical reactions and full chemical names of raw material & Products with complete mass balance and CAS no. product wise, Management of By-products, Solvent management etc.

PP presented that there is no any hazardous chemicals which required permission from PESO, there is no show- cause notices, closure notices etc. served by the GPCB to the existing unit and no fatal / non-fatal accidents, loss of life or man hours. M/s:Nandesari Industries Association - Common Effluent Treatment Plant (NIA-CETP) has submitted final report of CSIR-NEERI validating Hydrodynamic Cavitation technology on behalf of their member industries vide their letter no. NIA/CETP/EC/2016-2017 dated 17/06/2016. PP has submitted membership certificate vide letter no. NIA/CETP/PHC/20152016/016 dated 22/04/2016 regarding acceptance of 9.06 KL/day of waste water. PP has also submitted revised Form-1 & PFR considering changes made as per EIA report and all relevant details, copies of consent to Establish and Consent to Operate orders and point wise compliance status. There is a stay order by Hon'ble Gujarat High Court on amendment to EIA Notification 2006 dated 03/03/2016 regarding implementation of the NABET accreditation. After deliberation on various aspects, the Committee sought following additional information for further consideration of the proposal:

1. Details of solvent management as per ToR no. 23
2. Revised Risk Assessment report considering existing activities. (Tor no. 27)
3. Complete details of ToR no. 22 considering existing By-products as per the the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
4. Give details of actual users with copy of CC&A, MoU etc. Details of disposal of existing by-products for last 2 years.
5. Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project. Also include inspection reports of GPCB for last two years.

15	Vikram Thermo (India) Ltd. (Unit II)	Survey No. 322 Paiki, Village Indrad, Chhatral - Kadi Road, Ta.: Kadi, Dist.: Mehsana	Screening & Scoping
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**Project / Activity No.:** 5(f)

- M/s: Vikram Thermo (India) Ltd. (Unit II) (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11381/2016 dated 13/02016.

**Project status:** Expansion

**Project / Activity Details:**

This is an existing unit engaged in manufacturing of Synthetic organic chemicals and now proposes for enhancement of production as tabulated below:

Sr. No.	Name of Products	Existing (MT/Month)	Proposed (MT/Month)	Ultimate (MT/Month)
1	Di-Phenyl Oxide (DPO)	120	380	500
2	Scented Salt ( <i>By-Product</i> )	85	270	355
3	Drugpol Series (Polymers & Co-Polymers of Acrylic Acid)	Nil	10	10

The project falls under project activity 5(f) as per the schedule of EIA Notification 2006.

The location of the unit is outside the notified area. As per amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014, small units are categorized as Category “B” projects. Small units are defined as with water consumption less than 25 M<sup>3</sup>/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989. During presentation, PP informed that water requirement is 19.5 KL/day. Fuel requirement is 15.6 MT/day (<25 MT/day) and Chemicals to be used are not covered in MAH category. Hence, the proposed products of Resins fall under Category B of project activity 5(f) as per the EIA Notification 2006.

Plot area is approx. 10395 sq. m. Unit has proposed 3100 sq. m area for green belt/tree plantation. The capital cost of the project is Rs. 6 Crores. Fresh water requirement after proposed expansion will be increased from 7 KL/day to 19.5 KL/day (4.5 KL Domestic, 12 KL Industrial & 3 KL Gardening) which will be met through Bore well. Wastewater generation after the expansion will be increased from 2.55 KL/day to 5.65 KL/day [2.05 KL/day industrial + 3.6 KL/day domestic]. At present there is no generation of waste water from manufacturing process. There will be no waste water generation from the manufacturing process. Industrial waste water generation will be from Boiler (0.05 KL/day) and cooling (2 KL/day). Domestic sewage generated @ 3.6 kL/day is being disposed off via septic tank - soak pit system, in continuance with the current practice. Management of Washing water from DPO product distillation is as under: Crude DPO obtained from nutsche filtration is distilled and condensed DPO vapour is packed into drums. During this process, salts and impurities from the crude DPO deposit on the surface of the coils of the distillation vessel. Over a period of time, the distillation vessel is required to be washed to clear out these deposits and maintain optimum heat transfer efficiency. The frequency of washing of

distillation vessel is done once in 10 days, after about 5-6 batches of distillation. The wash water removed from the distillation vessel is filtered to remove the deposits and the filtrate is recycled back to the wash water storage sump. The water in the storage sump is reused for the next washing cycle. This cycle continues until the wash water becomes totally saturated with DPO. Thereafter, the accumulated saturated wash water is treated through distillation. In order to compensate for the evaporation losses, cooling tower bleed off is added to the wash water tank to maintain volume of water. The waste water generated from utilities (cooling bleed-off) will be collected in separate collection tank and reused in gardening purposes within the premises, toilet flushing and as make-up water in the washing activity. At present wood (4.6 MT/day) is used as a fuel for one small Boiler (0.3 TPH) and two no.s of TFH (10 Lac Kcal/hr). Total fuel consumption after proposed project will be 15.6 MT/day (4.6 MT/day wood and 11 MT/day Bio-Coal). MDC is provided as APCM. Unit has proposed two DG sets (380 KVA each) and consumption of Diesel will be @ 175 L/hr. No process gas emission is envisaged. Hazardous waste to be generated are Scented Salt, Used Oil, Discarded Containers, bags, liners, Distillation residue and Spent solvent

**Observations & Discussions:**

Technical presentation made during the meeting by project proponent. Committee suggested not use wood as a fuel and to use Bio-coal only as a fuel, which was agreed to by the project proponent. Upon asking about the existing unit, PP informed that the existing unit is running since 1982 and they have obtained valid CC&A from GPCB. After deliberation on various aspects, following additional TOR was prescribed for the EIA study covering 5 km radius of the project boundary.

1. Land Possession Documents of the proposed site. NA permission letter from concern authority.
2. Need for the proposed expansion should be justified in detail.
3. Demarcation of proposed expansion activities in lay out of the existing premises.
4. Exact details about additional infrastructural facilities, plant machineries etc. required for the proposed expansion.
5. Details of surrounding industrial units within 5 KM radius with details like Name and address of the unit, type and nature of industrial activity etc.
6. Project site specific details such as aerial distance of the project site from the nearest (1) Village-Nearest residential area N(2) Water Body: Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) National Park / Wild Life Sanctuary (8) Aanganwadi/School/College/Institute etc. and likely impact on them due to the proposed project along with the mitigation measures proposed to minimize the likely impact. Give satellite image of 5 KM radius.
7. Legal Undertaking stating that unit is complying the three conditions [i.e. water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989] as per the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014.

8. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
9. Proposed monthly production of each product and product wise monthly consumption of each raw material.
10. Chemical name of each proposed product to be manufactured. Details on end use of each product.
11. Manufacturing process along with chemical reactions, mass balance for each product.
12. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the project. Copy of permission letter obtained from the CGWA or concern authority for drawl of raw water.
13. Water balance diagram (including reuse-recycle, if any) along with qualitative and quantitative analysis of each waste stream to be generated.
14. Plans for management and disposal of waste streams to be generated from spillage, leakages, vessel washing, used container washing etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.
15. Management of Washing water from DPO product distillation & waste water generated from utilities with characteristics of waste water.
16. Action plan for 'Zero' discharge of effluent shall be included.
17. How it will be ensured that there will not be any waste water generation from the proposed products.
18. Details of possibility of chemical seepage & consequent soil contamination & mitigation measure proposed for the same for the proposed project.
19. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
20. Anticipated environmental impacts due to the proposed project/production may be evaluated for significance and based on corresponding likely impacts VECs (Valued Environmental Components) may be identified. Baseline studies may be conducted within the study area of 5 km for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
21. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
22. Modeling indicating the likely impact on ambient air quality due to proposed activities. The

details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.

23. Base line status of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
24. Specific details of (i) Details of the utilities required (ii) Type and quantity of fuel to be used for each utility (iii) Flue gas emission rate from each utility (iv) Air Pollution Control Measures proposed to each of the utility along with its adequacy (v) List the sources of fugitive emission along with its quantification and proposed measures to control it.
25. Specific details of fugitive emission from the unit along with its quantification and proposed measures to control it along with measures proposed to monitor VOC within work area. Details of ventilation system proposed in the work area. Measures proposed to keep the work area environment as per the norms of GFR.
26. Details of measures proposed for noise pollution abatement & its monitoring.
27. Details of management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling and its disposal. How the manual handling of the hazardous wastes will be minimized?
28. Methodology of de-contamination and disposal of discarded containers and its record keeping.
29. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
30. A detailed EMP including the protection and mitigation measures for preventing impacts on human health and environment as well as detailed monitoring plan with respect to various parameters and responsible head for the environmental management cell and environmental management cell proposed for implementation and monitoring of EMP.
31. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment.
32. A detailed Green Belt Development Program including annual budget, types & number of trees to be planted, area under green belt development [with map]; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the GIDC area and elsewhere.
33. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.
34. Details of quantity of each hazardous chemical to be stored, Material of Construction of major hazardous chemical storage tanks, threshold storage quantity as per schedules of the Manufacture, Storage & Import of Hazardous Chemicals Rules of major hazardous chemicals.

- How the manual handling of the hazardous chemicals will be minimized?
35. Details of the separate isolated storage area for chemicals. Details of fire extinguishers, flame proof electrical fittings, DCP extinguishers and other safety measures proposed.
  36. Specific safety details / provisions for various hazardous chemicals and detailed fire control plan for flammable substances.
  37. Details of possibilities of occupational health hazards from the proposed manufacturing activities and proposed measures to prevent them.
  38. Detailed risk assessment report including prediction of the worst-case scenario and maximum credible accident scenario along with damage distances and preparedness plan to combat such situation and risk mitigation measures. Vulnerable zone demarcation.
  39. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
  40. Status of the existing Consent to Operate and Authorization accorded by the SPCB. Compliance status of the existing unit with respect to various conditions of CC&A order obtained from the Gujarat Pollution Control Board (GPCB).
  41. Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for prevention of pollution.
  42. Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project. Also include inspection reports of GPCB for last two years.
  43. Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project.
  44. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
  45. A tabular chart with index for point-wise compliance of above details.

The above mentioned project specific TORs/additional TORs and the model TORs available in the MoEF's sector specific EIA Manual for Integrated Paint Industry shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

**Validity of ToR:**

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 21/06/2019.
- The period of validity could be extended for a maximum period of one year provided an

application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

16	Thermax Limited (Unit II)	Plot No. 903/2, GIDC Estate, Jhagadia, Dist.:Bharuch,	Screening & Scoping
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**Project / Activity No.:** 5(f)

- M/s: Thermax Limited (Unit II) (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11760/2016 dated 16/05/2016.

**Project status:** New

**Project / Activity Details:**

This is a new unit proposes the manufacturing of Synthetic organic chemicals as tabulated below:

Sr. no.	Name of the Products	Quantity (MT/Month)
1.	Ion Exchange Resin	208.33
2.	Acrylic Polymers	5000
3.	Epoxy Resins & Hardners	1000
4.	Industrial Biotech	208.33
5.	Poly Carboxylate Ether	208.33
6.	Poly Naphthalene Sulphonate	208.33
Total		6833.32

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.

Total plot area is 69400 sq. m & unit has proposed 23000 sq mtr area for the green belt development/Tree plantation. Expected project cost is INR. 65.90 Crores. Water requirement for the proposed project will be 745 KL/day and Industrial waste water generation will be 486.5 KL/day as tabulated below:

Sr. No.	Particulars	Water consumption M <sup>3</sup> /day	Effluent generation M <sup>3</sup> /day
		Consumption	Generation
1	Domestic	40	32
	Industrial		

2	Processing (294.5 DM & 279.5 Fresh)	574	454.5
3	Boiler from DM Plant	69	5
4	Cooling	15	5
5	DM Plant	22	22
	Total Industrial	680	486.5
6	Gardening	25	0
	Grand Total	745	518.5

Fresh water requirement will be met through GIDC water supply. Total treated effluent (486.5 m<sup>3</sup>/day) will be discharged into U/G drainage line of NCTL after treatment. Domestic waste water (32 KL/day) will be treated in STP and reused for gardening purpose within premises. It is proposed to install two steam Boilers (2 TPH each). Natural gas or HSD will be used as a fuel for Boilers. Unit has proposed one DG set (315 KVA) as stand -by facility. Boiler and DG sets will be operated on Natural gas. In case of non-availability of natural gas, Boiler & DG set will be operated on HSD. Details of process gas emission is tabulated as under:

Sr. No.	Plant	Process	Type of Gas	Air pollution Control System	Scrubbing Medium
1	Epoxy Resin Plant (S1)	Resin Plant	HCl	Water Scrubber/ Alkali scrubber	Alkali
2	Polymer Plant (S2)	Polymer Plant	Amines	Water Scrubber	Water
3	PCE / PNS Plant (S3)	Technical Plant	Acidic fumes	Alkali Scrubber	Water

Details of hazardous waste is as under:

Sr. No.	Name/Type	State	Qty., Kg/month	Disposal
1	Spent oil	Liquid	100	Sell to registered refiners
2	ETP waste	Cake	20000	To BEIL for secured landfill
3	Incinerable waste	Semi	5000	To BEIL for Incineration/Co-processing in cement
4	Off Specification Products	Semi	5000	

5	Insulation Waste	Solid	250	industries
6	Filter Cloth	Solid	250	
7	Spent Carbon	Solid	500	
8	Used PPE, Glassware	Solid	500	Sell to registered recyclers
9	Discarded Containers			Sell to GPCB authorize vendors
	Bags	Solid	5000	
	Liners	Solid	5000	
	Drums	Solid	1000	
	Carboys	Solid	1000	

**Observations/Discussions:**

Technical presentation made during the meeting by project proponent. During the meeting, upon asking about aerial distance of CEPI area of Ankleshwar GIDC, PP informed that the distance of GIDC-Ankleshwar is more than 7 KM from the proposed site. However, Committee asked to submit the exact aerial distance in this regard. While discussing about the management of waste water, Committee emphasized on reuse of treated wastewater. PP agreed upon reuse of treated sewage for gardening plantation and also committed to explore the possibilities to reuse industrial waste water after treatment.

After detailed deliberations on various aspects of the project following TORs were prescribed in addition to the draft TOR proposed, to carry out EIA study covering 5 km radius from the project boundary of the proposed site :

1. Copy of plot holding certificate obtained from GIDC Jhaghadia.
2. Exact aerial distance from the CEPI area of Ankleshwar from the boundary of project site.
3. Present land use pattern of the study area shall be given based on satellite imagery.
4. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
5. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
6. Details of manufacturing process / operations of each product along with chemical reactions, mass balance, consumption of raw materials etc. Details on strategy for the implementation of cleaner production activities.
7. Chemical name of each proposed product to be manufactured. Details on end use of each product.
8. Detailed mass balance and water balance (including reuse-recycle, if any) along with qualitative and quantitative analysis of the each waste stream from the processes.

9. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the project. Permission obtained from the GIDC for supply of raw water. Undertaking stating that no bore well shall be dug within the premises.
10. Explore the possibility of reuse / recycle and other cleaner production options for reduction of wastes. Details of methods to be adopted for the water conservation.
11. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
12. Segregation of waste streams and details on specific treatment and disposal of each stream.
13. Details of ETP including dimensions of each unit along with schematic flow diagram. Inlet, transitional and treated effluent qualities with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Inlet effluent quality should be based on worst case scenario considering production of most polluting products that can be manufactured in the plant concurrently.
14. Copy of permission letter with quantity from the authority of GIDC drainage network, Dahej regarding confirmation for spare capacity available to take additional effluent load in GIDC drainage.
15. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc. of effluent discharge.
16. Application wise break-up of effluent quantity to be recycled / reused in various applications like sprinkling for dust control and green belt development etc. In case of land application, details on availability of sufficient open land for utilizing effluent for plantation / gardening. How it will be ensured that treated effluent won't flow outside the premises linked with storm water during high rainy days.
17. Economical and technical viability of the effluent treatment system.
18. Undertaking stating that a separate electric meter will be provided for the ETP.
19. Characteristics of the combined effluent and treated water to be sent to Common pipeline with reference to the GPCB discharge norms.
20. Certificate from the concern authority of effluent drainage network regarding confirmation for spare capacity available to take additional effluent load in effluent drainage pipeline.
21. Application wise break-up of effluent quantity to be recycled / reused in various applications like sprinkling for dust control and green belt development etc. In case of land application, details on availability of sufficient open land for utilizing effluent for plantation / gardening. How it will be ensured that treated effluent won't flow outside the premises linked with storm water during high rainy days.
22. Plans for management, collection and disposal of waste streams to be generated from spillage, leakages, vessel washing, used container washing etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.
23. Land availability for gardening and plantation with its percolation rate & Soil characteristic.

- Detail management plan for treated effluent in monsoon season when utilization of treated effluent for gardening & plantation purpose is not feasible.
24. Quality of ground water within 500 meter radius of the site and impacts of on land discharge of treated waste water for gardening/plantation on ground water quality.
  25. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
  26. Anticipated environmental impacts due to the proposed project/production may be evaluated for significance and based on corresponding likely impacts VECs (Valued Environmental Components) may be identified. Baseline studies may be conducted within the study area of 5 km for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
  27. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
  28. Modeling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.
  29. Base line status of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
  30. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution control measures for process gas emission measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate emission from each utility (vii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (viii) List the sources of fugitive emission along with its quantification and proposed measures to control it (ix) Details on tail gas treatment.
  31. Action plan for odour control to be submitted.
  32. Details on management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual handling of the hazardous wastes will be minimized. Methodology of de-

- contamination and disposal of discarded containers and its record keeping.
33. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, Common effluent discharge pipeline etc.
  34. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
  35. Name and quantity of each type of solvents to be used for proposed production. Details of solvent recovery system including mass balance, solvent loss, recovery efficiency feasibility of reusing the recovered solvents etc. for each type of solvent.
  36. A detailed EMP including the protection and mitigation measures for impact on human health and environment as well as detailed monitoring plan and environmental management cell proposed for implementation and monitoring of EMP. The EMP should also include the concept of waste-minimization, recycle/reuse/recover techniques, energy conservation, and natural resource conservation. Total capital cost and recurring cost/annum earmarked for environment pollution control measures.
  37. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
  38. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment to be provided. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers. Plan for periodic medical checkup of the workers exposed. Details of work place ambient air quality monitoring plan as per Gujarat Factories Rules.
  39. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
  40. Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios should be carried out. The worst-case scenario should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the facilities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures including On-Site / Off-Site Emergency Plan should be provided.
  41. MSDS of all the products and raw materials.
  42. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.
  43. Details of quantity of each hazardous chemical (including solvents) to be stored, Material of Construction of major hazardous chemical storage tanks, dyke details, threshold storage quantity as per schedules of the Manufacture, Storage & Import of Hazardous Chemicals Rules of major hazardous chemicals, size of the biggest storage tank to be provided for each raw material & product etc. How the manual handling of the hazardous chemicals will be

minimized?

44. Details of the separate isolated storage area for flammable chemicals. Details of flame proof electrical fittings, DCP extinguishers and other safety measures proposed. Detailed fire control plan for flammable substances and processes showing hydrant pipeline network, provision of DG Sets, fire pumps, jockey pump, toxic gas detectors etc.
45. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
46. Detailed five year greenbelt development program including annual budget, types & number of trees to be planted, area under green belt development [with map], budgetary outlay; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere.
47. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment. Submit a detailed plan for social corporate responsibilities, with appropriate budgetary provisions for the next five years and activities proposed to be carried out; specific to the current demographic status of the area.
48. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA.
49. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
50. Does the company have a system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA Report.
51. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
52. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
53. A tabular chart with index for point-wise compliance of above TORs.

The above mentioned project specific TORs/additional TORs and the model TORs available in the MoEF's sector specific EIA Manual for Synthetic Organic Chemical industry shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

**Validity of ToR:**

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 21/06/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

17	Kosha Chemtech Pvt. Ltd.	7119,7120,7121,7122, GIDC Sachin, Ta.: Choryasi, Surat	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** Expansion

**Chronology of EC Process:**

- This project proposed by M/s: Kosha Chemtech Pvt. Ltd. (herein after Project Proponent – PP) has submitted an application vide their letter dated 14/09/2014.
- The project proponent was called for brief presentation and discussion in the meeting of SEAC held on 08/12/2014. During the meeting held on 08/12/2014, certain additional TOR was prescribed for the EIA study to be done covering 10 Km of study area.
- EIA Report prepared by M/s: En-Vision Enviro Technologies Pvt. Ltd., Surat was submitted by project proponent vide online proposal no. SIA/GJ/IND2/8630/2014 dated 19/01/2016.
- The project proponent was called for appraisal of the project in the meeting held on 25/02/2016.
- During the meeting dated 25/02/2016, technical presentation during the meeting included the Point wise ToR compliance. The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic. The baseline environmental study has been conducted for the study area of 5 km radial distance from project site for the period March 2015 to May 2015. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx, CO, VOC, Cl2, HCl and NH3 at eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. The resultant concentrations are within the NAAQS. During the meeting, Committee was not convinced about the waste water & spent acid management. On asking about spent acid management, PP could not reply satisfactorily. As per EIA report diluted Sulphuric Acid generated from the manufacturing process will be reused in process again. Committee noted that the exact quantity of spent acid generation and its management is not properly addressed. Project proponent was asked to remove some products having high pollution potential and submit the revised proposal with sound environment management plan (EMP). After detailed deliberations the Committee sought following additional information for further consideration of the proposal: (1) Revised proposal with sound environment management plan. (2) Product wise waste water generation in KL/day (Dilute stream,

concentrated stream, spent acid generation etc.), its Characteristics and its disposal method.  
 (3) Compliance of ToR no. 20 (4) An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF&CC OM dated 05/10/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the MoEF&CC OM dated 04/08/2009

**Project status:** Expansion

**Project / Activity Details:**

This is an existing unit engaged in manufacturing of Dyes Intermediates and now unit has applied for addition of some new products as tabulated below:

Sr. no.	Name of the products	Existing MT/Month	Proposed Total MT/Month
<b>Group-1</b>			
1.	R Salt	83	3
2.	G Salt		30
3.	Schaeffer's Acid	0.0	150
4.	Aniline 2, 4-Di Sulfonic Acid		
5.	Aniline 2, 5-Di Sulfonic Acid		
6.	PNCBOSA		
7.	Sulfo C Acid		
8.	Sulfanilic Acid		
9.	Para Cresidine Ortho Sulfonic Acid		
10.	EBAMSA		
11.	BON Acid		
<b>Group-2</b>			
12.	Amido G-Acid	0.0	40
<b>Group-3</b>			
13.	Sulfo Gamma Acid	0.0	30
14.	Bronners Acid		
<b>Group-4</b>			
15.	Amido Epsilon Acid	00	30
16.	Epsilon Acid		
17.	C-Acid		
18.	KOCH Acid		
19.	Violet Acid		

20.	1, 6-Cleave Acid		
21.	1, 7-Cleave Acid		
22.	Mix Cleave Acid		
Group-5			
23.	Peri Acid	00	10
24.	Phenyl Peri Acid		
Group-6			
25.	4 sulfoAnthralinic Acid	00	10
26.	4 sulfoHydrazone		
27.	Benzidine 2, 2 Di Sulfonic Acid	0.0	10
28.	NAS 5	0.0	10
29.	Aryl Sulfonic Acid	30	30
30.	DMAB Sulfethanolamine	12	7.2
31.	APS Sulfonamide	12	7.2
32.	Meta Ureido Aniline	9.0	5.4
33.	Aryl Sulfonyl Chloride	5.0	3.0
34.	Phosphoric acid	0.0	75
35.	Di-calcium Phosphate	0.0	150

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.

Total plot area is 4078 m<sup>2</sup>. The total cost of the proposed expansion is Rs. 3.0 Crores. Total water consumption after proposed expansion will be 36.2 KL/day (Existing 12 KL/day + Additional 24.2 KL/day). Fresh water will be sourced from GIDC water supply. Entire Industrial effluent i.e. 28.6 KLD will be treated in primary treatment and then sent to CETP for further treatment. Effluent generation from the industrial activity will be segregated into two streams: Dilute stream and Concentrated stream. Treated effluent from dilute stream will be sent to Globe Enviro Care Ltd. (CETP) and concentrated stream will be subjected to in-house MEE or sent to Mahavir Eco Projects Pvt. Ltd. (CETP). Domestic waste water will be disposed off into soak pit system. Unit has proposed one gas fired Boiler (cap. 0.5 TPH) in which Natural will be used as fuel. At present unit

is having one NG fired TFH and one DG set as stand by facility. At present two stage alkali scrubber is provided as APCM for control of process gas generated from the reactor vessel / drawing vessel. Air vent of existing Oleum tank is dipped into H<sub>2</sub>SO<sub>4</sub> tank. Project proponent has presented that there will be no additional process gas emission from the proposed expansion. Hazardous waste to be generated are ETP sludge (2.5 MT/Yr), Used Oil (10 Lit./Yr), Discarded containers (400 nos./year), MEE Salt (75 MT/Year) and Process waste (6 MT/Month).

**Observations & Discussions:** Technical presentation made during the meeting by project proponent.

Revised proposal with group wise details of waste water generation, product wise w/w generation in KL/day, Gypsum generation and its management and undertaking by PP & environmental consultant is submitted To deduce the pollution potential unit has removed 5 products namely Sulfo Tobias Acid, Para Sulfo VS, K-Acid, Gamma Acid and 6 Acetyl OAPSA. However, Committee was not convinced regarding the management of pollution load especially waste water generation for the remaining products. Upon asking, PP agreed to remove few more products like PNCBOSA, Koch ACID etc. which was agreed to by the project proponent. Committee asked to submit revised Form-1, Revised EIA report with all relevant details like treatability report, EMS adequacy report, water balance, hazardous waste generation, air emission details etc. Revised water balance diagram with treatability report and EMS adequacy report, Details of CETP of PIL, Haz. Waste, copy of SCN issued by GPCB & reply, Undertaking by PP & Consultant regarding EIA report and Characteristics of concentrated stream effluent is submitted. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Revised Form-1, Revised EIA report with all relevant details like treatability report, EMS adequacy report, water balance, hazardous waste generation, air emission details etc.
2. Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project. Also include inspection reports of GPCB for last two years.

18	Span Chemicals	Plot no: 27,C/1,B-6, GIDC-Pandesara, Ta.: Chorasi, Dist.: Surat	Appraisal
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**Project / Activity No.:** 5(f)

- M/s: Span Chemicals (herein after Project Proponent – PP) has submitted application vide their letter dated 13/08/2014.
- Project Proponent did not remain present in the SEAC meeting dated 18/10/2014.
- The project was considered for TOR finalization in the meeting of the SEAC held on 24/03/2015.
- Final EIA Report prepared by M/s: Aqua-Air Environmental Engineers Pvt. Ltd. was submitted project proponent on dated 05/10/2015. (Online Proposal no. SIA/GJ/IND2/1672/2015)
- The project proponent was called for appraisal of the project in the meeting held on 22/12/2015.
- During the meeting dated 22/12/2016, Technical presentation made during the meeting by project proponent. The baseline environmental quality has been assessed in the winter season (December 2014 to February 2015) in a study area covering 5 km radius around the

plant site. The wind direction is predominantly from NE to SW direction. Ambient Air Quality Monitoring (AAQM) was carried out at 8 locations during the study period for PM10, PM2.5, SO2, NOx, NH3, HCl, CO, VOC and CL2. The baseline ambient air quality study reveals that the concentrations of all the measured parameters are well within the prescribed limits as per the National Ambient Air Quality Standards for industrial & residential. The Industrial Source Complex – Short Term (ISCST3) dispersion model was used for the prediction of maximum ground level concentration (GLC). The maximum ground level concentration due to the proposed project will be within the ambient air quality standards. Committee noted that PP has not shown generation of spent acid from the manufacturing of proposed products. On asking, PP could not reply about the generation of spent acid and its management. While discussing about treatability of dilute and concentrated waste water streams, Committee noted that PP has not given product wise effluent generation with qualitative analysis. Committee also asked to give worst case scenario for waste water generation & its treatment scheme. It was observed that TOR related to waste water generation, treatment scheme, reuse-recycle scheme, management of by-products and hazardous waste, flue gas, process gas, fugitive emission details, Compliance status etc. have not been addressed properly. After deliberations Committee asked PP to come with the revised proposal with sound environment management plan. Considering the above facts, It was unanimously decided to consider the project for further appraisal only after submission of the following: (1) Revised proposal with sound environment management plan. (2) Stage wise qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance. (3) Complete and specific details of TOR no. 7, 9, 11, 13, 17, 18, 21, 23, 39 (4) Give specific option with specific details for concentrated effluent stream to be generated from the proposed project. (5) Plant lay out indicating storage area, plant area, greenbelt area, utilities etc. (6) An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF&CC OM dated 05/10/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the MoEF&CC OM dated 04/08/2009.

- The project proponent submitted the additional information vide their letter on 04/05/2016.

**Project status:** Expansion

**Project / Activity Details:**

This is an existing unit engaged in Dyes intermediates and now proposes for expansion and addition of new products as below:

Sr. no.	Products	Existing MT/Month	Proposed MT/Month	Total MT/Month

1.	Anthranilic Acid	7	23	30
2.	5 – Sulpho Anthranilic Acid	4	13	17
3.	Phthalimide	1	0	1
4.	Sodium Hypochlorite	0	200	200
5.	Schaeffer's Acid	0	30	30

Total plot area is 800.8 sq. m. The total cost of the proposed expansion is 1.60 Crores.

Total water consumption after proposed enhancement of production will be increased from 4.35 KL/day to 15.2 KL/day (1.6 KL Domestic, Gardening & 13.6 KL Industrial) which will be supplied by the GIDC. Waste water generation will be mainly from Process, Washings, Cooling and scrubber. Wastewater generation after the proposed enhancement of production will be increased from 3.65 KL/day to 11.4 KL/day (Dilute stream – 10 KL/day & Concentrated stream – 1.4 KL/day). Domestic waste water (0.5 KL/day) will be disposed off into septic tank/soak pit system. At present unit is a member of CETP of PIL and industrial effluent goes to CETP after primary treatment (existing) within the premises. Total 1.4 KL/day of high COD stream effluent will be treated in their own MEE or sent to MEPL for further treatment and 10 KL of low COD stream effluent will be treated in their own ETP and then sent to CETP of PIL, Pandesara. Necessary modifications and/up gradation will be carried out in existing ETP. Domestic waste water will be treated along with industrial effluent. Treated effluent will be sent to the CETP of M/s. Pandesara Infrastructure Ltd. (PIL) for further treatment and final disposal. There is no Boilers/heaters and no fuel requirement at present and for the proposed expansion. Unit has proposed scrubber system for control of process gaseous emissions from Sulphonator. Existing water/Alkali scrubber will be used for control of process gaseous emission of NH<sub>3</sub> & SO<sub>2</sub>. ETP waste (20 MT/Annum) & Evaporator salt (2 MT/Annum) will be disposed off at the Common TSDF site. Discarded barrels / containers / bags / liners (5 MT/Annum) will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil (0.07 MT/Annum) will be sold only to the registered recyclers. Spent carbon will be sent to registered regenerators for re-processing and for reuse or sent to Common TSDF site. Unit has obtained membership of TSDF of BEIL.

**Observations & Discussions:** Technical presentation made during the meeting by project proponent. PP has submitted product wise characteristics of untreated effluent with complete mass balance. Dilute stream effluent will be treated in ETP comprises of primary, secondary and tertiary treatment units and then sent to CETP of Pandesara Infrastructure Limited (PIL) and concentrated stream effluent will be treated in ETP comprises of primary, secondary and tertiary treatment units and it will be sent to common MEE of MEPPL, Sachin or evaporated in their own MEE. Revised water balance diagram with treatability report and EMS adequacy report, Details of CETP of PIL, Haz. Waste, copy of SCN issued by GPCB & reply, Undertaking by PP & Consultant regarding EIA report and Characteristics of concentrated stream effluent is submitted. To deduce the pollution

potential unit has removed three products namely G-Salt, Sulpho Tobias Acid and R-Salt. Unit has submitted revised form- with relevant details. However, Committee observed that there is a discrepancy between revised data and Treatability-adequacy report. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Revised treatability report and EMS adequacy report considering revised product details.
2. Technical details of APCM of process gaseous emissions with details like source of process gases, rate of emission, efficiency of APCM, disposal of scrubbing media with its qualitative & quantitative analysis.
3. Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project. Also include inspection reports of GPCB for last two years.

19	Dharma nandan Fine Chem	Block no.15, S.no.1792 & 1794, Vill. Halvad, Morbi Cross Road, Ta.: Halvad, Dist.: Morbi	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** New

**Chronology of EC Process:**

- This project proposed by M/s: Dharma nandan fine chem (herein after Project Proponent – PP) has submitted an application vide their letter dated 26/05/2015.
- This project was considered in the meeting of the SEAC held on 30/07/2015.
- The location of the unit is outside the notified area. As per amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014, small units are categorized as Category “B” projects. Small units are defined as with water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989.
- During presentation, PP informed that water requirement is 7.2 KL/day, Fuel consumption will be 2.3 MT/day and Chemicals to be used are not covered in MAH category. Hence, the proposed project falls under Category B of project activity 5(f) as per the EIA Notification 2006.
- Looking to the small scale of the project, low pollution potential and the details presented during the meeting, after detailed discussion, the project was categorized as B2 and the additional information was sought for appraisal of the project.
- The project proponent submitted the additional information vide their online proposal no. SIA/GJ/IND2/35678/2015 dated 30/12/2015
- The project proponent was called for presentation and discussion in the meeting of SEAC held on 03/02/2016
- During the meeting dated 03/02/2016, while discussing about the location of the proposed site, PP informed that the proposed site is surrounded by other industries and the site is located within the industrial estate. Upon asking, PP informed that the Wild Ass sanctuary is @ 40 km from the site. While reviewing the point wise reply, Committee noted that the management of

By-products, APCM and waste water management are not addressed properly. Safety aspects of Sodium metal was discussed in detail. Committee asked to provide strict engineering controls and personal protective equipments for the workers during handling of Sodium metal. After detailed deliberations the Committee sought following additional information for further consideration of the proposal: (1) Document showing site is located within the industrial estate. (2) Compliance of Point no 24 regarding management of By-products. (3) Clarification of discrepancy in reply of point no. 21 & 25 regarding spent solvent. (4) Stage wise qualitative and quantitative analysis of waste water (Effluent characteristics) to be generated from the manufacturing process of each product to be manufactured along with mass balance including parameters like COD, BOD, TDS, SS, Ammonical Nitrogen, pH etc. should be covered. (5) An Undertaking regarding commitment for Zero Liquid Discharge (ZLD) and use of Bio coal only as a fuel. (6) Technical details of Ammonia scrubbing system with mass balance including by-product management, Dryer unit & its APCM with line diagram. (7) Detailed safety measures for the handling, storage & use of Sodium Metal. Prepare SOP with provision of engineering controls as precautionary measures. (8) Generation and management of spent carbon.

- The project proponent submitted the additional information vide their letter on 13/05/2016.

#### Project / Activity Details:

This is a new project proposes the manufacturing of following Synthetic Organic Chemical.

Sr. no.	Products Name	Production Capacity (MT/Month)
1	Phenidone A (1-Phenyl -3-Pyrazolidone)	2.5
2	Phenidone B (4 Methyl -1- Phenyl -3-Pyrazolidone)	1.5
	Total	4.0
By-Products		
1	Sodium Sulfate	0.12
2	Ammonium Chloride	0.8

The project falls under project activity 5(f) as per the schedule of EIA Notification 2006.

Total plot area 584 sq. m. Unit has proposed 36 sq. m area for the green belt development/ Tree plantation. Expected project cost is Rs. 0.60 Crores. Nearest residential area of Vill. Halvad is @ 1.5 KM from the project site. Total water consumption for proposed project will be 7.2 KL/day (0.4 KL/Day for Domestic, 0.1 KL/Day for Gardening, 0.2 KL/Day for Washing, 2 KL/Day for Cooling, 2 KL/Day for Boiler and 2.5 KL/Day for Process) which will be sourced from the private water supply tankers. Total waste water generation will be 3.5 KL/Day (0.2 KL from Domestic & 3.3 KL from industrial activity). Domestic w/w will be disposed through soak pit system and Industrial waste water (0.2 KL from washing, 0.4 from utility & 2.7 KL from process) will be treated in ETP followed by Evaporator to achieve Zero discharge. It is proposed to install one Boiler (1TPH) and one

D.G.Set (50 KVA). Briquettes of Bio-Coal (2.3 MT/day) will be used as fuel for Boiler & Diesel (20 Lit/hr) will be used as fuel for D.G. Set. Bag Filter is proposed as APC for flue gas emission control. Unit has proposed HCL scrubber for scrubbing of Ammonia gas which will be liberated from the manufacturing process. Generated by-product will be sold out to actual users. Unit has proposed water scrubber with dryer unit as APCM. The Hazardous waste to be generated from the manufacturing activity will be ETP sludge & Evaporation Residue (1 MT/Month), Process waste (0.06 MT/Month), Spent Solvent (3.6 MT/Month), Used/spent oil (0.05 MT/Month) and Discarded plastic bags (0.02 MT/Month). Process waste, ETP waste & evaporation residue will be disposed off at the nearby common TSDF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers after decontamination. Used oil will be sold only to the registered recyclers. Spent solvent will be sent to authorize re-processors.

#### Observations & Discussions:

Technical presentation made during the meeting by project proponent. Project proponent has submitted the point wise reply of additional details sought by SEAC during the meeting held on 03.02.2016. Committee found that the proposed site is not within the industrial estate, however, unit has submitted NA permission letter for the proposed site. PP presented that there is no any By-product/Spent acid generation. PP has submitted revised mass balance for both the products. However, Committee felt that the process modification converts by-products into waste streams and it is desired to submit proper treatment system with technical details. PP submitted safety measures for the handling, storage & use of Sodium Metal including Storage Requirements, Handling Precaution/Conditions, Personal protective equipment. An Undertaking regarding commitment for Zero Liquid Discharge (ZLD) & use of Bio coal only as a fuel is details of Ammonia scrubbing system is submitted. Details of Dryer unit & its APCM with line diagram not submitted. Spent Carbon will be generating From Production of Phenidone A & B in Quantity 0.005 MT/day or 0.152 MT/Month. Which will be sent to CHWIF Site. While discussing about the wild ass sanctuary, PP informed that they do not know about the exact boundary of the wild ass sanctuary and its distance from the project site. Committee suggested to obtain No Objection Certificate from the forest department to which PP was agreed upon and informed that they will submit the same from concern authority. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. NOC / certificate from Forest Department regarding the exact aerial distance of the project site from the boundary of wild ass sanctuary and any other environmental sensitive area.
2. Revised Form-1 with relevant changes like elimination of By-products, change in quality & quantity of industrial effluent, Water balance, Hazardous waste generation etc.
3. Adequacy of proposed waste water treatment scheme with stage wise reduction of Parameters like COD, BOD, Ammonical Nitrogen etc.
4. Line diagram with technical details of Ammonia scrubbing system and APCM with Drying operation.

20	Sainath Industries	Plot no: 3529, Phase-4, GIDC- Chhatral, Ta.: Kalol, Dist: Gandhinagar	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** New

**Chronology of EC Process:**

- M/s: Sainath Industries (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/3380/2015 dated 28/10/2015.
- This project was considered in the meeting of the SEAC held on 02/02/2016.
- Looking to the small scale of the project, technical aspects of the project, its location and the details presented during the meeting, after detailed deliberation, the project was categorized as B2 category project and the additional information was sought for appraisal of the project.
- The project proponent submitted the additional information vide online proposal no. SIA/GJ/IND2/53884/2016 dated 18/05/2016

**Project / Activity Details:**

This is a new unit proposes the manufacturing of Synthetic Organic Chemicals (Dye-Intermediates) as tabulated below:

Sr. no.	Name of the Products	Quantity MT/Month
1	3,5 Di-Amino Benzoic Acid	15
2	Fast Blue B Base	1.5

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.

Total plot area is 989.88 sq. m & unit has proposed 120 sq mtr area for the green belt development/Tree plantation. Expected project cost is Rs. 0.5 Crores. Total water consumption for proposed project will be 5 KL/day (1 KL for Domestic, 0.5 KL for Gardening, 3.5 KL for Industrial purpose) which will be sourced from GIDC water supply. Industrial waste water generation will be 3.95 KL/day, which will be treated in proposed Primary treatment plant and treated waste water will be evaporated in evaporator to achieve Zero Liquid Discharge (ZLD). Domestic waste water (1 KL/day) will be disposed off into soak pit system. Unit has proposed to reuse 5.5 KL/day of Mother Liquor (ML) generated from filtration stage of the product 2,5 Di-Amino Benzoic Acid. Unit has proposed one steam Boiler (1 TPH) in which PNG (100 SCM/day) or LDO/FO (50 L/hr) will be used as a fuel. Unit has proposed one DG set (250 KVA) in which HSD (20 ltrs/hr) will be used as a fuel. Unit has proposed to provide 10 reactor vessels. PP presented that there will be no process gas emission from the proposed project. Electricity will be used as a fuel for Drying operation.

ETP waste including evaporator residue [30 MT/Year] will be disposed off at the Common TSDF site. Process waste [Iron sludge – 600 MT/Year] will be disposed off at the Common TSDF site or will be sent for co-processing. Distillation residue [1.2 MT/Year] shall be disposed off at the CHWIF. Discarded barrels / containers / bags / liners [1.2 MT/Year] will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil

[0.8 MT/Year] will be sold only to the registered recyclers.

**Observations & Discussions:**

Technical presentation made during the meeting by project proponent. While discussing about the reuse of Mother Liquor (ML), Committee observed that information regarding justification for reuse of waste streams (ML) is not properly addressed and PP could not justify about the complete reuse of ML during presentation. Feasibility report for complete reuse of ML without treatment is not submitted. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Quality of the Mother Liquor (ML) generated from the Isolation step in the manufacturing process of 3, 5 Di-Amino Benzoic Acid and its feasibility to reuse in next batch. Give technical justification regarding complete reuse of Mother Liquor.
2. Detailed mass balance with reaction chemistry & stoichiometry for both products.
3. Technical details of Air stripper with line diagram
4. Stage wise reduction of Parameters like COD, BOD etc. during treatment of waste water.

21	Ravi veneer Industries	Survey No.: 252/75/paiki 3, & 252/75/Paiki 5, Kalol- mansa Road, Village & Ta., .: Kalol, Dist.: Gandhinagar	Appraisal
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**Project / Activity No.:** 5(f)

**Project status:** New

**Chronology of EC Process:**

- M/s: Ravi Veneer Industries (herein after Project Proponent – PP) has submitted application vide their letter dated 19/09/2015. (Online Proposal no.SIA/GJ/IND2/2303/2015)
- This project was considered in the meeting of the SEAC held on 27/11/2015
- Looking to the small scale of the project, technical aspects of the project, low pollution potential and the details presented during the meeting, after detailed deliberations, the project was categorized as B2 category project and the additional information was sought for appraisal of the project.
- The project proponent submitted the additional information vide their letter dated their letter dated 16/06/2016. (Online Proposal no.SIA/GJ/IND2/53747/2016)

**Project / Activity Details:**

This is a new unit proposes for manufacturing of Synthetic Organic Chemicals as tabulated below:

Sr. no.	Name of the Products	Quantity MT/Month
1.	Phenol Formaldehyde Resin	12.5
2.	Melamine Formaldehyde Resin	12.5

3.	Urea Formaldehyde Resin	50
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The location of the unit is outside the notified area. As per amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014, small units are categorized as Category "B" projects. Small units are defined as with water consumption less than 25 M<sup>3</sup>/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989. During presentation, PP informed that water requirement is 12.05 KL/day. Fuel requirement is 1.65 MT/day (<25 MT/day) and Chemicals to be used are not covered in MAH category. Hence, the proposed products of Resins fall under Category B of project activity 5(f) as per the EIA Notification 2006.

Total plot area is 5866 sq. m & unit has proposed 2173 sq mtr area for the green belt development/Tree plantation. Expected project cost is Rs. 2.5 Crores. Aerial distance of nearest residential area of village Kalol is @ 700 m from the project site. Total water consumption for proposed project will be 12.05 KL/day (5 KL for Domestic, 4 KL for Gardening, 3.05 KL for Industrial) which will be sourced from Bore well. Industrial waste water generation will be 0.35 KL/day, which will be treated in proposed Primary treatment with followed by Evaporator (Cap. 40 Liters/hr). Domestic waste water (0.46 KL/day) will be disposed off into soak pit system. It is proposed to install one small Boiler (1.5 TPH). Bio coal (1.65 MT/day) will be used as fuel for Boiler. Multi Cyclone dust collector followed by Bag filter is proposed as APCM. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be ETP sludge & Evaporation residue (2.64 MT/Year), Discarded containers/Bags/Liners (0.42 MT/Year) and used oil (10 ltrs/Year). ETP waste & Evaporation residue will be disposed off at the nearby common TSDF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized vendors. Used oil will be sold only to the registered recyclers.

**Observations & Discussions:**

Technical presentation made during the meeting by project proponent. Committee observed that unit has shown waste wood generation as 462 MT/Annum and proposed to use as a fuel for Boiler. Committee found that the source of the wood waste is required to be identified. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Source of the wood waste and justification for its generation quantity.

The following proponents did not remain present during the meeting:

1. United Pesticide & Nonionics Pvt. Ltd., Plot no. 1680, GIDC, Sarigam, Umbergaon, Valsad
2. Maruti Chemicals, S. No.795/A, Vill. Rakanpur, Kalol, Gandhinagar.
3. Sun Industries, Plot No. C5/101/4. Ground Floor, Beside Hotel Supreme, GIDC, Vapi
4. Gujarat Alkalies And Chemicals Ltd., Plot No.: 42/1, GIDC Dahej, Taluka: Vagra, District: Bharuch

It was decided to call them in one of the upcoming meetings of SEAC.

1. Reconsideration of the proposal of M/s: Ashapura Perfoclay Limited for expansion of production capacity of Bleaching Clay at the existing unit at Survey no. 167, Village: Ler, Nr. Bhujodi, Anjar Bhuj Highway, Bhuj, District: Kutch.

M/s: Ashapura Perfoclay Limited applied for environmental clearance and the SEAC recommended the project for grant of environmental clearance vide this office letter no. EIA-10-2015-6993-1298 dated 26/05/2016 for expansion of production capacity of Bleaching Clay at the existing unit as tabulated below:

Sr. no.	Product	Existing	Proposed (Additional)	Total after expansion
1	Bentonite (Throughput)	0.094 MMTPA	0.062 MMTPA	0.156 MMTPA
2	Bleaching Clay	0.072 MMTPA	0.072 MMTPA	0.144 MMTPA

The case was referred back by the SEIAA vide their letter no. SEIAA/GUJ/EC/2(b)/399/2016 dated 31/05/2016 for reconsideration to the SEAC based on the discussion in the SEIAA meeting held on 27/05/2016 with the following point:

(1) To verify the details of raw material source and spent acid management.

Project proponent vide their letter dated 17/06/2016, submitted the reply as below:

1. Details of source of raw materials:

Details of Source of Raw Material, its quantity and mode of Transportation is as under:

Raw material	Quantity MT/Month E-Existing, P-Proposed, T-Total			Mode of Transportation (Trip per day) E-Existing, P-Proposed, T-Total			Source of Raw materials	EC details & Rate of Mining (RoM)-MTM
	E	P	T	E	P	T		
Mineral (Be	7800	5200	13000		5	14	(1)M/s: Ashapura International	EC NO: SEIAA/GUJ/ EC/1(a)/1803

nto nit e)	(Dumper of 30 Ton capacity)	Ltd.	/2015
		S NO: 305/1,306/1,vill: Chiyasar,Ta:Ab dasa Dist: Kutch	RoM- 3300
		(2) M/s: Ashapura Mine chem. Ltd. S NO: 135/p,vill:Miyan i,Ta:Abdasa, Dist:Kutch	EC NO: SEIAA/GUJ/ EC/1(a)/355/ 2015 RoM- 1500
		(3) M/s: Ashapura Minechem Ltd. S NO: 327/p,vill: Laxmipar,Ta:N akhatrana Dist:Kutch	EC NO: SEIAA/GUJ/ EC/1(a)/3307 /2015 RoM- 1700
		(4) M/s: Ashapura Minechem. S NO: 80/p,vill: Julra, Ta:Lakhpat Dist: Kutch	EC NO: SEIAA/GUJ/ EC/1(a)/2378 /2015 RoM- 2100
		(5) M/s: Ashapura Minechem Ind. S NO: 65/p,Vill: Hamla, Ta:Mandvi, Dist: Kutch	EC NO: SEIAA/GUJ/ EC/1(a)/1807 /2015 RoM- 1800
(6) M/s: Ashapura Minechem Ltd. S. No. 327/P Laxmipar, Ta.	EC NO: SEIAA/GUJ/ EC/1(a)/3305 /2015 – new RoM- 2500		

								Nakhtrana, Dist Kutch	
								(7) M/s: Ashapura Minechem Ltd.  S. No. 343/p Vandh, Ta. Mandvi, Dist Kutch	EC NO: SEIAA/GUJ/ EC/1(a)/1815 /2015  RoM-1250
								(8) M/s: Ashapura Minechem Ltd  S. No. 127 Roha, Ta. Nakhtrana, Dist Kutch	EC NO: SEIAA/GUJ/ EC/1(a)/348/ 2015  RoM- 1000
75 % Sul ph uri c Aci d	4 8 0 0	1 6 0 0	6 4 0 0	4 5	2 3	6 7		M/s: Kutch Chemical (Gandhidham)  CCA no. AWH- 65490 dated 30.09.2014, Valid up to 18/07/2020	Plot no. 166/1-3, 171,172,166, Vill. Padana, Ta.: Gandhidham, Dist. Kutch.
				(Tankers of 30 KL capacity)					
Li me	2 1 0 0	1 0 0 0	3 1 0 0	4 5	2 3	6 7		M/s: GNFC Ltd. , Bharuch .  Purchase order dated 26.05.2016 is attached for ref.	M/s: Gujarat Narmada Valley Fertilizers & Chemicals Limited P.O.: Narmadanag ar – 392 015. District: Bharuch
				(Truck of 16 Ton capacity)					
Attapul	-	2	2		90			From Ashapura	Office

gite  Note: Fuller Earth is another name of Attapul gite both are same.	-	0 0 0	0 0 0	-	-	95 Truc ks Mon thly	Hydrabad	address M/s Ashapura Clay Tech Ltd
							(Truck of 21 Ton capacity)	Sy No. 446/447, Tandur Road, Dharur village & Mandal, RR district.  Mines Address:  Sy. No. 13/A& 13/A1 of Marepally village, Peddumul Mandal, Ranga Reddy district.

This unit procures raw materials from authorized suppliers. PP has submitted copy of (1) Environment Clearance and CC & A of various units (for Bentonite), (2) CC & A of Kutch Chemicals Ltd (for Sulfuric Acid) & (3) Copy of Environment Clearance application of Ashapura Clay Tech Ltd (for Attapulgite i.e. Fullers Earth). EC of Attapulgite is in process – Inward copy attached.

#### Spent Acid Management

Sr. No.	Types of Hazardous Waste	Quantity, MT/Month			Mode of Disposal
		Existing	Proposed	Total After Expansion	
1	Spent Acid	3000	2500	5500	Sale to IFFCO unit

They are sending spent acid to IFFCO on regular basis although If IFFCO will not take spent acid then it will be neutralize at their Neutralization & Filtration Plant and there will be generation of Gypsum – by product. PP has submitted GPCB authorization letter of supply of spent acid to IFFCO.

Gypsum – By product :

Name of product/By-Product	Quantity, MT/Month			Remarks
	Existing	Proposed	Total After Expansion	
Bleaching Clay	6000	6000	12000	-
Gypsum	3000	1500	4500	-
	3000	3000	6000	If spent acid of 2500 MT not sent to IFFCO.

Project proponent represented that Gypsum produced by the neutralization of sulphuric acid containing leach liquor obtained from the leaching of bentonite clay is non hazardous. It does not contain any organic impurity as well as heavy metals. PP has submitted (1) Analysis report of gypsum & (2) Permission Letter from MoEF&CC dated 17<sup>th</sup> October 2014.

The said reply was perused by the committee in the meeting of the SEAC held on 22/06/2016. During the meeting, committee noted that PP has submitted reply of point raised by SEIAA with relevant documents. The Committee observed that generation of spent acid from the process may not be having commercial value and henceforth unanimously decided to recommend the proposal with specific condition of neutralization of entire quantity of spent sulfuric acid and disposal of gypsum to cement mill for co-processing and / or backfilling of exhausted mines as per the Permission Letter from MoEF & CC vide letter no. F. NO. 23-161/2014-HSMD dated 17<sup>th</sup> October 2014. After detailed deliberation, Committee decided to forward the proposal to SEIAA for grant of environmental clearance by replacing Specific Condition No. 2 as below with rest of conditions unchanged as prescribed in previous recommendation letter dated 26/05/2016:

**Specific Condition no. 2**

“Entire quantity of spent sulphuric Acid (5500 MT/Month) generated from the manufacturing process shall be neutralized and generated gypsum shall be sent to cement mill for co-processing and/ or it shall be sent to back filling of exhausted mine as per the consent sanctioned by MOEF&CC vide letter no. F. no. 23-161/2014-HSMD dated 17<sup>th</sup> October 2014.”

2. Reconsideration of the proposal of M/s. Ravi Industries for setting up of the proposed manufacturing of Synthetic Organic Chemical unit at Plot no:1-20/B, Nr. Steel Art, GIDC Kalol, Dist.: Gandhinagar.

M/s: Ravi Industries applied for environmental clearance and the SEAC recommended the project for grant of environmental clearance vide this office letter no. *EIA-10-2015-6853-E-1001* dated 26/04/2016 for setting up of the proposed manufacturing of Synthetic Organic Chemical unit. This unit has obtained CTE for Inorganic Chemical - Ferrous Sulphate and applied for manufacturing of Meta Uriedo aniline (MUA) as tabulated below:

Sr. no.	Name of Product	Quantity MT/Month
Existing Product		

1.	Ferrous Sulphate	100
Proposed Product		
1.	Meta Uriedo aniline (MUA)	12

The case was referred back by the SEIAA vide their letter no. SEIAA/GUJ/EC/5(f)/313/2016 dated 10/05/2016 for reconsideration to the SEAC based on the discussion in the SEIAA meetings held on 29/04/2016 with the following point: (1) To verify the categorization of the unit (2) To verify the details of characteristics of hazardous waste and its disposal thereof. (3) To verify the compliance status of CETP performance and impact of said project on CETP performance.

The proposal was considered in the SEAC meeting dated 22/06/2016,

1. Earlier, during the SEAC meeting dated 16/09/2015, looking to the small unit, its location in GIDC-Kalol and low pollution potential, Committee unanimously decided to consider this proposal under the B2 category project as per the EIA Notification 2006.
2. Project proponent vide their letter dated 24/05/2016 & 20/06/2016 submitted the reply as below: Characteristics and disposal of hazardous waste to be generated is submitted. ETP waste and Iron sludge will be disposed off to common TSDF site. Spent carbon will be disposed off to the CHWIF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized re-processors. Used oil will be sold only to the registered recyclers.
3. CETP performance data is submitted. A letter from CETP of Kalol GIDC Industries Association mentioned that CETP is having sufficient capacity to treat the additional effluent to be received from M/s: Ravi Industries.

The said reply was considered by the Committee in the meeting of the SEAC held on 22/06/2016. During the meeting, committee noted that PP has submitted reply of point raised by SEIAA. Committee found that the COD of treated effluent to be discharge into CETP is @ 1800 mg/L which is well within the CETP inlet norms (COD 2500 mg/L). Committee also noted that entire quantity (4.8 KL/day) will be sent to CETP after achieving CETP norms and there is no flue gas & process gaseous emission from the manufacturing activities. Unit has obtained membership certificate of Integrated Common Hazardous waste management facility of M/s: Saurashtra Enviro Projects Ltd.

The committee was satisfied with the clarification given by the project proponent regarding hazardous waste & CETP-Kalol and decided to forward the proposal to SEIAA for the grant of environment clearance by replacing the Condition No. 3 and 9 as below and with rest of conditions same as prescribed earlier in the recommendation letter dated 26/04/2016:

Condition no. 15

ETP sludge and Iron sludge shall be disposed off at the common TSDF. Spent carbon shall be disposed off at the CHWIF. However, all the conditions mentioned in Hazardous waste guidelines published by CPCB shall be complied with in letter and spirit.

Condition no. 16

The unit shall obtain necessary permission from the nearby authorized TSDF site & CHWIF.

Member units of CETP-NIA, Nandesari regarding Hydrodynamic Cavitation technology for treatment of waste water.

During the earlier meeting dated 27/04/2016 the following proposals were asked to submit Final report of NEERI validating Hydrodynamic Cavitation technology as the Committee found that the reply regarding treatment method "Hydro dynamic cavitation" submitted by industrial units was not satisfactory.

1. M/s. Amophil Chemicals Pvt. Ltd., Plot no. 124/33, A-B, GIDC-Nandesari, Dist.: Vadodara.
2. M/s: R. K. Industries, Plot no.125/4, GIDC Nandesari, Dist.: Vadodara.
3. M/s: Pharma Inter Chemie unit II, Plot no:139 & 140, GIDC Estate, Nandesari, Vadodara.

During the meeting dated 27/04/2016, a letter received from NIA, Nandesari vide dated 05/04/2016, addressed to Chairman, SEIAA was discussed in detail. As per the letter, NIA has asked NEERI to authenticate Hydrodynamic Cavitation technology as a method of treatment for waste water and it was further mentioned that it is at advance stage of submitting the final report. Committee was of view that proposals with waste water treatment method as "Hydro dynamic cavitation" shall be considered only after submission of the final report regarding authentication of the treatment technology by NEERI.

Committee observed that most of the units located in GIDC Nandesari are sending their waste water to CETP after in-house treatment comprises of Hydrodynamic Cavitation process. This technology is in use for the treatment of waste water generated by chemical industries retaining refractive COD.

Accordingly, M/s:Nandesari Industries Association - Common Effluent Treatment Plant (NIA-CETP) has submitted final report of CSIR-NEERI validating Hydrodynamic Cavitation technology on behalf of their member industries vide their letter no. NIA/CETP/EC/2016-2017 dated 17/06/2016. The contents of the said technical evaluation report including suggestions and recommendation were discussed in detail. The report stated that *"Though the overall process selection and treatment philosophy adopted by M/s: NIA-CETP seems appropriate, it may further need technical refinements and modifications to make it environmentally sound process technology by implementing requisite environmental management and waste handling systems."*

After deliberations, Committee decided to consider the proposals of GIDC-Nandesari which are treating their effluent by Hydrodynamic Cavitation process under the supervision of CETP-Nandesari and to allow them to use Hydrodynamic Cavitation process with the following conditions.

1. Unit shall install adequate APCM i.e. scrubbing system with the Hydrodynamic Cavitation reactor headspace to control un-reacted Chlorine and Volatile compounds. The emission from the vent shall conform to the standards prescribed by MoEF&CC/CPCB/GPCB. At no time, the emission levels shall go beyond the stipulated

standards.

2. Hazardous waste generation from the Hydrodynamic Cavitation technology shall be disposed off as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
3. All necessary safety measures as per the prevailing guidelines shall be taken to avoid any kind of accident during use, storage and handling of Chlorine gas.
4. Necessary prior permissions from various statutory authorities like PESO, Nagpur, Factory Inspectorate and others shall be obtained for use, storage and handling of Chlorine gas.
5. Unit shall implement any technical refinements & modifications made in the hydrodynamic cavitation process by NIA-CETP as recommended by CSIR-NEERI in technical evaluation report for Hydrodynamic Cavitation technology and unit shall inform SEIAA/GPCB time to time.

Committee also decided that, the member units of the CETP-Nandesari which are using hydrodynamic cavitation process under the supervision of CETP-Nandesari shall be allowed to use the said technology for in-house treatment of industrial waste water with the above mentioned specific conditions.

Further the committee decided to recommend the following projects for grant of environmental clearance with the specific conditions as above.

1. M/s. Amophil Chemicals Pvt. Ltd., Plot no. 124/33, A-B, GIDC-Nandesari, Dist.: Vadodara.
2. M/s: R. K. Industries, Plot no.125/4, GIDC Nandesari, Dist.: Vadodara.
3. M/s: Pharma Inter Chemie unit II, Plot no:139 & 140, GIDC Estate, Nandesari, Vadodara

The additional information received from the project proponents M/s: Arvalli Castor Derivatives Pvt. Ltd. for setting up of proposed manufacturing of Synthetic Organic Chemicals at Block no. 521 & 609, On Coastal Highway, Nr. Mahiwad Chowkdi, Ta.: Padra, Dist.: Vadodara, which was sought during SEAC meeting dated 25/02/2016 for further consideration of the proposal. The said submission by the project proponent was considered by the committee during the meeting and as it was found that the reply regarding the waste water management is not satisfactory. After detailed deliberations, the Committee decided to consider the project on satisfactory submission of the following:

(1) Stream wise qualitative and quantitative assessment of the wastewater. A detailed treatability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated. Give technical details of MEE including capacity and schematic diagram. (2) Treated effluent management plan during monsoon season when utilization of treated effluent for gardening & plantation purpose is not feasible. Detailed study report considering Percolation rate of the land available for gardening & plantation. Ensure that land is suitable for utilization of treated sewage for plantation & gardening

The additional information received from the project proponents M/s: Sodium Metal Pvt. Ltd. for setting up of expansion in manufacturing of Synthetic Organic Chemicals at Plot no.21, GIDC-Nandesari, Dist.: Vadodara., which was sought during SEAC meeting dated 09/06/2015 for further consideration of the proposal. The said submission by the project proponent was considered by the committee during the meeting and as it was found that the reply regarding the R & D Products was not satisfactory. After detailed deliberations, the Committee decided to consider the project on satisfactory submission of the following:  
Details of R&D products with reference to ToR no.4 & 6. Give undertaking that R&D products shall not be sold commercially. Give complete details of Air, Water & Hazardous waste generation from the proposed R&D products and its management.

The additional information received from the project proponents, which was sought during various SEAC meetings for granting Environmental Clearance to the projects. The said submissions by the project proponents were considered by the committee during the meeting and as it was found satisfactory, the committee decided to recommend the following projects for grant of environmental clearance.

1. M/s.SRF Limited, Plot no. D2/1, Phase-II, GIDC- Dahej, Suva, Ta.:Vagra, Dist.:Bharuch .

*Meeting ended with thanks to the Chair and the Members.*

**Minutes approved by:**

	<i>Shri V. C. Soni, Vice Chairman, SEAC</i>	
2.	<i>Shri R. J. Shah, Member, SEAC</i>	
3.	<i>Dr. V. K. Jain, Member, SEAC</i>	
4.	<i>Shri V.N. Patel, Member, SEAC</i>	
5.	<i>Dr. Mayuri Pandya, Member, SEAC</i>	
6.	<i>Shri Rajesh I Shah, SEAC</i>	
7.	<i>Shri Hardik Shah, Secretary, SEAC</i>	