

Minutes of the 287th meeting of the State Level Expert Appraisal Committee held on 27/04/2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar.

The 287th meeting of the State Level Expert Appraisal Committee (SEAC) was held on 27th April, 2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar. Following members attended the meeting:

1. *Shri T. P. Singh, Chairman, SEAC.*
2. *Shri V. C. Soni, Vice Chairman, SEAC.*
3. *Shri R. J. Shah, Member, SEAC.*
4. *Dr. V. K. Jain, Member, SEAC.*
5. *Shri V.N. Patel, Member, SEAC.*
6. *Shri Rajesh I. Shah, Member, SEAC*
7. *Dr. Mayuri Pandya, Member, 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 five (5) 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	Kish Developers	S No.190, 191/B,207 T.P. 84/B, Makarba, Ahemdabad	Screening & Scoping
<p>The SEIAA, Gujarat has accorded environmental clearance to M/s Kish Developers for residential building construction project – “K.P.Eternia” at S No.190, 191/B,207, T.P.S.No. 84/B, Makarba, Ahemdabad vide order no. SEIAA/GUJ/EC/8(a)/82/2012 dated 21/03/2012 for the built up area of 48,458.12 m² comprising of 7 buildings housing total 336 residential units.</p> <p>The project proponent, vide proposal no. SIA/GJ/NCP/10864/2016 dated 26/03/2016 submitted revised Form I & Form IA and requested for amendment of Environmental Clearance order dated 21/03/2012.</p> <p>The request of amendment for the proposed changes in terms of expansion and change in scope (from the completely residential project to the completely commercial project) was considered during the meeting. Details of the project after the proposed changes, as presented before the committee, are tabulated below:</p>			
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	90 Crores	

	Project Cost (Rs. In Crores)																
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 14,222.0 • FSI area (m²): 38,396.70 • Total BUA (m²): 77,752.94 <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 (m²)</td> <td>38,399.4</td> <td>38,396.70</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>---</td> <td>4,627.57</td> </tr> <tr> <td>Common Plot Area (m²)</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 ²)	38,399.4	38,396.70	Ground Coverage (m ²)	---	4,627.57	Common Plot Area (m ²)	1,422.2	1,423.0	Max. building height (m)	45 m	45 m.
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Common Plot Area (m ²)	1,422.2	1,423.0															
Max. building height (m)	45 m	45 m.															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 3 buildings & 17 corporate houses. • No. of Blocks: 3 buildings & 17 corporate houses. • 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. • No. of residential units: --- • No. & type of Commercial Units: 11 shops, 17 corporate houses and 513 offices. • Details of amenities if any: No 															
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"> • Water requirement (KL/day): 21.75 • Source of water: Local water tankers. • Waste water generation quantity (KL/day): 5.73 • Mode of disposal: Into septic tank & soak pit. • Details of reuse of water, if any: No 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 187.9 • Fresh water requirement (KL/day): 60.5 • Source of water: Water supply from Ahmedabad Municipal Corporation (AMC) • Waste water generation quantity (KL/day): 145.2 • Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage line of AMC. • In case of STP provision, capacity of STP: Yes, 175 KL/day • STP Technology: biological treatment • Purposes for treated water utilization: Gardening and flushing • Quantity of treated water to be reused: 1. Gardening (KL/day): 6.40 															

		<p>2. Flushing (KL/day):121.0</p> <ul style="list-style-type: none"> • Provision of dual plumbing system (Yes/No): yes • 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 & flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage line of AMC. • Mode of disposal: as above. 																																								
13.	Status of water supply and drainage line	Available in the area.																																								
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</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 m³ will be used for back filling and raising plinth level.</td> <td>Remaining will be send to their other project site for filling up of the low lying areas.</td> </tr> <tr> <td>Construction debris</td> <td>700</td> <td>350 m³ will be used for development of internal road and back filling.</td> <td>Remaining will be send to their other project site for filling up of the low lying areas.</td> </tr> <tr> <td>Steel scrap</td> <td>20</td> <td>0</td> <td>Sold to vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>10</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>800.0</td> <td>White bins</td> <td>Sold to vendors</td> </tr> <tr> <td>Wet waste</td> <td>410.0</td> <td>Green Bins</td> <td>Hand over to AMC</td> </tr> <tr> <td>STP Sludge</td> <td>20</td> <td>Green Bins</td> <td>Hand over to AMC</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: yes • 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 • Landfill site where waste will be ultimately disposed by local authority: final disposal at the nearest municipal solid waste collection point of AMC. 		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	2,500	2,500	Will be used for greenbelt development.	Other excavated earth	47,500	21,000 m ³ will be used for back filling and raising plinth level.	Remaining will be send to their other project site for filling up of the low lying areas.	Construction debris	700	350 m ³ 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	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	800.0	White bins	Sold to vendors	Wet waste	410.0	Green Bins	Hand over to AMC	STP Sludge	20	Green Bins	Hand over to AMC
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15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR:19,198.35 m² • Parking area requirement for Commercial units as per GDCR: 19,198.35 m² • Total number of CPS requirement for the project as per NBC :768 • Number of CPS requirement for commercial units as per NBC:768 																																								

		<ul style="list-style-type: none"> • Total Parking area provided (m²) & No. of CPS: 25,110.58 & 807 CPS • Parking area provided in basement (m²) & No. of CPS: 22,423.66 & 700 CPS • Parking area provided in hollow plinth (m²) & No. of CPS: 1,186.92 & 42 CPS • Parking area provided as open surface (m²) & No. of CPS: 1,500.0 and 65 CPS. 																								
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m wide proposed roads on two sides. • Number of Entry & Exit provided on approach road/s: 4 gates +1 entry for basement. • Width of Entry & Exit provided on approach road/s: 6 m • 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. • Width of all internal roads: 6 m & 4.5 m. 																								
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, 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"> • Power supply: Maximum demand: 2.5 MW Connected load: --- • Source: Torrent Power Limited. • % of saving with calculations: ~30% by use of LED, solar lights and star rated energy efficient electronic consumer durables • Compliance of the ECBC guidelines (Yes / No), if yes, compliance in tabular form: only roof area • DG Sets: No. and capacity of the DG sets: 1 X 125 KVA Fuel & its quantity: HSD, 25 litre/hr 																								
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • 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 & ambulance service. • 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 -30 KL capacity (total capacity), refuge area at 5th, 8th and 12th floors, pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm² at terrace level etc. 																								
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: --- • No. & dimensions of RWH tank(s) : 4 Nos and 2.0m X 2.0 m X 3.0 m • No. and depth of percolations wells :4 nos. • Details on Pre-treatment facilities : oil and grease removal and filter.
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) :400.0 • Area covered by shrubs and bushes (m²): Included in lawn covered area. • Lawn covered area (m²):1,023.0 • Total Green Area (m²):1,423.0 • Green Area % of plot area: 11% • No. of trees and species to be planted: 215 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar.
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, 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:

1. Full size project plans showing building wise & floor wise built up area, FSI area, Floor area details & plot area statement.
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.

3. Explore the possibility of providing two separate ramps and revised plans showing location of both the ramps.
4. Plans showing the floor area & maximum travel distance of the staircase from the farthest corner of the floor, distance between the two consecutive staircases and provision of staircases.
5. Minimum fire water requirement for the proposed project based on the fire study.
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.
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.

2	Dhirubhai M Hirpara	R.S.No 683 & 684, At- Kosamdi, Tal- Ankleshwar, Dist Bharuch	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 [SIA/GJ/NCP/58203/2016.]															
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	Mr. Dhirubhai M. Hirpara															
6.	Estimated Project Cost (Rs. In Crores)	35 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No.															
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 43,402.0 • FSI area (m²): 31,986.43 • Total BUA (m²): 44,604.98 <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 (m²)</td> <td>52,470.27</td> <td>31,986.43</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>--</td> <td>13,104.32</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>4,272.97</td> <td>4,336.18</td> </tr> <tr> <td>Max. building height (m)</td> <td>--</td> <td>18.0</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	52,470.27	31,986.43	Ground Coverage (m ²)	--	13,104.32	Common Plot Area (m ²)	4,272.97	4,336.18	Max. building height (m)	--	18.0
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Common Plot Area (m ²)	4,272.97	4,336.18															
Max. building height (m)	--	18.0															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 6 Nos. + 276 row houses. • No. of Blocks: 11 Nos. + 276 row houses. • Scope of buildings/blocks: 6 nos. buildings - Ground + 5 floors, Row houses - G+1 floor. • & size of Residential Units: 474. (2 BHK- 198 Flats) & (Row House-213- 															

		1BHK,63-2BHK) <ul style="list-style-type: none"> No. & type of Commercial Units: 66 Nos. Of Shops Details of amenities if any: No 															
10.	No. of expected residents / users	2133 nos. residential users															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 15.95 Source of water: Local water tankers Waste water generation quantity (KL/day): 1.15 Mode of disposal: disposed through onsite septic tank and soak pit Details of reuse of water, if any: washing water of construction equipments will be reused for curing 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 416.0 Fresh water requirement (KL/day): 171.0 Source of water: Water supply from Bharuch Ankleshwar Urban Development Authority (BAUDA). Waste water generation quantity (KL/day): 254.0 Mode of disposal: Sewage to be generated from the project will be treated in the proposed onsite STP and reused for toilet flushing and gardening purpose within premises and irrigation purpose. In case of STP provision, capacity of STP: 300 KL/day STP Technology: Conventional with primary, secondary & treatment facilities. Purposes for treated sewage utilization: Toilet Flushing and Gardening Quantity of treated water to be reused: 1.Gardening (KL/day): 128.0 2. Flushing (KL/day): - 117.0 Provision of dual plumbing system (Yes/No): Yes Quantity and type (treated/untreated)of water to be discharged: Sewage to be generated from the project will be treated in the proposed onsite STP and reused for toilet flushing and gardening purpose within premises and irrigation purpose. Mode of disposal: as above. 															
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14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>20,700</td> <td>20,700</td> <td rowspan="2">Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be reused for development of greenbelt.</td> </tr> <tr> <td>Other excavated earth</td> <td></td> <td></td> </tr> <tr> <td>Construction debris</td> <td>48 m3</td> <td>48 m3</td> <td></td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	20,700	20,700	Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be reused for development of greenbelt.	Other excavated earth			Construction debris	48 m3	48 m3	
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Construction debris	48 m3	48 m3															

Steel scrap	5.6 MT	5.04 MT	Will be sold to scrap vendor
Discarded packing materials	1 MT	--	Will be sold to recycler

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste Wet waste	1359 Kg	Into bins to be provided for each individual unit.	The non-biodegradable wastes will be sold to recyclers and the biodegradable wastes will be collected and disposed through composting process.
STP Sludge	225 Kg	--	Reused as manure in gardening and irrigation

- 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.
- Capacity and no. of community bins to be placed within premises: 140 liter each; 20 nos. of bins;
- Disposal: The non-biodegradable wastes will be sold to recyclers and the biodegradable wastes will be collected and disposed through composting process.
- Landfill site where waste will be ultimately disposed by local authority:-

15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 3,572.11 m² • Parking area requirement for residential units as per GDCR: 3143.38 m² • Parking area requirement for Commercial units as per GDCR: 428.73 m² • Total number of CPS requirement for the project as per NBC: 266 nos. • Number of CPS requirement for residential units as per NBC: 237 nos. • Number of CPS requirement for commercial units as per NBC: - 29 nos. • Total Parking area provided (m²) & No. of ECS: 19,775.29 m², 769 nos. • Parking area provided in basement (m²) & No. of ECS: 6544.78 m², 204 nos • Parking area provided in hollow plinth (m²) & No. of ECS: 1199.12 m², 43 nos. • Parking area provided as open surface (m²) & No. of ECS: 12031.39 m², 522 nos.
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m wide road

		<ul style="list-style-type: none"> • Number of Entry & Exit provided on approach road/s: One gate will be provided. • Width of Entry & Exit provided on approach road/s: 12.0 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): --- • Width of all internal roads: 12 m & 7.5 m 																												
17.	Details of Green Building measures proposed.	Maximum utilization of natural light, CFL lighting fixtures in the common areas, use of solar energy in external lighting (Landscape lighting), aerated block [Cement + Fly Ash + Air mixture] will be used to reduce heat stress inside building, rain water harvesting through ground water recharge etc.																												
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply Maximum demand: 1500 KW Connected load: -- • Source: D.G.V.C.L • Energy saving by Non-conventional Methods: • Energy saving measures: Maximum utilization of natural light, CFL lighting fixtures in the common areas, use of solar energy in external lighting (Landscape lighting), aerated block [Cement + Fly Ash + Air mixture] will be used to reduce heat stress inside building etc. • DG Sets: not proposed. 																												
19.	Fire and Life Safety Measures	Fire extinguisher, sprinkler system and fire hydrant systems will be provided for fire safety.																												
20.	<p>Details on staircase</p> <table border="1"> <thead> <tr> <th>Name of Building</th> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Floor area</th> <th>No. of staircase</th> <th>Width of the staircase(m)</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>A to E</td> <td>Joint</td> <td>G + 5</td> <td>527.17</td> <td>02</td> <td>1.38</td> <td><30</td> </tr> <tr> <td>F</td> <td>Single</td> <td>G + 5</td> <td>253.03</td> <td>01</td> <td>1.38</td> <td><30</td> </tr> <tr> <td>Row houses</td> <td>--</td> <td>G + 1</td> <td>33.25</td> <td>01</td> <td>1.20</td> <td><30</td> </tr> </tbody> </table>		Name of Building	Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase(m)	Travel distance (m)	A to E	Joint	G + 5	527.17	02	1.38	<30	F	Single	G + 5	253.03	01	1.38	<30	Row houses	--	G + 1	33.25	01	1.20	<30
Name of Building	Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase(m)	Travel distance (m)																								
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F	Single	G + 5	253.03	01	1.38	<30																								
Row houses	--	G + 1	33.25	01	1.20	<30																								
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 80-100 ft • No. & dimensions of RWH tank(s) : • No. and depth of percolations wells : 11 nos., 40 m • Details on Pre-treatment facilities : Gravity filter, MOC: PE 																												
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 2,688.09 • Area covered by shrubs and bushes (m²): inclusive in lawn area • Lawn covered area (m²): 2,169.56 • Total Green Area (m²): 4,757.65 • Green Area % of plot area: 11 % • No. of trees and species to be planted: 865 nos. of trees like Asopalav, Gulamhor, Palm, Ficus ,Badam etc. 																												
23.	Budgetary allocation for Environmental Management	<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>7 Lacs</td> </tr> <tr> <td>2</td> <td>Groundwater Recharge Structure</td> <td>7 Lacs</td> </tr> </tbody> </table>	Sr. No.	Description	Capital Cost (Rs. In Lacs)	1	Landscaping	7 Lacs	2	Groundwater Recharge Structure	7 Lacs																			
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1	Landscaping	7 Lacs																												
2	Groundwater Recharge Structure	7 Lacs																												

	Plan (Rs. in 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		
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 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 & N.A orders for both the survey numbers submitted by them shows that land for residential use is in the name of applicant & others.		

During the meeting, it was presented that they will provide margin of 3.5 m on both the sides of internal roads of 7.5 m width to accommodate car parking outside the premises of row houses. They were suggested to plant trees all along this margin area at certain distances which also facilitates car parking under shadow of the trees. While discussing about the trees existing at the project site, it was presented that there was not any tree existed when they have purchased the land of the project site. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Exact aerial distance of the project site from the nearest TSDF site & the nearest industrial cluster.
2. Status of availability of water supply, drainage connection & municipal solid waste collection facility to the proposed project. Copy of permission or a letter of intent from Bharuch Ankleshwar Urban Development Authority for providing water supply, drainage connection & municipal solid was collection facility to the proposed project.
3. Realistic details on activity wise reuse of treated sewage for flushing & gardening purpose considering the availability of garden/ landscape area within premises & soil quality and plan for management of treated sewage considering the same. Realistic details on total water requirement, fresh water requirement, sewage generation quantity and capacity of STP based on it. Treated sewage management plan during the monsoon season when treated sewage utilization for gardening & irrigation purpose is not possible.
4. Details on the proposed composting facility to be provided including its size, capacity, method of composting etc. Budgetary allocation for installation, operation & maintenance of the proposed STP & composting facility. Layout plan showing location of proposed STP & composting facility.

3	landmark superstar	Block No. 709, O.P. No. 134, F.P. No. 142, TPS No. 17, (Puna), Moje - Puna, Surat.	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 [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"> Land / Plot Area (m²): 8,711.0 FSI area (m²): 34,840.12 Total BUA (m²) : 55,293.10 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>19,599.75</td> <td>34,840.12</td> </tr> <tr> <td>Ground Coverage(m²)</td> <td>2,613.30</td> <td>3,769.12</td> </tr> <tr> <td>Common Plot Area(m²)</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 ²)	19,599.75	34,840.12	Ground Coverage(m ²)	2,613.30	3,769.12	Common Plot Area(m ²)	871.88	878.00	Max. building height(m)	--	66.45
	Permissible	Proposed															
FSI Area (m ²)	19,599.75	34,840.12															
Ground Coverage(m ²)	2,613.30	3,769.12															
Common Plot Area(m ²)	871.88	878.00															
Max. building height(m)	--	66.45															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 1 No. of Blocks: 1 Scope of buildings/blocks: 2 level basement + ground floor + 11 floors. No. & size of Residential Units: -- No. & type of Commercial Units: 300 Textile Houses Details of amenities if any: -- 															
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"> Water requirement (KL/day): 14.50 Source of water: Borewell water Waste water generation quantity (KL/day): 2.16 Mode of disposal: Into septic tank & soak pit. Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment. 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 53.50 Fresh water requirement (KL/day): 34.0 Source of water: Water supply from Surat Municipal Corporation (S.M.C) Waste water generation quantity (KL/day): 19.50 Mode of disposal: Sewage to be generated will be segregated into the grey & black sewage. Grey sewage will be treated in the proposed onsite STP for grey sewage. Treated grey sewage will be used for gardening & 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.

- In case of STP provision, capacity of STP: Yes. Grey Sewage Treatment Plant - 40 KL/day.
- STP Technology: Grey Sewage Treatment Plant
- Purposes for treated water utilization: Treated sewage will be utilized for gardening and toilet flushing
- Quantity of treated water to be reused: 1. Gardening (KL/day): 3.50
- 2. Flushing (KL/day): 16.0
- Provision of dual plumbing system (Yes/No): Yes
- Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be segregated into the grey & black sewage. Grey sewage will be treated in the proposed onsite STP for grey sewage. Treated grey sewage will be used for gardening & 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.
- Mode of disposal: As above.

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

Construction Phase:

	Generation (m ³)	Quantity to be reused (m ³)	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 ³ will be reused for back filling.	Disposal to other project site in consultation with SMC
Construction debris	581	276 m ³ 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

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
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"> • Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste. • Capacity and no. of community bins to be placed within premises: 2.0 m³ in each building • Landfill site where waste will be ultimately disposed by local authority: Khajod Landfill Site of S.M.C 			
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR:10,452.03 m² • Parking area requirement for Commercial units as per GDCR:10,452.03 m² • Total number of CPS requirement for the project as per NBC : 140 • Number of CPS requirement for commercial units as per NBC: 140 • Total Parking area provided (m²) & No. of CPS: 19,315.0 m² & 610 CPS • Parking area provided in basement (m²) & No. of CPS: 12,013.0 m² & 376 CPS. • Parking area provided as open surface (m²) & No. of CPS: 1332.50 m² & 48 CPS. • Parking area provided as mechanical parking in upper basement (m²) & No. of CPS: 5969.50 m² & 186 CPS. 			
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 60.0 m wide road in N direction & 18.0 m wide road in W direction. • Number of Entry & Exit provided on approach road/s: 3 gates will be provided. • Width of Entry & Exit provided on approach road/s: 7.50 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 7.50 m • Width of all internal roads: 7.50 m 			
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"> • Power supply • Maximum demand: 1500 KVA • Connected load: • Source: DGVCL • Energy saving measures: use of LED lights for common building areas, garden & basement & these LED lights will run through solar panels, reflective/ white tiles in common areas, maximum use of natural light, three 			

		<p>nos. of solar panels, each of 1.2 KWH capacity, on terrace floor etc.</p> <ul style="list-style-type: none"> • DG Sets • No. and capacity of the DG sets: 03 x 125 KVA • Fuel & its quantity: Low Sulphur High speed Diesel (HSD) & quantity 55 L/h in each 					
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • 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 (100 KL x 2 nos), terrace tanks of 10 KL x 2 nos., provision of pump: one electric & one diesel pump of capacity 1,620 L/min. & one electric pump of capacity 180 L/min. having pressure 3.5 kg/cm² at terrace level etc. • 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. 					
20.	Details on staircase						
	No. of Floor	Floor Area (m ²)	No. of staircase	Width of Staircase (m)	No. of Fire Lift	No. of Lift	Maximum Travel Distance up to the Staircase < 30 m
	Ground floor	2,582.82	02	2.0	02	19	
			Escalator – 0 1				
	1 st to 10 th floor	3,057.98	02	2.0	02	19	
			Escalator – 0 1				
	11 th floor	1,407.50	01	2.0	02	06	
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: --- • No. & dimensions of RWH tank(s) : 05 no. of RWH tanks; • size: 4m x 3m x 3m • size of Bore: 350 mm dia. • size of pipe: 150 mm dia. • No. and depth of percolations wells: 05 nos. of percolating wells, • Details on Pre-treatment facilities: A de-silting chamber will be provided to de-silt and remove floating material through bar screen. 					
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 358.0 • Area covered by shrubs and bushes (m²): -- • Lawn covered area (m²): 520 • Total Green Area (m²): 878.0 • Green Area % of plot area: 10.08 % • No. of trees and species to be planted:60 trees of Gulmohar, Neem tree, Coconut palm, Asopalav, Champa etc. 					

23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	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.	Water pollution	0.50	20.00
		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
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.			

During the meeting, it was presented that the project was to be developed by M/s Landmark Empires as per the form – I & 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 & 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 & mechanical ventilation system, LED lights connected with solar panels, CO sensors connected with automatic alarm system & 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 & DGMS approved flame proof electrical fittings. After detailed discussion, it was decided to appraise the project only after submission of the following:

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.

4	Vinodbhai P. Asodaria	Block No. 70, Moje-Bagusana, Bharuch	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 [SIA/GJ/NCP/58403/2016]															
2.	Type of Project	Residential															
3.	Project / Activity No. [8(a) or 8(b)]	8(a)															
4.	Name of the project	Residential Project															
5.	Name of Developer	Mr. Vinodbhai P. Asodaria															
6.	Estimated Project Cost (Rs. In Crores)	28 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No.															
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²): 61,620.0 FSI area (m²): 23,613.73 Total BUA (m²): 25,761.49 <table border="1" style="width: 100%; margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="width: 20%;">Permissible</th> <th style="width: 20%;">Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td style="text-align: center;">61,525.24</td> <td style="text-align: center;">23,613.73</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td style="text-align: center;">--</td> <td style="text-align: center;">11,392.50</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td style="text-align: center;">6,152.52</td> <td style="text-align: center;">6,993.92</td> </tr> <tr> <td>Max. building height (m)</td> <td style="text-align: center;">--</td> <td style="text-align: center;">6.60 m</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	61,525.24	23,613.73	Ground Coverage (m ²)	--	11,392.50	Common Plot Area (m ²)	6,152.52	6,993.92	Max. building height (m)	--	6.60 m
	Permissible	Proposed															
FSI Area (m ²)	61,525.24	23,613.73															
Ground Coverage (m ²)	--	11,392.50															
Common Plot Area (m ²)	6,152.52	6,993.92															
Max. building height (m)	--	6.60 m															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 375 Row Houses. No. of Blocks: -- Scope of buildings/blocks: Ground + 1 floor & Ground floor & size of Residential Units: 375 Nos. (1 BHK- 295 & HK -80) 															

		<ul style="list-style-type: none"> No. & type of Commercial Units: - Details of amenities if any: No 																			
10.	No. of expected residents / users	1687 nos. residential users																			
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 15.95 Source of water: Local water tankers Waste water generation quantity (KL/day): 1.15 Mode of disposal: disposal through onsite septic tank and soak pit Details of reuse of water, if any: washing water of construction equipments will be reused for curing 																			
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 326.0 Fresh water requirement (KL/day): 136.0 Source of water: water supply from BAUDA Waste water generation quantity (KL/day): 200.0 Mode of disposal: Sewage to be generated from the project will be treated in the proposed onsite STP and reused for toilet flushing and gardening purpose within premises and irrigation purpose. In case of STP provision, capacity of STP: 250 KL/day STP Technology: Conventional with primary, secondary & treatment facilities. Purposes for treated water utilization: Toilet Flushing and Gardening Quantity of treated water to be reused: 1. Gardening (KL/day): 101.0 2. Irrigation (KL/day): 89.0 Provision of dual plumbing system (Yes/No): Yes Quantity and type (treated/untreated) of water to be discharged: Sewage to be generated from the project will be treated in the proposed onsite STP and reused for toilet flushing and gardening purpose within premises and irrigation purpose. Mode of disposal: as above. 																			
13.	Status of water supply and drainage line	---																			
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>1000</td> <td>1000</td> <td rowspan="2">Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be reused for development of greenbelt.</td> </tr> <tr> <td>Other excavated earth</td> <td></td> <td></td> </tr> <tr> <td>Construction debris</td> <td>22</td> <td>22</td> <td></td> </tr> <tr> <td>Steel scrap</td> <td>2.6 MT</td> <td>2.04 MT</td> <td>Will be sold to scrap vendor</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	1000	1000	Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be reused for development of greenbelt.	Other excavated earth			Construction debris	22	22		Steel scrap	2.6 MT	2.04 MT	Will be sold to scrap vendor
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Construction debris	22	22																			
Steel scrap	2.6 MT	2.04 MT	Will be sold to scrap vendor																		

Discarded packing materials	1 MT	--	Will be sold to recycler
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Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	1012 Kg	Into bins to be provided for each individual unit.	The non-biodegradable wastes will be sold to recyclers and the biodegradable wastes will be collected and disposed through composting process.
Wet waste			
STP Sludge	200 Kg	--	Reused as manure in gardening and irrigation

- 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.
- Capacity and no. of community bins to be placed within premises: 140 liter each; 15 nos. of bins;
- Disposal: The non-biodegradable wastes will be sold to recyclers and the biodegradable wastes will be collected and disposed through composting process.
- Landfill site where waste will be ultimately disposed by local authority: No

15.	Parking Details	<ul style="list-style-type: none"> • Total number of CPS requirement for the project as per NBC: 188 • Number of CPS requirement for residential units as per NBC: 188 • Total Parking area provided (m²) & No. of ECS: 10,349.92 m², 450 nos. • Parking area provided as open surface (m²) & No. of ECS: 10,349.92 m², 450 nos.
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m wide road • Number of Entry & Exit provided on approach road/s: One gate will be provided. • Width of Entry & Exit provided on approach road/s: 12 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m. • Width of all internal roads: , 12.0 & 7.5 m
17.	Details of Green Building measures proposed.	Maximum utilization of natural light, CFL lighting fixtures in the common areas, use of solar energy in external lighting (Landscape lighting), aerated block [Cement + Fly Ash + Air mixture] will be used to reduce heat stress inside building, rain water harvesting through ground water recharge etc.
18.	Energy	<ul style="list-style-type: none"> • Power supply

	Requirement, Source and Conservation	<p>Maximum demand: 1500 KW Connected load: --</p> <ul style="list-style-type: none"> • Source: D.G.V.C.L • Energy saving by Non-conventional Methods: • Energy saving measures: Maximum utilization of natural light, CFL lighting fixtures in the common areas, use of solar energy in external lighting (Landscape lighting), aerated block [Cement + Fly Ash + Air mixture] will be used to reduce heat stress inside building etc. • DG Sets: not proposed. 		
19.	Fire and Life Safety Measures	---		
20.	Details on staircase: one staircase of 1.2 m width will be provided in each individual row house.			
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 80-100 ft • No. & dimensions of RWH tank(s) : --- • No. and depth of percolations wells : 16 nos., 40 m • Details on Pre-treatment facilities : Gravity filter, MOC: PE 		
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 3,776.87 • Area covered by shrubs and bushes (m²): inclusive in lawn area • Lawn covered area (m²): 6,381.94 • Total Green Area (m²): 10,158.81 • Green Area % of plot area: 16 % • No. of trees and species to be planted: 1250 nos. of trees like Asopalav, Gulamhor, Palm, Ficus ,Badam etc. 		
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Sr. No.	Description	Capital Cost (Rs. In Lacs)
		1	Landscaping	6 Lacs
		2	Groundwater Recharge Structure	6 Lacs
		3	Solar Energy Utilization	3 lacs
		4	Energy Efficient Lighting	2 lacs
		5	Solid Waste Management	2 lacs
		6	Monitoring of Air, Water, Noise & Soil	0.75 lacs
Total			19.75 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 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	Village form no. 7 as on 14/01/2016 submitted by them shows that the N.A land for residential use is in the name of applicant & others.		

possession.

During the meeting, it was presented that they will provide margin of 3.65 m on both the sides of internal roads of 7.5 m width to accommodate cars parking outside the premises of row houses. It was observed that a gas pipeline & an overhead high tension line are passing through the project site. A plan showing provision of 15 m margin on both the side of the gas pipeline has been submitted. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Status of availability of water supply, drainage connection & municipal solid waste collection facility to the proposed project. Copy of permission or a letter of intent from Bharuch Ankleshwar Urban Development Authority for providing water supply, drainage connection & municipal solid was collection facility to the proposed project.
2. Realistic details on activity wise reuse of treated sewage for flushing & gardening purpose (considering the availability of garden/ landscape area within premises & soil quality) and revised water balance details as well as plan for management of treated sewage considering the same. Treated sewage management plan during the monsoon season when the treated sewage utilization for gardening & irrigation purpose is not possible.
3. Details on the proposed composting facility to be provided including its size, capacity, method of composting etc. Budgetary allocation for installation, operation & maintenance of the proposed STP & composting facility. Layout plan showing location of proposed STP & composting facility.
4. Authentic supporting documents showing the width of the margin required to be left on both the sides of the gas line passing through the premises or a copy of permission obtained from concerned competent authority in this regard.
5. Copy of permission, if any, from concerned competent authority with regards to the overhead high tension line passing through the project site.

5	Celebration homes	Block No. 43, O.P. No. 15, F.P. No. 15, TPS No. 21, (Sarhana - Simada), Surat.	Screening & Scoping / appraisal
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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[SIA/GJ/51938/2016]
2.	Type of Project	Residential
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Celebration Homes
5.	Name of Developer	Mr. Satishbhai Gabhrubhai
6.	Estimated Project Cost (Rs. In Crores)	Rs. 90 crores
7.	Whether construction work has been initiated	No

	at site? If yes, details thereof																
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²) 11,181.47 FSI area (m²): 29,457.60 Non FSI area (m²): 14,963.2 Total BUA (m²):44,420.8 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>30,021.96</td> <td>29,457.60</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>3,186.43</td> <td>2,426.88</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>1,120.07</td> <td>1,120.07</td> </tr> <tr> <td>Max. building height (m)</td> <td>65 m</td> <td>44.90 m</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	30,021.96	29,457.60	Ground Coverage (m ²)	3,186.43	2,426.88	Common Plot Area (m ²)	1,120.07	1,120.07	Max. building height (m)	65 m	44.90 m
	Permissible	Proposed															
FSI Area (m ²)	30,021.96	29,457.60															
Ground Coverage (m ²)	3,186.43	2,426.88															
Common Plot Area (m ²)	1,120.07	1,120.07															
Max. building height (m)	65 m	44.90 m															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings:8 No. of Blocks:8 Scope of buildings/blocks: Basement + hollow plinth + 14 floors. No.& size of Residential Units:224 units No. & type of Commercial Units:-- Details of amenities if any:Club house 															
10.	No. of expected residents / users	1008															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 15.0 Source of water: Water supply from SMC. Waste water generation quantity (KL/day): 2.1 Mode of disposal: Into drainage line of SMC. 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Fresh water requirement (KL/day): 145.0 Source of water: Water supply from SMC. Waste water generation quantity (KL/day): 112.0 Mode of disposal: Into drainage line of SMC. 															
13.	Status of water supply and drainage line	Both drainage and water supply lines are available in the area.															
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>5,590.7 m³</td> <td>500 m³</td> <td> <ul style="list-style-type: none"> 500 m³ of excavated Top Soil Utilized for greenbelt development 5090.7 m³ of excavated Top Soil will be utilized at other project site after obtaining necessary permission if any </td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	5,590.7 m ³	500 m ³	<ul style="list-style-type: none"> 500 m³ of excavated Top Soil Utilized for greenbelt development 5090.7 m³ of excavated Top Soil will be utilized at other project site after obtaining necessary permission if any 							
	Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse														
Top Soil	5,590.7 m ³	500 m ³	<ul style="list-style-type: none"> 500 m³ of excavated Top Soil Utilized for greenbelt development 5090.7 m³ of excavated Top Soil will be utilized at other project site after obtaining necessary permission if any 														

Other excavated earth	18213 m ³	6708 m ³	6708 m ³ of excavated Soil will be utilized for back filling within site. Excess soil of 11,505 m ³ will be utilized at other project site after obtaining necessary permission if any
Construction debris	15kg/day	Nil	Sold off to recyclers
Steel scrap	15kg/day		
Discarded packing materials	6kg/day		

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	150 kg/day	Into separate bins to be provided within premises.	Will be collected through door to door waste collection system of SMC for final disposal at Khajod disposal site.
Wet waste	152 kg/day		

- Details of segregation if to be done: Separate bins for dry and wet waste provided to each unit
- Capacity and no. of community bins to be placed within premises: 8 nos. of bins having capacity of 25 kg each for dry waste and 8 nos. of 25 kg for wet waste will be provided to building.
- Landfill site where waste will be ultimately disposed by local authority: Khajod Disposal Site

15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 4,503.29 m². • Parking area requirement for residential units as per GDCR:4,503.29 m². • Total number of CPS requirement for the project as per NBC :224 • Number of CPS requirement for residential units as per NBC: 224 • Total Parking area provided (m²) & No. of ECS: 8,720.29 m² and 278 CPS • Parking area provided in basement (m²) & No. of ECS: 7,536.08 m² and 236 CPS • Parking area provided in hollow plinth (m²) & No. of ECS: 1,184.21 m² and 42 CPS.
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads:18 m wide TP road • Number of Entry & Exit provided on approach road/s: One Separate entry and exit provided • Width of Entry & Exit provided on approach road/s:7.5 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width forthe plantation):7.5 m

		<ul style="list-style-type: none"> • Width of all internal roads: 7.5 m 																		
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 ground water recharge, maximum utilization of natural light, roof-top thermal insulation, CFL lighting fixtures in the common areas, appropriate design to shut out excess heat and gain loss, use of solar energy in external lighting (landscape lighting), use of aerated blocks etc.																		
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand:1100 KW Connected load:1200 KW • Source: DGVCL • Energy saving measures: Maximum utilization of natural light, roof-top thermal insulation, CFL lighting fixtures in the common areas, appropriate design to shut out excess heat and gain loss, use of solar energy in external lighting (landscape lighting), use of aerated blocks etc. • DG Sets: No. and capacity of the DG sets:4 x 60 KVA Fuel & its quantity: diesel (10 Liter/h) Note : - D.G. Sets will be used incase of power failure or fire emergency 																		
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • During the construction phase: Fire extinguishers at various locations and easily accessible, to keep printed board showing important telephone number of fire, ambulance, hospital etc. training to the workers on safety aspects, first aid box at identified places within premises, doctor & ambulance services, provision of PPE'S like helmet, gumboot/safety shoes, safety net, safety goggles etc. • During the operation phase: Fire extinguishers, hose reel, wet riser, manually operated electric fire alarm system, terrace fire water tank of 20 KL capacity, underground fire water tank of 100 KL capacity, smoke fire detectors etc. • Nearest fire station: Varachha fire station. Distance from project site: 2 km. 																		
20.	<p>Details on staircase</p> <table border="1"> <thead> <tr> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Floor area</th> <th>No. of staircase</th> <th>Width of the staircase</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>A,C,E,G 4 nos of building</td> <td>B+G+14 floors</td> <td>237.48</td> <td>1</td> <td>2.0 m</td> <td>Less than 15 m</td> </tr> <tr> <td>B,D,F,H 4 nos of Building</td> <td>B+G+14 floors</td> <td>288.87</td> <td>1</td> <td>2.0 m</td> <td>Less than 15 m</td> </tr> </tbody> </table>		Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)	A,C,E,G 4 nos of building	B+G+14 floors	237.48	1	2.0 m	Less than 15 m	B,D,F,H 4 nos of Building	B+G+14 floors	288.87	1	2.0 m	Less than 15 m
Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)															
A,C,E,G 4 nos of building	B+G+14 floors	237.48	1	2.0 m	Less than 15 m															
B,D,F,H 4 nos of Building	B+G+14 floors	288.87	1	2.0 m	Less than 15 m															
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 16 m • No. & dimensions of RWH tank(s) :- • No. and depth of percolations wells :3 • Details on Pre-treatment facilities :only roof top rainwater harvesting is proposed 																		
22.	Green area	<ul style="list-style-type: none"> • Tree covered area (m²) :600 																		

	details	<ul style="list-style-type: none"> • Area covered by shrubs and bushes (m²): 300 • Lawn covered area (m²): 400 • Total Green Area (m²): 1,300 • Green Area % of plot area: 9% • No. of trees and species to be planted: 300
23.	Budgetary allocation for Environmental Management Plan(Rs. in lacs)	Green belt development : 70 Lacs Drainage and rain water harvesting: 50 lacs Solar and energy saving: 30lacs Total: 150Lacs
24.	Proposed dust control measures during the construction phase	Loading & transportation in covered trucks, covered shed provided for cement unloading activity, temporarily wind screen around project site, sprinkling of water on roads and in vicinity of storage area.
25.	Eco friendly building material usage details.	Fly ash brick, aerated blocks, paving blocks, RMC, lead free paints 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.	Village form no. 7/12 submitted by them shows that the agricultural land of the project site is in the name of applicant Mr. Satishbhai Gabhrubhai and a copy of application made for obtaining N.A permission has been submitted.

During the meeting, the project proponent was asked to obtain necessary permission before cutting the trees existing at the project site. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Details on the FSI permissible to the project and permission / authentic supporting documents showing availability of the proposed FSI.

6	Mayberry Villa-Phase-2	Block No. 89, Moje Virwadi, Navsari,	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	Residential
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Mayberry Villa Phase - 2
5.	Name of Developer	M/s. Calypso Developers.

6.	Estimated Project Cost (Rs. In Crores)	Rs. 55.0 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	---															
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 45,628.0 • FSI area (m²): 29,783.98 • Total BUA (m²) : 32,402.48 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>48,779.28</td> <td>29,783.98</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>16,259.76</td> <td>14,891.99</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>4,562.80</td> <td>16,523.00</td> </tr> <tr> <td>Max. building height (m)</td> <td>--</td> <td>6.85</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	48,779.28	29,783.98	Ground Coverage (m ²)	16,259.76	14,891.99	Common Plot Area (m ²)	4,562.80	16,523.00	Max. building height (m)	--	6.85
	Permissible	Proposed															
FSI Area (m ²)	48,779.28	29,783.98															
Ground Coverage (m ²)	16,259.76	14,891.99															
Common Plot Area (m ²)	4,562.80	16,523.00															
Max. building height (m)	--	6.85															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings/Row Houses: 278 Nos. • Scope of buildings/blocks: Row houses of Ground floor + 1 floor. • No. & size of Residential Units: 278 Nos. • No. & type of Commercial Units: -- • Details of amenities if any: -- 															
10.	No. of expected residents / users	<p>Expected residents: 1390 Expected shop users: -- Expected visitors: 350</p>															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 16.0 • Source of water: Bore well (Water level depth: 12 meter) • Waste water generation quantity (KL/day): 2.52 • Mode of disposal: Into septic tank & soak pit. • Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment. 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 260.0 • Fresh water requirement (KL/day): 127.0 • Source of water: Borewell water • Waste water generation quantity (KL/day): 155.0 • Mode of disposal: Sewage to be generated from the project will be treated in the proposed onsite STP and reused completely for toilet flushing and gardening purpose within premises and irrigation purpose. • In case of STP provision, capacity of STP: 200 KL/day • STP Technology: Conventional with primary, secondary & treatment facilities. • Purposes for treated water utilization: Toilet Flushing and Gardening • Quantity of treated water to be reused: 1. Gardening (KL/day): 67.0 2. Flushing (KL/day): 66.0 • Provision of dual plumbing system (Yes/No): Yes • Quantity and type (treated/untreated) of water to be discharged: Sewage 															

to be generated from the project will be treated in the proposed onsite STP and reused for toilet flushing and gardening purpose within premises.

- Mode of disposal: as above.
- It is proposed to store treated sewage in the storage tank of 600 KL capacity during monsoon season when treated sewage utilization for gardening purpose is not possible.

13. Status of water supply and drainage line During the operation phase borewell water will be used. Sewage will be treated in the proposed onsite STP & treated sewage will be completely used for gardening & flushing purpose.

14. Solid waste Management Construction Phase:

	Generation (m ³)	Quantity to be reused/used (m ³)	Mode of Disposal / Reuse
Top Soil	8,261.50	8,261.50	Reuse for developing garden area
Other excavated earth	--	34,221.00	Said earth will be arranged from our other site/ nearly local supplier
Construction debris	340	162	Reused as a filler up to plinth level and remaining will be reused for outer road development
Steel scrap	13	--	Sold to local scrap vendors
Discarded packing materials	08	--	Sold to local vendors

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	500.40	Blue colour bucket	Into dustbin of nearby Gram Panchayat.
Wet waste	333.60	Green colour bucket	Collected and composting within premises. Fertilizer will be used in garden as a manure
STP Sludge	15	On SDB	Reused in gardening as manure within project premises

- Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste.
- Capacity and no. of community bins to be placed within premises:

		<ul style="list-style-type: none"> • Landfill site where waste will be ultimately disposed by local authority: MSW will be disposed to the nearest Navsari Nagarpalika site.
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 4,467.60 m² • Parking area requirement for residential units as per GDCR: 4,467.60 m² • Total number of CPS requirement for the project as per NBC : 139 • Number of CPS requirement for residential units as per NBC: 139 • Total Parking area provided (m²) & No. of CPS: 8,411.0 m² & 329 CPS • Parking area provided in hollow plinth (m²) & No. of CPS: 4,718.0 m² & 168 CPS. • Parking area provided as open surface (m²) & No. of CPS: 3,693.0 m² & 161 CPS
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 12 m wide road in W direction • Number of Entry & Exit provided on approach road/s: one gate will be provided. • Width of Entry & Exit provided on approach road/s: 7.62 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m • Width of all internal roads: 7 m, 7.6 m & 9 m.
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"> • Power supply Maximum demand: 1500 KVA Connected load: • Source: DGVCL • Energy saving measures: use of LED lights for common building areas, garden & basement & these LED lights will run through solar panels, reflective/ white tiles in common areas, maximum use of natural light etc. • DG Sets: Not proposed.
19.	Fire and Life Safety Measures	The nearest fire station is Navsari fire station, which is at a distance of 5.3 km from the project site. A fire tender can take 15-20 minutes to reach the project site in case of emergency.
20.	Details on staircase	One staircase will be provided in each row house.
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: -- • No. & dimensions of RWH tank(s) : 23 no. of RWH tanks; size: 4 m x 3 m x 3 m size of Bore: 350 mm dia. size of pipe: 150 mm dia. • No. and depth of percolations wells: 23 nos. of percolating wells, depth will kept 5 m above ground water table. • Details on Pre-treatment facilities: A de-silting chamber will be provided to

		de-silt and remove floating material through bar screen																												
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 953.0 • Area covered by shrubs and bushes (m²): -- • Lawn covered area (m²): 15,570.0 • Total Green Area (m²): 16,523.0 • Green Area % of plot area: 36.21 % • No. of trees and species to be planted: 139 trees of Gulmohar, Neem tree, Coconut palm, Asopalav, Champa etc. 																												
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>0.75</td> <td>1.80</td> </tr> <tr> <td>2.</td> <td>Water pollution</td> <td>1.50</td> <td>50.0</td> </tr> <tr> <td>3.</td> <td>Solid and hazardous waste management</td> <td>0.60</td> <td>1.00</td> </tr> <tr> <td>4.</td> <td>Green belt development</td> <td>1.30</td> <td>5.00</td> </tr> <tr> <td>5.</td> <td>Rain water harvesting</td> <td>1.15</td> <td>13.00</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total</td> <td>5.30</td> <td>70.80</td> </tr> </tbody> </table>	Sr. No.	Particulars	Approximate recurring cost per annum (Rs. In Lacs)	Approximate Capital cost (Rs. In Lacs)	1.	Air pollution	0.75	1.80	2.	Water pollution	1.50	50.0	3.	Solid and hazardous waste management	0.60	1.00	4.	Green belt development	1.30	5.00	5.	Rain water harvesting	1.15	13.00	Total		5.30	70.80
Sr. No.	Particulars	Approximate recurring cost per annum (Rs. In Lacs)	Approximate Capital cost (Rs. In Lacs)																											
1.	Air pollution	0.75	1.80																											
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5.	Rain water harvesting	1.15	13.00																											
Total		5.30	70.80																											
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.																												

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

1. Copy of permission from Central Ground Water Authority for ground water abstraction for the proposed

project.

2. Details on ground water depth & ground water quality in the area (at least 5 borewells) & map showing the sampling locations.
3. Location of the proposed STP, composting facility, treated sewage storage tank & fresh water storage tank/s on layout plan of the project.
4. Justify the parking area available in hollow plinth in the proposed building construction project comprising of row houses.
5. 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 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).
6. Exact aerial distance of the project site from the nearest water body. Notarized undertaking stating that the water body in the vicinity will be not adversely affected in any case.
7. Exact aerial distance of the project site from Purna Wildlife sanctuary.

7	Vision Infrastructure	Block No. 48, 50/p1/p1, 50/p1/p2,50/p2, 53,55,56,75,76/p, Vill. Bakrol, Ta. Waghodia, Dist. Vadodara.	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 [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"> • Land / Plot Area (m²): 1,14,679.0 • Net Land / Plot Area (m²): 1,12,844.43 • FSI area (m²):69,938.83 • Total BUA (m²):74,471.81 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%;">Permissible</th> <th style="width: 25%;">Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>80,275.30</td> <td>69,938.83</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>39,576.65</td> <td>33,657.70</td> </tr> <tr> <td>Common Plot Area (m²)</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 ²)	80,275.30	69,938.83	Ground Coverage (m ²)	39,576.65	33,657.70	Common Plot Area (m ²)	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"> • No. of Buildings:680 duplexes, 7 blocks (Residential & commercial), 1 block commercial. • No. of Blocks: 680 duplexes, 7 blocks (Residential cum commercial), 1 block commercial. • Scope of buildings/blocks: 7 residential & commercial blocks – ground floor (parking & shops) + 5 floors, Duplexes – Ground floor + 1 floor, 1 commercial block – ground floor only. • No. of residential units: 680 duplexes & 132 flats. • No. & type of Commercial Units: 28 shops • Details of amenities if any: No 															
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"> • Water requirement (KL/day): 21.75 • Source of water: Local water tankers. • Waste water generation quantity (KL/day): 5.73 • Mode of disposal: Into septic tank & soak pit. • Details of reuse of water, if any: No 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 562.87 • Fresh water requirement (KL/day): 331.2 • Source of water: Water supply from VUDA • Waste water generation quantity (KL/day): 400.24 • Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage line of VUDA. • In case of STP provision, capacity of STP: Yes, 2 X 225 KL/day • STP Technology: biological treatment • Purposes for treated water utilization: Gardening and flushing • Quantity of treated water to be reused:1.Gardening (KL/day):62.56 2. Flushing (KL/day):169.11 • Provision of dual plumbing system (Yes/No): yes • 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 & flushing purpose within premises. Only remaining quantity of treated sewage will be discharged into the drainage 															

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13.	Status of water supply and drainage line	Available at 2.4 km from the site																																								
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</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>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>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"> • Details of segregation if to be done: yes • 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 • Landfill site where waste will be ultimately disposed by local authority: VUDA. 		Generation (m ³)	Quantity to be reused (m ³)	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"> • Total parking area requirement for the project as per GDCR:10,778.04 m² • Parking area requirement for residential units as per GDCR:10,367.72 m² • Parking area requirement for Commercial units as per GDCR:410.32 m² • Total number of CPS requirement for the project as per NBC :256 • Number of CPS requirement for residential units as per NBC: 239 • Number of CPS requirement for commercial units as per NBC:17 • Total Parking area provided (m²) & No. of CPS: 21,921.78 & 926 CPS • Parking area provided in basement (m²) & No. of CPS: 1,386.32 & 43 CPS • Parking area provided in hollow plinth (m²) & No. of CPS:1,185.46 & 42 																																								

		<p>CPS</p> <ul style="list-style-type: none"> • Parking area provided as open surface (m²) & No. of CPS:19,350 and 841 CPS. 																																				
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m wide proposed roads on two sides. • Number of Entry & Exit provided on approach road/s: 4 gates will be provided. • Width of Entry & Exit provided on approach road/s:12 m (Entry and Exist) and 7.5 m (Entry and Exist) • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5.5 m • Width of all internal roads:12, 9, 7.5 m 																																				
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"> • Power supply: Maximum demand:4250 KVA Connected load: 4500 KVA • Source: MGVCL • % of saving with calculations: ~30% by use of LED, solar lights and star rated energy efficient electronic consumer durables • Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area • DG Sets: No. and capacity of the DG sets:2 X 62.5 KVA Fuel & its quantity: HSD, 25 litre/hr 																																				
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • 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 & ambulance service. • 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/cm² at terrace level etc. 																																				
20.	Details on staircase	<table border="1"> <thead> <tr> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Floor area m²</th> <th>No. of staircase</th> <th>Width of the staircase (m)</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>HP+ 5</td> <td>276.53</td> <td>1</td> <td>1.23</td> <td>13</td> </tr> <tr> <td>BC</td> <td>G/HP+ 5</td> <td>598.69</td> <td>2</td> <td>1.23</td> <td>15</td> </tr> <tr> <td>DE</td> <td>G/HP+ 5</td> <td>598.69</td> <td>2</td> <td>1.23</td> <td>15</td> </tr> <tr> <td>F</td> <td>HP+ 5</td> <td>285.05</td> <td>1</td> <td>1.23</td> <td>14</td> </tr> <tr> <td>G</td> <td>HP+ 5</td> <td>285.05</td> <td>1</td> <td>1.23</td> <td>14</td> </tr> </tbody> </table>	Type & no. of buildings	No. of floors	Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)	A	HP+ 5	276.53	1	1.23	13	BC	G/HP+ 5	598.69	2	1.23	15	DE	G/HP+ 5	598.69	2	1.23	15	F	HP+ 5	285.05	1	1.23	14	G	HP+ 5	285.05	1	1.23	14
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 15 m • No. & dimensions of RWH tank(s) : 29 No and 2.0m X 2.0 m X 3.0 m • No. and depth of percolations wells :29 no and 11 m 																																				

		<ul style="list-style-type: none"> • Details on Pre-treatment facilities : oil and grease removal and filter
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) :4,000 • Area covered by shrubs and bushes (m²):3,000 • Lawn covered area (m²):6,902.79 • Total Green Area (m²):13,902.79 • Green Area % of plot area: 10% • No. of trees and species to be planted: 1700 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar.
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. Village form no. 7 & 12 for block numbers 55 & 76/p submitted by them shows that the agricultural land 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, 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.

8	The Polaris Textile Market	T.P.S.No.35, Block No.225, F.P.No.20, O.P.No.20, Moje Kumbhairia, Choryasi, Surat.	Refer back case
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This is a commercial building construction project which was recommended by the SEAC vide letter dated EIA-10-2015-7199-E-423 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)/183/2016 dated 29/02/2016 for the following reason:

“To verify the details of parking area requirement in view of NBC guidelines.”

The project proponent along with their expert consultant attended the meeting and it was presented that the proposed project is completely planned for textile go-downs and hence they have proposed to provide parking as 1 CPS per 250 m² of FSI area of the proposed project as per NBC norms.

After discussing the matter, it was decided to recommend the project again to the SEIAA Gujarat for grant of Environmental Clearance only after submission of the following:

1. Notarized undertaking stating that the commercial units of the proposed project are textile go-downs & will be used to store grey & finished fabrics only.

9	Vraj Galaxy Apartments I	S.No.94/A,O.P.No.35/2, F.P.No.35/2/1, TPS No. 75, Hanspura-Muthiya, Ahmedabad	Refer back case
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This is a Residential building construction project which was recommended by the SEAC vide letter dated EIA-10-2015-6999-E-407 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)/176/2016 dated 29/02/2016 for the following reason:

“To verify the details of permissible and proposed ground coverage area”

The project proponent along with their expert consultant attended the meeting and it was presented that due to typographical mistake, permissible ground coverage was written as 2,784.74 m² which is actually 5,812.02 m² and the proposed ground coverage is also 5,812.02 m².

After discussing the matter, it was decided to recommend the project again to the SEIAA Gujarat for grant of Environmental Clearance with the permissible ground coverage of 5,812.0 m² and the proposed ground coverage of 5,812.0 m².

10	Texcore Technologies Pvt. Ltd.	Plot No. 3092, Phase-III, GIDC-Chhatral, Ta- Kalol, Dist: Gandhinagar.	Appraisal
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Project / Activity No.: 5(f)**Project status:** Expansion**Chronology of EC Process:**

- This project proposed by M/s: Texcore Technologies Pvt. Ltd. (herein after Project Proponent – PP) has submitted an application vide their letter dated 13/07/2015.
- This project was considered in the meeting of the SEAC held on 02/02/2016.
- Looking to the low pollution potential of the proposed activity, after deliberation on various aspects, the project was categorised as B2 and the additional information was sought for appraisal of the project.

Project / Activity Details:

This is an existing unit engaged in manufacturing of Synthetic Organic Chemicals and now proposed for expansion of the project as tabulated below:

Sr. no.	Name of Products	Existing MT/Month	Additional MT/Month	Total after Proposed expansion MT/Month
1	Textile Auxiliary by Formulation	200	--	200
2	Textile sizing Blends (Powder) by Formulation/Blending	200	--	200
3	Purification Sodium Sulfate (white powder)	10	-10	NIL
3	Water soluble acrylamide polymer	--	50	50
4	Water Soluble polyester-1	--	75	75
5	Water Soluble polyester-2	--	75	75

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 1500 sq. m. Unit has proposed 100 sq. m. area for the green belt development. Total Expected project cost is Rs. 50 Lacs. Total water consumption will be 10.5 KL/day (Industrial – 9.2 KL, Domestic & Gardening – 1.3 KL) which will be sourced from the GIDC supply. There will not be any effluent generation from the industrial activity. Process water requirement is 9.4 KL/day. Water (of reaction) generated is 0.175 KL/day, which will be fully used in process make-up; reducing fresh water requirement. Accordingly up to 9.2 KL/day. Domestic waste water (0.6 KL/day) which will be disposed through septic tank via soak pit. Unit has proposed one TFH (4 Lac Kcal/hr). LDO/HSD (200 lit./hr) will be used as fuel in TFH. The Hazardous waste to be generated from the manufacturing activity will be Distillation residue (1.2 MT/Year), Used oil/spent oil (50 Lit/Year) and Discarded Container (24 MT/Year). Distillation residue will be sent to CHWIF for Incineration. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers. Used oil will be sold only to the registered recyclers. Unit has obtained membership certificate of NECL for CHWIF.

Observations & Discussions:

Technical presentation made during the meeting by project proponent. While discussing about the water of reaction generated from the proposed products, Committee not convinced about the complete reuse of industrial effluent in next batch of the same product. PP has submitted rental agreement for proposed GIDC plot, however, plot holding certificate is not submitted. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Plot holding certificate from concerned authority.
2. Clarification with technical justification regarding water of reaction (Generation and complete reuse in very next batch of the same product).
3. Source of distillation residue and justify the quantity.

11	Inol Industry LLP	Plot no. C1-475, Road no.4/82-c, GIDC-Sachin, Ta.: Choryasi, Dist.: Surat	Appraisal
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Project / Activity No.: 5(f)**Project status:** New**Chronology of EC Process:**

- This project proposed by M/s: Inol Industry LLP (herein after Project Proponent – PP) has submitted an application vide their letter dated 15/09/2015.
- This project was considered in the meeting of the SEAC held on 27/11/2015.
- Looking to the low pollution potential of the proposed activity, after deliberation on various aspects, the project was categorised as B2 and the additional information was sought for appraisal of the project.

Project / Activity Details:

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

Sr. no.	Name of Products	Quantity MT/Month
1	Acrylic resin 1	250
2	Acrylic resin 2	150
3	Ploy acrylic ether	19.5
4	Polyamide	104
5	Synplast	430
6	Melamine formaldehyde	13
7	Urea formaldehyde	5
8	Ploy Urethane	5
9	PU-Acrylate	5
10	Epoxy 1	5
11	Epoxy 2	10
12	Epoxy 3	10

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

Total plot area is 703 sq. m & unit has proposed 200 sq mtr area for the green belt development/Tree

plantation. Expected project cost is Rs.2 Crores. Total water consumption for proposed project will be 21 KL/day (1 KL for Domestic, 0.5 KL for Gardening, 19.5 KL for Process) which will be sourced from GIDC water supply. Industrial waste water generation will be NIL. Domestic waste water (0.6 KL/day) will be disposed off into soak pit system. It is proposed to install one TFH (6 Lac Kcal/hr). LDO (4.5 KL/Month) will be used as fuel for TFH. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be Process residue (spillage, floor cleaning, vessel cleaning etc), (5 MT/Year), Discarded containers/Bags/Liners (20 MT/Year) and used oil (0.05 MT /Year). Process residue (spillage, floor cleaning, vessel cleaning etc) will be sent to CHWIF for Incineration Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil will be sold only to the registered recyclers.

Observations/Discussions:

Technical presentation made during the meeting by project proponent. While discussing about Occupational hazard, fire safety and the storage & handling issues regarding various chemicals like TDI, Formalin, EO etc. , PP could not reply about the precautionary measures to be taken for the various hazardous chemicals to be used for the proposed project. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Compliance of point no. 28 to 32 with all relevant details considering worst case scenarios. .
2. Odour control plan as per prevailing guidelines of CPCB.
3. Fuel consumption for TFH in KL/Day & KL/hr.

12	Elastopoint Industries	Plot no. C-63, Saykha Industrial Estate, Saykha GIDC, Vill: Saykha, Vagra, Bharuch	Appraisal
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Project / Activity No.: 5(f)

Project status: Existing

Chronology of EC Process:

- This project proposed by M/s: Elastopoint Industries (herein after Project Proponent – PP) has submitted Application vide their letter dated 19/01/2015.
- This project was considered in the meeting of the SEAC held on 12/05/2015.
- The project proponent requested for categorizing the project as B2 and to exempt them from carrying out detailed EIA study. Looking to the small scale of the project, location of the project site, technical aspects of the project, low pollution potential and the details presented during the meeting, after detailed elaboration, request was considered & 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 21/09/2015.
- The project proponent was called for further appraisal of the project in the meeting held on 14/10/2015.
- During the meeting, Committee observed that PP has submitted inadequate information for most of the details asked in earlier SEAC meeting. PP has not submitted Risk assessment report, mass balance for manufacturing of Phenol Formaldehyde, technical details of evaporator, details regarding fugitive

emissions, details regarding hazardous chemicals & its storage, specific details of Safety & occupational health etc. Copy of plot holding certificate obtained from the GIDC. After detailed deliberations the Committee sought following additional information for further consideration of the proposal: (1) Manufacturing process along with chemical reactions, mass balance for each product. (For all products) (2) Details of provisions to be made for evaporation of industrial effluent. Technical details of effluent evaporation system including evaporation capacity, steam required for evaporation, adequacy of the boilers to supply steam for evaporation in addition to the steam required for the process etc. Techno-economical viability of the evaporation system. (3) 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. (4). 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. (5) 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. (6) 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. (7) 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. (8) 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? (9) Details of the separate isolated storage area for chemicals. Details of fire extinguishers, flame proof electrical fittings, DCP extinguishers and other safety measures proposed. (10) Specific safety details / provisions for various hazardous chemicals and detailed fire control plan for flammable substances. (11) Details of possibilities of occupational health hazards from the proposed manufacturing activities and proposed measures to prevent them. (12) 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. (13) Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related

measures. (14) A tabular chart with index for point-wise compliance of above details.

- The project proponent submitted the additional information vide online proposal no. SIA/GJ/IND/51572/2016 dated 14/03/2016.

Project / Activity Details:

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

Sr. no.	Name of the Product	Capacity, MT / Day
1	Phenol Formaldehyde Resin	10 MT/ Day
2	Melamine Formaldehyde Resin	
3	Urea Formaldehyde Resin	
4	Epoxy Resin	
5	Polyamide Resin	
6	Poly Vinyl Acetate Adhesive	
7	Non-reactive poly amide resin	
8	Natural Adhesive	
9	Acrylic Adhesive	
10	Ketonic Resin	

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

Total plot area is 3885.5 sq. m & unit has proposed 1200 sq. m. area for the green belt development/Tree plantation. Expected project cost is Rs.0.8 Crores. Total water consumption for proposed project will be 34.93 KL/D (1.35 KL/day for Domestic, 1.2 KL/day for Gardening & 31.7 KL/day for Industrial). Total fresh water requirement will be 16.93 KL/day as they will reuse 17.32 KL of water from treated effluent from ETP and the Boiler condensate. Fresh water will be sourced from GIDC water supply. Industrial waste water generation will be 5.8 KL/day, which will be treated in proposed effluent treatment plant and treated waste water will be evaporated in steam jacketed Evaporator (Capacity 200 Lit./hr) with Condenser. Domestic waste water (1.2 KL/day) will be disposed off into soak pit system. Flue gas generation will be from Steam Boiler (1 TPH) and D.G. sets (500 KVA). White Coal (1.18 MT/day) will be used as fuel in Boiler. Multi Cyclone Dust collector will be provided as APCM. Diesel (0.2 KL/day) will be used as fuel for DG set. Unit has proposed MDC as APCM. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be ETP sludge & Evaporation residue (60 MT/Year), Discarded containers/Bags/Liners (300 no.s/Month) and used oil (200 lit./Year). ETP waste will be disposed off at the 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.

Observations/Discussion:

Technical presentation made during the meeting by project proponent. Committee noted that unit has submitted point wise reply and covered all details sought during SEAC meeting dated 14/10/2015. Committee noted that the capacity of the evaporator is not adequate and submitted. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. Details of specific treatment for Phenolic compounds in the effluent.
2. Technical details of Evaporator & condenser with adequate capacity.

13	PAB Organics Pvt. Ltd.	Plot no:102-103, GIDC-Nandesari, Dist.: Vadodara	Appraisal
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Project / Activity No.: 5(f)

Project status: Expansion

Chronology of EC Process:

- This project proposed by M/s: PAB Organics Pvt. Ltd. (herein after Project Proponent – PP) has submitted Application vide their letter dated 30/06/2014.
- The project was considered for TOR finalization in the meeting of the SEAC held on 24/02/2015.
- EIA Report prepared by M/s: San Envirotech Pvt. Ltd., Ahmedabad was submitted by project proponent vide their online proposal no. SIA/GJ/IND2/10844/2014 dated 23/03/2016.

Project / Activity Details:

This is an existing unit engaged in manufacturing of Bulk drugs & Intermediates and now unit has applied for expansion in 3 existing products & addition of 39 new products as tabulated below:

Sr. No.	Name of Product	Existing Quantity in MT/month	Addition/ Deletion in MT/Month	Total Proposed Quantity in MT/Month
1.	N-Hydroxy Succinamide	1.5	- 1.5	0
2.	4 (1-Pyrrolidine) Butro Nitrile	1.5	- 1.5	0
3.	2-Chloro Ethylamine Hydrochloride	1.5	- 1.5	0
4.	4-Chloro Phenyl Hydrazine Chloride	1.5	- 1.5	0
5.	5 Amino Phthalide	3.0	- 3.0	0
6.	5 Bromo Phthalide	3.5	+ 11.5	15.0
7.	1,3-Dihydro-1-Oxo-5-Isobenzofuran Carbonitrile (5-Cyano Phthalide)	1.0	+ 9.0	10.0
8.	Schiff Base (1-Cyano(2,3 – Dichlorophenyl Methalene Hydrazine)	1.0	+ 3.0	4.0

9.	4-(2,3 – Epoxy Propoxy) Carbazole	0.5	- 0.5	0
10.	5-Cyano Indole	--	+ 0.5	0.5
11.	7-Hydroxy-3,-4-Dihydro-2-(1H)-Quinolinone	--	+ 1.0	1.0
12.	(±)-3-(Carbamoyl methyl)-5-methylhexanoic Acid	--	+ 80.0	80.0
13.	3-(2-Methoxy-5-Methylphenyl)-3-Phenyl Propyl Methane Sulphonate	--	+ 2.0	2.0
14.	6-Chloro-3-methyl Uracil	--	+ 2.0	2.0
15.	2,3-Di Chloro Benzoyl Cyanide	--	+ 15.0	15.0
16.	1-(2,3-Dichlorophenyl) Piperazine hydrochloride	--	+ 1.0	1.0
17.	3,4-Dihydro-6-methyl-4-phenyl-2H-benzopyran-2-one	--	+ 3.0	3.0
18.	3,4-Dimethoxy Benzyl Cyanide / Homo Veratronitrile	--	+ 20.0	20.0
19.	3-Isobutylglutaric acid	--	+ 20.0	20.0
20.	2, N-Dimethyl-N-(3, 3-diphenylpropyl)-1-amino-2-propanol	--	+ 5.0	5.0
21.	2,6-Dimethyl-5-methoxycarbonyl-4-(3-nitrophenyl)-1, 4-Dihydropyridine-3-carboxylic acid	--	+ 4.0	4.0
22.	6-Fluoro-3,4-Dihydro-4-oxo-2H-1-benzopyran-2-Carboxylic acid	--	+ 5.0	5.0
23.	N-Methyl Homoveratryl amine	--	+ 6.0	6.0
24.	(6S)-4,5,6,7-Tetrahydro-1,3-Benzothiazole-2,6-Diamine	--	+ 0.25	0.25
25.	®-(-)-3-(Carbamoyl methyl)-5-methylhexanoic Acid	--	+ 10.0	10.0
26.	2-Methyl-3-Nitrophenyl Acetic acid	--	+ 0.5	0.5
27.	2-methyl-3-nitro-N,N-di-n-propyl phenyl ethyl ammonium oxalate.	--	+ 0.5	0.5
28.	2-Methoxy-5-Methyl-N,N-bis(1-methylethyl)-gamma-Phenylbenzene Propanamine Fumarate	--	+ 2.0	2.0
29.	1-[2-Amino-1-(4-	--	+ 5.0	5.0

	Methoxyphenyl) Ethyl] Cyclohexanol HCl.			
30.	1-[Cyano-(4-Methoxy Phenyl)-Methyl] Cyclohexanol	--	+ 6.5	6.5
31.	Ethyl-5-nitro-Benzofuran- 2-Carboxylate	--	+ 0.5	0.5
32.	Pregabalin			
33.	Homo Veratryl Amine			
34.	Venlafaxine HCl			
35.	Proguanil HCl			
36.	Fenofibrate			
37.	Dapoxetine Hydrochloride			
38.	Febuxostat			
39.	Clomifene Citrate			
40.	Betahistine DiHCl	--	+ 26.25	26.25
41.	Aripiprazole			
42.	Des Venlafaxine Succinate			
43.	Hydroxyzine Dihydrochloride			
44.	Pramipexole Dihydrochloride			
45.	Lercanidipine hydrochloride			
46.	Tolterodine tartrate			
47.	1-(3-Chlorophenyl)-4-(3- Chloropropyl) Piperazine Monohydrochloride	--	+ 5.0	5.0
48.	R & D Products / Miscellaneous new products	--	+ 10.0	10.0
	Total Production	15	+ 245.0	260.0

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 11708 sq.m (Existing 5854 sq.m and proposed 5854 sq.m). The estimated cost of the proposed project is Rs 36 Crores. After proposed expansion total water consumption will be increased from 42 KL/day to 426 KL/day (403 KL/day Industrial and 23 KL/day – Domestic). Source of the fresh water is GIDC water supply. After proposed expansion, Industrial waste water generation will be increased from 23.2 KL/day to 269 KL/day. RO reject with other softener and DM plant reject will be taken to second RO plant. The RO water generated from the second RO plant will be taken to cooling tower and the reject will be taken for washings and then sent to ETP for its further treatment and disposal. Industrial effluent and washing waste water will be sent to CETP after primary, secondary and tertiary treatment. Domestic waste water (20 KL/day) will be sent to STP. At present unit has provided two Boilers (2 TPH each) and one DG set (250 KVA). Agro Briquettes (150 Kgs/hr) is used as fuel for Boilers. Unit has proposed 2 Boilers (Cap. 4 TPH & 4 TPH), one TFH and one DG set. Agro Briquettes will be used as fuel in Boilers (9 MT/day for each) and TFH (3 MT/day). Diesel (35 Kgs/hr) will be used as a fuel for DG sets. At present water scrubbers and Caustic scrubbers are provided for control of HCL & SO₂ gases. Now unit has proposed additional water & Caustic scrubbers for control of NH₃, HBR, HCL & SO₂ gases. Recovered by-products like HCL, HBr and

Ammonium Sulphate will be sold to the actual users. Hazardous waste to be generated are Used /Spent oil, Discarded containers/ barrels /liners, ETP, Spent Carbon, Spent solvent, Process residue, Distillation residue etc.

Observations & Discussions:

Technical presentation made during the meeting by project proponent. Ambient air quality monitoring was carried out at 6 locations from March - 2015 to May – 2015 within 5 KM radial distance for the parameters like PM10, PM2.5, Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and VOCs. Committee noted that PP has not covered baseline study of NH₃, HBr, HCL HF etc. which are the project specific parameters. Committee asked to submit compliance of relevant TOR regarding baseline study. While reviewing the EIA report, Committee observed that ToR compliance regarding Mass balance, status of CETP performance, Hazardous waste, By-products & Solvent management, Risk assessment prediction etc. are not adequate. While discussing about the management of By-products and spent solvents, PP could not reply satisfactorily. Committee was of view that PP should submit sound management with relevant details for all the By-products/Hazardous waste generated from the proposed project. Committee asked to carry out in-house solvent recovery instead of sending to outsider for solvent recovery and complete re-use of used solvent. PP could not justify about the quantity of R & D products to be manufactured. After deliberation, It was unanimously decided to consider the project for further consideration only after submission of the following:

1. 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.
2. Compliance of ToR no. 4, 7, 11, 13, 14, 15, 16, 19, 19, 21, 22 and 39 and its relevant details.
3. 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.
4. Proposal for adequate APCM for Boilers.
5. Final report of NEERI validating Hydrodynamic Cavitation technology.

14	Infinium Pharmachem Pvt. Ltd.	Plot no. 37,38, 39, Sojitra GIDC, Dist.: Anand.	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Infinium Pharmacies Pvt Ltd. (herein after Project Proponent – PP) has submitted application vide their letter dated 09/07/2015.
- The project was taken up in the SEAC meeting held on 17/11/2015.
- During presentation, Committee noted that unit has proposed two options for disposal of industrial waste water. Committee was of the view that unit should not be allowed to sent their effluent to common facility of SEPL which is located far away from the project site. On asking about the other options for treatment of waste water, PP could not reply satisfactorily. Looking to the location in Sojitra GIDC and type of proposed products, committee unanimously decided to consider the case for screening & scoping only after submission of the following: (1) Name of products generating waste water with quantity per month,

its specific treatment option with technical details. (2) Satellite image of project site (1 KM radius from the boundary of the project site) with specific details such as distance of the project site from the nearest residential habitat. Name and type of surrounding industrial units and impact on it due to proposed project. Name of Chemical units located within GIDC of Sojitra. (3) Documents showing GIDC-Sojitra was established before 14/09/2006.

- The project proponent submitted the additional information vide online proposal no. SIA/GJ/IND/51572/2016 dated 14/03/2016.

Project status: Expansion

Project / Activity Details:

This is an existing unit engaged in manufacturing of Inorganic products and now proposes to manufacture Synthetic Organic Chemicals as tabulated below:

Sr. no.	Name of Products	MT/Month		
		Existing	Additional	Total after proposed expansion
1	<u>Inorganic Iodine Derivatives</u> Sodium Iodide, Potassium Iodide, Ammonium Iodide, Copper Iodide, Zinc Iodide, Silver Iodide, Calcium Iodate, Pottassium Iodate, Soidum Iodate, Sodium Meta Par Iodate, Lithium Iodide Hydrate, Nickel Iodide, Lead Iodide, Cadmium Iodide, Thallium Iodide, Antimomny Iodide, Hydroiodic Acid, Calcium Iodide Hydrate, Iodine, Iodine Monochloride, Iodine 0.1n Standard Solution, Cesium Iodide, Iodine Monochloride 40% Solution In Acetic Acid, Iodine Monochloride 40% Solution In MDC, Barium Iodide Dihydrate, Iodic Acid (Solution), Iodic Acid (Crystal), Per-Iodic Acid	50	--	50
2	<u>Organic Iodine Derivatives</u> Iodobenzene Diacetate, Bis Trifluoro Acetoxy Iodobenzene	--	50	50

<p>4-Iodobenzoicacid, 3-Iodobenzoic Acid</p> <p>Methyl Tri Phenyl Phosphonium Iodide</p> <p>Ethyl Tri Phenyl Phosphonium Iodide</p> <p>Iso Propyl Tri Phenyl Phosphonium Iodide, 1-Iodohexane, 1- Iodoheptane</p> <p>Cyclo Hexyliodide, 4-Iodoaniline, 2-Fluoro -4-Iodoaniline, 1, 4 – Diiodobenzene, 4 – Iodophenol, 2 – Iodotoluene, 3 , 5 – Diiodosalicylicacid,</p> <p>1,3-Diiodo-5,5-Dimethyl Hydantoin</p> <p>N-Iodo Succinimide, 2 – Iodophenol,</p> <p>Iodoform, Tetrabutyl Ammonium Iodide</p> <p>Trimethyl Sulfoniumiodide, Chloriodomethane, Di Iodo Methane,</p> <p>Ethyl Magnesium Iodide - 1m Solution In THF, Methyl Magnesium Iodide - 1m Solution In THF, Thymol Iodide, 1,3 – Diiodopropane, 1 , 10-Diiododecane, 2-Iodoethanol, 1-Bromo 2-Iodobenzene, 1-Bromo 4-Iodobenzene, 3-Iodo-N-Phenyl Carbazole, 4-Fluoro Iodobenzene</p> <p>2-Nitro Iodobenzene, 2-Iodo Aniline</p> <p>2-Butyl-3(3,5-Diiodo-4-Hydroxy Benzoyl) Benzofuran, Methyl Ammonium Iodide, 1,3-Diiodo Benzene, 5-Iodo Uracil, 1,4-Diiodo Butane, 2-Iodoacetic Acid, 3- Iodo Pyridine, 4- Iodo Pyridine, Iodophor, Povidone – Iodine Powder</p> <p>Propidium Iodide, Diiodoethane, 6- Iodo Indazole,</p>				
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4-Bromo-2-Iodoaniline, 3-Iodotrifluoride, 3-Iodoaniline, Diiodo Fluro Methane				
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The project falls under project activity 5(f) as per the schedule of EIA Notification 2006.

Plot area is approx. 4098 sq. m. Unit has proposed 1200 sq. m area for green belt/tree plantation. Estimated cost of proposed expansion is Rs. 0.72 Crores. Fresh water requirement after proposed expansion will be increased from 7.3 KL/day to 19 KL/day which will be supplied by the GIDC. Wastewater generation after the expansion will be increased from 0.5 KL/day to 12 KL/day. The unit has existing Effluent Treatment Plant consisting of primary and tertiary treatment facilities. Current mode of disposal is; recycled in Cooling tower make up and plantation /gardening within premises. The Project Proponent is planning to install in-house Single Effect Evaporator to achieve Zero Liquid Discharge. Industrial effluent will be treated in ETP and finally evaporated at in-house Evaporator The capacity of evaporation will be 600 Lit/hour. Domestic waste water (1.5 KL/day) will be disposed off into septic tank/soak pit system.

Flue gas emission details is as below:

Sr.No.	Stack attached to	Height of stack	Fuel consumption	APCM	Expected Concentration Pollutant
1	Thermic Fluid heater (3 Lac K cal) – Existing	15 m	Coal/wood/agro waste: 1.6 MT/day	None	PM < 150 mg/Nm ³ SO ₂ < 100 ppm NO _x < 50 ppm
2	Hot Water Generator (250 Lit/hr) – Existing	9 m			
3	Thermic Fluid heater (6 Lac K cal) – Proposed	15 m		Cyclone separator	
4	Hot Water Generator (250 Lit/hr) – Proposed	9 m			
5	D. G. Set (250 KVA) X 2 Nos. – Proposed	8 m		Adequate height	

Process gaseous emission details will be as below:

Stack attached to	Height of stack	APCM	Expected Concentration Pollutant
Reaction Vessel - 1 to 6	9 m	Scrubber	HCl < 20 mg/Nm ³
Reaction Vessel - 7 to 11	9 m	Scrubber	HCl < 20 mg/Nm ³

Hazardous waste to be generated are as below:

SR	Detail of Hazardous Waste	Existing Quantity	Proposed total quantity	Management of Waste
1	ETP Waste	1.2 MT/Year	2.4 MT/year	Collection, Storage and Disposal At TSDF
2	Used Spent Oil	0.36 KL/Year	0.5 MT/Year	Collection, Storage reused for lubrication of machineries in unit.
3	Discarded Containers/ Barrels/Liners	10 MT/Year	10 MT/Year	Collection, Storage, Decontamination, disposal by reuse or returned to supplier
4	Distillation Residue	NIL	5 MT/year	Collection, Storage and Disposal At CHWIF
5	Evaporation salt	NIL	18 MT/year	Collection, Storage and Disposal At TSDF

Observations & Discussions:

Technical presentation made during the meeting by project proponent. While discussing about the treatability of the effluent with VOCs, PP informed that they will install stripping column to recover low boiling components before evaporation. Committee emphasised on proper storage for various chemicals as there are more than 70 chemicals to be used for proposed project and asked to submit storage details on plan layout. 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. After detailed discussion, the following additional Terms of Reference were prescribed for the EIA study to be done covering 5 Km radial distance from the project boundary.

1. Copy of plot holding certificate obtained from GIDC - Sojitra.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. 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. Storage facility for each chemicals shall be included.
4. List of products showing production capacity of each of the products instead of combined production capacity for group of the products.
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. Submit action plan for complete Zero Liquid Discharge (ZLD) system by complete reuse/ recycle of treated waste water.
 14. Proposal for Zero Liquid Discharge (ZLD) system including technical details of Stripper, MEE, RO system etc. Ensure that there will not be any discharge from your unit. Details of TDS/COD/Energy balance for stripper & multiple effect evaporator. Performance based details of fenton treatment for worst case scenario shall be included.
 15. Economical and technical viability of the effluent treatment system including RO, Stripping column & Evaporation system. Action plan for 'Zero' discharge of effluent shall be included.
 16. 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.
 17. 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.
 18. 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.
 19. Undertaking stating that a separate electric meter will be provided for the ETP.
 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 like NH₃, HCl etc. 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 google map / 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 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 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.
 27. Explore the possibilities for Co-Processing of the Hazardous waste prior to disposal into TSD/CHWIF.
 28. Membership of Common Environmental Infrastructure including the TSD / Common Incineration Facility, if any.
 29. Complete management plan of the by-products & spent acids which are recyclable / reusable within the premises and all the relevant details of by-products & spent acids which are not recyclable / reusable within the premises.
 30. Name and address of end consumers to whom any hazardous waste / by-product will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said waste / by-product 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. 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.
33. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
34. 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.
35. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
36. 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.
37. MSDS of all the products and raw materials.
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 impacts. This shall include the details of Antidotes also.
39. 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?
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. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
42. 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.
43. 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.

44. (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.
45. 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.
46. 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.
47. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
48. 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 26/04/2019.
- 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.

15	Prakhar Estates Pvt. Ltd.	Plot No.821,GIDC, Sachin, Dist-Surat	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Prakhar Estates Pvt. Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/2622/2015 dated 06/10/2015.
- The project proponent was called for brief presentation and discussion in the meeting of SEAC 22/12/2015.
- During the meeting, while discussing about the treatability of the concentrated effluent, PP replied that it will be evaporated through Spray dryer after primary treatment. Committee noted that the content concentrated stream effluent comprises of high COD having refractive COD which shall be disposed through thermal decomposition at high temperature. Spray drying includes temperature profile of 250 deg. C to 400 deg. C and under prevailing temperature profile the thermal decomposition does not take

place instead transformation of the phase occurs resulting evaporation of vapour of high COD effluent into the ambient air polluting ambient air quality. Committee also discussed about the handling of spent acid and deliberated that there is no infrastructure available to handle spent sulphuric acid generated from such products. After deliberation, committee asked PP to come with the proposal with sound environment management plan. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after submission of the following: Revised proposal with Revised Form-1 & relevant details.

- The project proponent has submitted revised proposal (Revised Form-1 & PFR) vide their letter dated 14/03/2016.

Project status: New

Project / Activity Details:

This is a new unit proposes the manufacturing of Synthetic organic Chemicals (Dyes Intermediates) as tabulated below:

Sr.No.	Name of Product	Quantity (MT/Month)
1	4 Chloro 2 Amino Phenol 6 Sulphonic Acid (4 CAPSA)	5
2	6 Chloro 2 Amino Phenol 4 Sulphonic Acid (6 CAPSA)	
3	Ortho Amino Phenol Para Sulphonic Acid (OAPSA)	
4	6 Nitro 2 Amino Phenol 4 Sulphonic Acid (6 NAPSA)	10
5	Aniline 2,5 Di Sulphonic Acid	25
6	Aniline 2,4 Di Sulphonic Acid	
7	Copper Formazone BASE	20
8	Blue HEGN STAGE I [2-(2-Amino-Ethylamino)-5-Nitro-Benzensulfonc Acid]	
9	Blue HEGN STAGE II [Diaryl amino-3,6-dichloro-1,4-benzoquinone]	
10	Mecitylene Acid (M ACID)	
11	Blue 49 Base	
12	Blue HEGN STAGE III [3, 10-di-(2'-Aminoethylamino)-6,13 di chloro triphendioxazine- 4,11-disulphonic acid]	4
13	4 -4 Diamino Diphenylene amine 2 Sulfonic Acid (F C Acid)	40
14	4 Nitro 4 Amino Diphenylene amine 2 Sulfonic Acid (4 NADPSA)	
15	6 Acetyl Ortho Amino Phenol Para Sulphonic Acid (6-Acetyl OAPSA)	40
Total		144

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 4816 sq. m & unit has proposed 1415 sq mtr area for the green belt development/Tree plantation. Expected project cost is Rs.12 Crores. Total water consumption for proposed project will be 143 KL/day, which will be sourced from GIDC water supply. Industrial waste water generation will be 52 KL/day, which will be treated in ETP and spray dried completely. Domestic waste water (2 KL/day) will be disposed off into soak pit system. Industrial effluent will be completely spray dried after primary treatment. Generated

spent sulphuric acid will be completely reused for other products within premises.

Flue gas emission details is as below:

Sr. No.	Stack attached to	Stack ht (m)	Name of fuel and quantity	APC measures
1	Boiler 5 TPH	21	Coal- 7 MT/Day	Bag Filter followed by wet scrubber
2	Thermic Fluid Heater 2.5 Lacs kcal/hr	11	Coal / Wood- 0.7 MT/Day	Cyclone Separator
3	Hot Air Generator-I for Spray Dryer 75 Lac KCal (Capacity)	30	Coal/Wood- 21 MT/Day	Scrubbing System
4	Hot Air Generator-II for Spin flash Dryer 2 Lac KCal (Capacity)	11	Coal/Wood- 0.56 MT/Day	Bag Filter
5	D.G.Set 500 KVA	9	Diesel 100 Lit/Hr	---

Process gas emission details is as below:

Sr. No.	Stack attached to	Stack ht (m)	APC measures	Pollutants
1	Sulfonation Reactor 5 nos.	11	Two stage scrubber system	SO ₂
2	Nitration reactor 2 no.	11	Two stage scrubber system	NO ₂
3	Spray Dryer	30	Scrubbing System	SPM
4	Spin Flash Dryer	11	Bag filter	SPM

Hazardous waste generation and management is as below:

Sr. No.	Type of Waste With Category No.	Total Quantity of Waste	Disposal
1	Discarded bags & Discarded Containers Category No.: 33.3	1.5 MT/Month	Used for packing of ETP waste/ return back to raw material supplier/ to authorized recyclers.
2	Used Oil Category No. 5.1	200 Lit/Month	To Authorised re-processors.
3	ETP waste/ Gypsum Sludge Category No.: 34.3	100 MT/ Month	Reuse for lubrication purpose of plant and machineries or sale to registered recycler.
4	Process Waste /Iron Sludge Category No.: 26.1	200 MT/Month	TSDf site or Cement manufacturing industries.
5	Spent Acid Class D2, Schedule-II	420 MT/Month	100% Captive Consumption, Reuse by self in an Isolation Process instead of HCL
6	Fly Ash	0.9 MT/Day	Sold out to actual users.

Observations/Discussions:

Technical presentation made during the meeting by project proponent. Committee noted that PP has submitted revised proposal with decreasing the total production from 270 MT/Month to 144 MT/Month. While

discussing about the spent acid management, PP informed that they have worked out for complete reuse of spent sulphuric acid within premises for manufacturing of other products. They will not send spent acid outside the premises in any case. Further PP assured that they will submit the action plan for spent acid management with product wise generation and use of spent acid in respective products with quantitative & qualitative analysis. Upon asking about the treatability of the effluent with VOCs, PP informed that they will install stripping column to recover low boiling components before evaporation. During the meeting, Issues related to waste water management, safety aspect of hazardous chemicals, health effects of chemicals etc. have been discussed. Upon asking about possibility to adopt Zero Liquid Discharge (ZLD) concept for the proposed project, PP informed that they will go for complete ZLD and they will adopt state of the art technology to achieve ZLD. After detailed discussion, the following Terms of Reference (ToR) were prescribed for the EIA study to be done covering 10 km radial distance from the boundary of the project site.

1. Copy of plot holding certificate obtained from GIDC Sachin.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. 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.
4. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
5. 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.
6. Chemical name of each proposed product to be manufactured. Details on end use of each product.
7. 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.
8. 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.
9. 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.
10. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
11. Segregation of waste streams and details on specific treatment and disposal of each stream.
12. Action plan for 'Zero' discharge of effluent shall be included.
13. Spent acid management with complete mass balance (Qualitative & Quantitative analysis). Feasibility report for reuse of spent acid in respective products. Undertaking regarding complete reuse within premises and will not send spent acid outside the premises in any case.
14. 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.
15. 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 Incinerator in order to avoid/reduce gaseous emission/VOC from spray drying of industrial effluent containing solvents & other chemicals. Techno-economical viability of the spray drying system.
16. Technical details of RO/NF system. (If any).
 17. Undertaking stating that a separate electric meter will be provided for the ETP, RO & Incinerator/Spray Dryer.
 18. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
 19. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
 20. 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.
 21. 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.
 22. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
 23. 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 10 km for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
 24. 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.
 25. 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.
 26. 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.
 27. 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 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.
28. Action plan for odour control to be submitted.
 29. 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.
 30. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, if any.
 31. Complete management plan for By-products 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 from the proposed project.
 32. 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.
 33. 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.
 34. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
 35. 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.
 36. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
 37. 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.
 38. MSDS of all the products and raw materials.
 39. 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.

40. 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?
41. 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.
42. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
43. 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.
44. 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.
45. (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.
46. 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.
47. 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.
48. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
49. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
50. 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 26/04/2019.

- 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	Matrix Pharma Chem	Plot No. 90/1&91/1, GIDC - Odhav, Dist.: Ahmedabad	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Matrix Pharma Chem (herein after Project Proponent – PP) submitted Application vide their online proposal no. SIA/GJ/IND2/10748/2016 dated 16/03/2016.

Project Status: Expansion

Project / Activity Details:

This unit is engaged in manufacturing of Vat Indigo Blue and now proposes for expansion of the project as tabulated below:

Sr. no.	Name of proposed product	Quantity MT/Month
Existing Product		
	Vat Indigo Blue	1
Proposed Product		
1	Indigo Carmine	3
2	Ponceau 4R	5
3	Tartrazine	14
4	Sunset Yellow	14
5	Carmoisine	6
6	Brilliant Blue FCF	5
7	Acid Blue 25	5
8	Acid Blue 40	3
9	Acid Blue 324	3
10	Acid Green 25	3

11	Acid Violet 43	3
	TOTAL	64 MT/M

During the meeting, it was presented that the project site is located within the GIDC estate of Odhav, which falls within the Ahmedabad city limit. On asking, project proponent could not reply about the exact distance of proposed site from the Critically Polluted area of Vatva-Narol. Committee noted that some part of the GIDC-Odhav is located within the 5 km radius from the boundary of the Vatva GIDC. Considering the applicability of the General Condition, the project proponent was asked to submit the exact aerial distance of the proposed project site from the nearest boundary of the Vatva-Narol CEPI area along with the satellite image reflecting the same. Committee also observed that the existing unit was not in compliance as they have been issued 3 times closure notice from GPCB for violation under the Water act. After detailed discussion, It was decided to consider the project only after the satisfactory submission of the following:

1. The exact aerial distance of the proposed project site from the nearest boundary of the Vatva-Narol CEPI area along with the satellite image reflecting the same.
2. Aerial distance of nearest residential area from the boundary of the project site along with satellite image.
3. Details of CETP- OEPL (1) Total capacity of the CETP (2) Total booked capacity and actual load received at present (Qualitative and Quantitative) (3) CETP performance including Last 1 year analysis reports of GPCB for Inlet and outlet of CETP (4) Recommendations and suggestions of the last two Environment Audit reports of CETP- OEPL-Odhav and its compliance report. (5) Latest copy of membership certificate from CETP authority for additional effluent load.
4. 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.

17	M/S. Europa Foams Pvt. Ltd.	Survey No. 168/2, Plot No. 11, Kuwadva-Wankaner Road, Village: Sanosara, Taluka& District: Rajkot	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Europa Foams Pvt. Ltd. (herein after Project Proponent – PP) has submitted application vide their online proposal no. SIA/GJ/IND2/10825/2016 dated 23/03/2016.

Project status: New

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.	Polyurethane Foam (PU) Foam	200

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 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 4.3 KL/day. Fuel requirement is 15 ltrs/hr (<25 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.

Total plot area is 7119.34 sq. m. Unit has proposed 2212 sq. m area for the green belt development/ Tree plantation. Expected project cost is Rs. 4.9 Crores. Aerial distance of the nearest residential area of Village Sanosara is @ 2.4 KM. It is reported that no National park/sanctuary or ecologically sensitive area is located within 10 km distance. Total water consumption for proposed project will be 4.3 KL/day (3.5 KL/Day for Domestic & Gardening and 0.8 KL/Day for industrial) which will be sourced from Bore Well. Industrial waste water generation will be NIL. Domestic waste water generation will be 0.4 KL/Day which shall be disposed through soak pit system. Unit is proposed to install one D.G.Set of 125 KVA and Diesel (15 Lit/hour) will be used as fuel for D.G.Set. The Hazardous waste to be generated from the manufacturing activity will be used oil/spent oil and reused for lubrication of machineries in unit.

Observations & Discussions:

Presentation made by the proponent included the general information about the project, details of product & raw materials, manufacturing process with process flow diagram, Health and safety measures proposed etc. On asking about storage and handling details of TDI, PP informed that monthly consumption of TDI is 52 MT and they will store less quantity of TDI than the threshold limit for MAH unit. Further PP assured that they will submit undertaking in this regard. However committee asked to provide strict engineering controls and personal protective equipments for the workers during handling of TDI. 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. Following additional information was sought from the project proponent for appraisal of the project:

1. Land Possession Documents of the proposed site. Copy of NA Permission from the concern authority.
2. Project site specific details such as 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/Eco sensitive zone (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.
3. 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. Give tabular format for comparison of actual storage of hazardous chemicals and threshold limit prescribed in MSIHC Rules, 1989.
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. Demarcation of proposed project activities in lay

- out plan. Exact details about infrastructural facilities, plant machineries etc. required for the proposed project.
5. Proposed monthly production and monthly consumption of each raw material. Source of raw materials and its mode of transportation.
 6. Manufacturing process along with chemical reactions, mass balance for each product. Give exact quantity of raw materials required in MT/Day.
 7. 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.
 8. Water balance diagram (including reuse-recycle, if any) along with qualitative and quantitative analysis of each waste stream to be generated.
 9. 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.
 10. 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.
 11. 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.
 12. Details of measures proposed for noise pollution abatement & its monitoring.
 13. 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?
 14. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
 15. 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.
 16. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment.
 17. 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.
 18. MSDS of all the products and raw materials to be used.
 19. 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.

20. 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?
21. Details of the separate isolated storage area for chemicals. Details of fire extinguishers, flame proof electrical fittings, DCP extinguishers and other safety measures proposed.
22. Specific safety details / provisions for various hazardous chemicals and detailed fire control plan for flammable substances.
23. 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 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.
24. 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.
25. 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.
26. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
27. A tabular chart with index for point-wise compliance of above details.

The project shall be appraised on satisfactory submission of the above.

The following proponents did not remain present during the meeting:

1. "Avadh Infracon" at Block No. 211, T.P.S.No.13, F.P.No.131, Near Shyambaba Temple, VIP road, Vill: Bharthana, Vesu, Dist: Surat.
2. M/S. M.D. Inducto Cast Ltd., Plot no:144, Paiki 1&2, Vill: Nesada, Ta: Sihor, Dist: Bhavnagar.
3. Mohini Organics Pvt Ltd. , Plot No. C-298, Sayakha Industrial Estate, Ta-Vagra, Dist. Bharuch

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

The additional information received from the project proponents, which was sought during various SEAC meetings, 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.

Sr. No.	Name and address of the project.
1.	Swaminarayan Green City, F.P.No.169,170 & 171, O.P.No.172, Block No. 396, T.P.S.No.48, Village: Kholvad, Dist: Surat.
2.	Indraprasth Business Park, S.P.No.25/1, F.P.No.25, S.No.193, D.T.P.S. No. 84/B, Village: Makarba, Ahmedabad.
3.	The Bungalows, Plot No. - 181/1, S.No:998, Opp. ZyduS Cadila Building, Satellite Road, S.G.Highway, Ahmedabad.
4.	Soham Residency, F.P. No. 25/Paikkee, TPS No. 1, Dist: Surat.
5.	Satkar Premium, Survey No. 209 + 210, F.P.No. 28, T.P. S. No. 97, Village: Naroda, Taluka: Asarwa, District: Ahmedabad.
6.	Cosmos Plus, S.No.270/P 1, 270/P 2, Village: Madvi, Ta. & Dist: Rajkot.
7.	Dream Ikon, T.P.No.2 (Vesu – Bharthana), R. S. No. 415/3, 413, 412/1, 412/2, O.P.No.129, 130/1, 130/2, F.P.No.118/1+118/2+119, at Vesu, Surat.
8.	A commercial project by Mr. Alpeshbhai A Patel, Block No.671,631, O.P.No. 45, 24, F.P. No.45/2,24/1, T.P.S.No.12 (Puna), Puna, Surat.
9.	Building construction project by Mr. Vijaybhai M. Bharwad, F.P No-117, O.P.No. - 117, New S.R.No. - 40-1+2, Old S.R.No.-33, Sub Plot No.-01, T.P.S. No. - 75 (Magdalla-Vesu-Gavier), Moje- Magdalla, Dist .Surat.
10.	Shrungal Homes, Block No. 141, F.P.No.42, O.P.No.42, T.P.S.No.58 (Bamroli), Choryasi, Surat.
11.	Shayona Shikhar, S.No.232, F.P.No.60, O.P.No.60, T.P.S.No. 33, Village: Gota, Ta: Dascroi, Dist: Ahmedabad.
12.	Surya Emerald, O.P.No.91/1, F.P.No.91/1, S.No. 691, 692/1+2/P, T.P.S.No.51, Makarba, Vejalpur, Ahmedabad.
13.	M/s. Maharshi Pharma Chem Pvt. Ltd. at Block no.203,Vill.: Alindra, Vaso-Alindra Road, Ta.: Matar, Dist.: Kheda,
14.	M/s. Lanxess India Pvt. Ltd., Plot No:748/2/A,748/3, 748/4/A & 748/4/B, G.I.D.C. Jhagadia, Bharuch.
15.	Mangalam Intermediates, Plot no: 8201/1, GIDC Estate, Sachin,
16.	Mahavir Eco Projects Pvt. Ltd., Plot No:2430, GIDC Estate, Sachin, Choryasi, Surat.
17.	Himalaya Chemicals, Plot no.25, Shed No.C-1/B-4, GIDC Estate, Pandesara, Choryasi, Dist.: Surat
18.	Camlin Fine Sciences Limited, Plot no..Z/96/D, Part-II, Dahej SEZ, Ta.: Vagra, Dist.: Bharuch.
19.	Pharma Inter Chemie unit II, Plot no:139 & 140, GIDC Estate, Nandesari, Vadodara
20.	KLJ organic limited unit ii, Plot no.760 GIDC industrial, Estate, jhagadia,Bharuch.
21.	Reliance Industries Ltd. (RIL-HMD), Hazira Manufacturing Division, GIDC Mora Plot, Choryasi Dist.: Surat.
22.	Reliance Industries Ltd. (RIL-DMD), Dahej Manufacturing Division, GIDC PlotNo.1, Dahej Vagra Dist.: Bharuch.

The additional information received from the project proponents, which was sought during various SEAC meetings, were considered by the committee during the meeting and as it was found not satisfactory, the committee decided to consider these proposal after submission of the additional details as below:

1.	M/s. Amophil Chemicals Pvt. Ltd., Plot no. 124/33, A-B, GIDC-Nandesari, Dist.: Vadodara.
<p>The case was referred back by the SEIAA vide their letter no. SEIAA/GUJ/EC/5(f)/287/2016 dated 18/04/2016 for reconsideration to the SEAC based on the discussion in the SEIAA meetings held on 02/04/2016 with the following point: (1) To verify the accreditation of consultant with respect to Notification of MoEF&CC dated 03/03/2016 and status of interim stay order in SCA-10311/2012 filed in Hon. High Court of Gujarat. (2) To verify the compliance of monitoring of Ambient Air Quality with respect to project specific parameters i.e. VOC. & (3) To verify the techno-economical feasibility of Hydrodynamic Cavitation technology.</p> <p>Project proponent vide their letter dated 09/04/2016, submitted the reply as below: (1) The consultant has acquired the stay order from Honourable Gujarat High Court against the Notification of MoEF&CC dated 03/03/2016. (2) VOC measurement was carried out on site and inside the GIDC estate and also on site. The VOC was not detected on site as there is no activity at site whereas it varied from 0.2 to 0.4 ppm in Nandesari estate. Elsewhere at other monitoring locations in the study circle, VOC was below detectable levels. (3) A short note prepared by Chairman, Nandesari Industries Association on the techno-economical feasibility of the Hydrodynamic Cavitation. A letter from NIA vide dated 05/04/2016, addressed to Chairman, SEIAA, it is mentioned that NIA has asked NEERI to authenticate Hydrodynamic Cavitation technology as a method of treatment for waste water and it was mentioned that it is already at advance stage of submitting the final report. It was further mentioned that the final report of NEERI was to be availed to them at the end of April 2016.</p> <p>The said submission by the project proponent was considered by the committee during the meeting. Committee found that the reply regarding treatment method "Hydro dynamic cavitation" was not satisfactory. 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. After detailed deliberations, the Committee decided to consider this proposal after submission of the following:</p> <ul style="list-style-type: none"> Final report of NEERI validating Hydrodynamic Cavitation technology. 	
2.	M/s: R. K. Industries, Plot no.125/4, GIDC Nandesari, Dist.: Vadodara
<p>The additional information received from the project proponents M/s: R. K. Industries, Plot no.125/4, GIDC Nandesari, Dist.: Vadodara which was sought during SEAC meeting dated 03/02/2016. The said submission by the project proponent was considered by the committee during the meeting. Committee found that the reply regarding treatment method "Hydro dynamic cavitation" was not satisfactory. 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. After detailed deliberations, the Committee decided to consider this proposal after satisfactory submission of the following:</p> <ul style="list-style-type: none"> Final report of NEERI validating Hydrodynamic Cavitation technology. 	
3.	Pharma Inter Chemie unit II, Plot no:139 & 140, GIDC Estate, Nandesari, Vadodara
<p>The additional information received from the project proponents M/s: Pharma Inter Chemie unit II, Plot no: 139 & 140, GIDC Estate, Nandesari, Vadodara which was sought during SEAC meeting dated 03/02/2016. Committee observed that the treated effluent will be sent to the CETP, Nandesari for further treatment. Committee observed that treatment of waste water at CETP, Nandesari is carried out with Hydrodynamic</p>	

Cavitation technology.

A letter from NIA vide dated 05/04/2016, addressed to Chairman, SEIAA, in the case of M/s; Amophil Chemicals Pvt. Ltd., Plot no. 124/33, A-B, GIDC-Nandesari, Dist.: Vadodara it is mentioned that NIA has asked NEERI to authenticate Hydrodynamic Cavitation technology as a method of treatment for waste water and it was mentioned that it is already at advance stage of submitting the final report. It was further mentioned that the final report of NEERI was to be availed to them at the end of April 2016. 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. After detailed deliberations, the Committee decided to consider this proposal after submission of the following:

- Final report of NEERI validating Hydrodynamic Cavitation technology.

Meeting ended with thanks to the Chair and the Members.

Minutes approved by:

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