Minutes of the 315th meeting of the State Level Expert Appraisal Committee held on 01/12/2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar.

The 315th meeting of the State Level Expert Appraisal Committee (SEAC) was held on 1st December, 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 Rajesh Shah, Member, SEAC.*

The agenda of TOR/Scoping/Category 8 (a) cases and Appraisal cases was taken up. Twelve (12) cases of TOR/Scoping/Category 8 (a) and thirteen (13) 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.	High Rise Building Project 2 FP 123	R.S. No.: 54/2+54/3, O.P.No: 27/B1, F.P.No: 123, T.P.S.No: 7, (Anjana), Ta: Choryasi, Dist. Surat	Appraisal case

The project was earlier taken up in meeting of SEAC dated 09/8/16. During the meeting held on 09/08/2016, after detailed discussion on various aspects of the project it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained from concerned competent authority for the proposed FSI.
2. Base line status of the existing traffic, impact on it due to the project activities (prior to construction, during construction and at full site operation), carrying capacity of the existing roads and details of traffic management in and outside the project during construction and operation phase of the project.
3. Copy of permission obtained from Airports Authority of India for the proposed building height.
4. Location of the proposed STP on the layout plan.
5. Minimum fire water requirement for the proposed project based on the fire study.
6. Type of activities to be carried out in the proposed commercial units. Notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit 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.
8. E waste management plan.
9. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
10. Details on ventilation, lighting arrangements and CO sensors to be provided in the basements. Details on provision to be made for natural lighting & ventilation in the proposed commercial units.
11. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.

12. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
13. Details & plans showing floor wise emergency evacuation for the proposed project.

The project proponent submitted the above mentioned details vide their letter dated 03/10/2016.

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

During the meeting, they have submitted a copy of permission dated 23/11/2016 obtained from the Urban Development & Urban Housing Department for the proposed FSI & ground coverage. Traffic survey carried out on adjacent canal road shows that the road having carrying capacity of 7200 PCU/hr will be adequate to cater the total traffic load of 1085/hr PCU in the proposed scenario. Copy of permission obtained from Airports Authority of India for top elevation of 110.67 m above AMSL(MSL is 10.67 m.) has been submitted. Layout plan showing location of the proposed STP has been submitted. 332 KL capacity underground fire water tank will be provided for the proposed project. They have submitted a notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. It was presented that eco friendly building material will be used for walls & ceiling and properly sized & efficient heating, ventilation & air conditioning system will be provided to avoid the heat island effect in the surrounding. E-waste management plan, plan for loading / unloading of goods & provision of common amenities on each floor were presented & discussed during the meeting. They have submitted plans showing air cut outs & location of CO sensors in the basements as well as floor wise emergency evacuation plan for the proposed project.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/56441/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a) - Building and construction projects; Category: B
4.	Name of the project	Commercial project by Mr. Nareshbhai H. Babariya
5.	Name of Developer	Mr. Nareshbhai H. Babariya
6.	Estimated Project Cost (Rs. In Crores)	40 Crore
7.	Whether construction work has been initiated at site? If yes, details thereof	No

<table>
<tr><td>8.</td><td>Project Details</td><td>
• Land / Plot Area (m^2): 11,252.0
• FSI area (m^2): 45,007.14
• Total BUA (m^2): 71,605.45
<table>
<tr><td></td><td>Permissible</td><td>Proposed</td></tr>
<tr><td>FSI Area (m^2)</td><td>45,008 .0</td><td>45,007.14</td></tr>
<tr><td>Ground Coverage (m^2)</td><td>3,375.60</td><td>5,740.11</td></tr>
<tr><td>Common Plot Area (m^2)</td><td>1,125.20</td><td>1,226.79</td></tr>
<tr><td>Max. building height (m)</td><td>-</td><td>53.14</td></tr>
</table>
</td></tr>
<tr><td>9.</td><td>Building Details</td><td>
• No. of Buildings: 1 Nos.
• No. of Blocks: 1
• Scope of buildings/blocks: 2 level basement + Ground floor + 9 floors.
• No. of commercial units: 1107 shops.
</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>2214 nos. Commercial Users</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>
• Water requirement (KL/day): 10.3
• Source of water: Water supply from Surat Municipal Corporation (SMC)
• Waste water generation quantity (KL/day): 1.20
• Mode of disposal: Onsite Sanitation facilities (Septic tank/ Soak Pit) will be provided during the construction phase
</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>
• Total water requirement (KL/day): 111.0
• Fresh water requirement (KL/day): 75.0
• Source of water: water supply from Surat Municipal Corporation (SMC).
• Waste water generation quantity (KL/day): 93
• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose and only remaining quantity of treated sewage will be discharged into the drainage line of SMC.
• In case of STP provision, capacity of STP: Capacity 100.0 KL/day
• STP Technology: Primary, Secondary & Tertiary Treatment.
• Purposes for treated water utilization: Treated sewage will be utilized in gardening and flushing.
• Quantity of treated water to be reused: 1. Gardening (KL/day): 3.0 KL/day, 2. Flushing (KL/day): 33.0 KL/day
• Provision of dual plumbing system (Yes/No): Yes
• Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose and only remaining quantity of treated sewage will be discharged into the drainage line of SMC
• Mode of disposal: As above.
</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>S.M.C. Water Supply and Underground Sewer line available at project site.</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>
Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
</table>
</td></tr>
</table>

		Top Soil	93,432.69	93,432.69	Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be used for development of greenbelt.
		Other excavated earth			
		Construction debris	85	85	
		Steel scrap	7.6 MT	---	Will be sold to recycler/vendors
		Discarded packing materials	1 MT	--	Will be sold to recycler/vendors

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	664Kg	Into bins to be provided for waste collection.	Collection & final Disposal through SMC
Wet waste			

- Details of segregation if to be done: The solid wastes to be 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; 18 nos. of bins;
- Landfill site where waste will be ultimately disposed by local authority: M.S.W will be finally transferd to the final disposal site at Khajod

15.	Parking Details	• Total parking area requirement for the project as per GDCR: 22,504 m^2 • Parking area requirement for commercial units as per GDCR: 22,504 m^2 • Total number of CPS requirement for the project as per NBC: 900 nos. • Number of CPS requirement for commercial units as per NBC: 900 nos. • Total Parking area provided (m^2) & No. of ECS: 28,696.39 m^2, 915 nos. • Parking area provided in basement (m^2) & No. of ECS: 18,402.36 m^2, 575 nos. • Parking area provided as open surface (m^2) & No. of ECS: 1,551.24 m^2, 67 nos. • Parking area provided as mechanical parking (m^2) & No. of ECS: 8742.79 m^2, 273 nos.
16.	Traffic Management	• Width of adjacent public roads: 60 & 12.19 m wide road • Number of Entry & Exit provided on approach road/s: 2 gates will be provided. • Width of Entry & Exit provided on approach road/s: 6 m & 7.5 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3.5 • Width of all internal roads: 6 & 9
17.	Details of Green	Maximum utilization of natural light, CFL & LED lighting fixtures in common areas, use of solar energy in external lighting, rain water harvesting &

<table>
<tr><td></td><td>Building measures proposed.</td><td>ground water recharge etc.</td></tr>
<tr><td>18.</td><td>Energy Requirement, Source and Conservation</td><td>• Power supply
Maximum demand: 1500 KVA
Connected load: --
• Source: D.G.V.C.L
• Energy saving measures: Maximum utilization of natural light, CFL & LED lighting fixtures in common areas, use of solar energy in external lighting, aerated block [Cement + Fly Ash + Air mixture will be used to reduce heat stress inside building etc.
• DG Sets:
No. and capacity of the DG sets: 4 x 50 KVA
Fuel & its quantity: Diesel, 12 Lit./Hr.</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>• Fire extinguishers & hose reel at each floor, wet riser opening at each floor, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 332 KL capacity for each building, terrace water tank of 25 KL on each building block etc.
• Nearest fire station: Man Darwaja fire station.
Distance from the project site: approximate at about 1.5 km.
Time required by the fire tender to reach the project site: 5 minutes.</td></tr>
<tr><td>20.</td><td>Details on staircase
<table>
<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>
<tr><td>C</td><td>Joint</td><td>G + 9</td><td>4917.22</td><td>07</td><td>2.0</td><td><30</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 80-100 ft
• No. and depth of percolations wells : 3nos.,
• Details on Pre-treatment facilities : Gravity filter, MOC: PE.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) : 847.52 m^2
• Area covered by shrubs and bushes (m^2): ---
• Lawn covered area (m^2): ---
• Total Green Area (m^2): 847.52 m^2
• Green Area % of plot area: 7.5%
• No. of trees and species to be planted: 150 nos. of trees like Asopalav, Gulamohar, Palm, Neem, Badam tree etc.</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Capital Cost (Rs. In Lacs)</th></tr>
<tr><td>1</td><td>Landscaping</td><td>20 Lacs</td></tr>
<tr><td>2</td><td>Groundwater Recharge Structure</td><td>7 Lacs</td></tr>
<tr><td>3</td><td>Solar Energy Utilization</td><td>4 lacs</td></tr>
<tr><td>4</td><td>Energy Efficient Lighting</td><td>2 lacs</td></tr>
<tr><td>5</td><td>Solid Waste Management</td><td>3 lacs</td></tr>
<tr><td>6</td><td>Monitoring of Air, Water, Noise & Soil</td><td>0.75 lacs</td></tr>
<tr><td colspan="2">Total</td><td>36.75 Lacs</td></tr>
</table></td></tr>
<tr><td>24.</td><td>Proposed dust control</td><td>Vertical curtails, water sprinkling, covering the building materials with the tarpaulin sheet etc.</td></tr>
</table>

	measures during the construction phase	
25.	Eco friendly building material usage details.	Fly ash based bricks, Ready Mix Concrete, A.C.C Blocks will be used.
26.	Amenities for the construction workers.	Sanitation facility, drinking water & tap water, soak pit for domestic waste water collection, first aid box, free medicine, doctor service, PPEs etc.
27.	Documents related to land possession.	Copy of village form no. 7 & 12 submitted by them shows that the land is in the name of applicant & others. Copy of application made for obtaining N.A permission has been submitted.

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

1. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
2. Notarized consent of the other land owners for issuing environmental clearance for the proposed project in the name of the applicant.

2.	High Rise Building Project-1	R.S. No: 54/1, O.P.No: 27/A, F.P.No: 94, T.P.S. No.: 07 (Anjana), Ta: Choryasi, Dist. Surat.	Appraisal case

The project was earlier taken up in the meeting of SEAC dated 09/08/2016. During the meeting held on 09/08/2016, after detailed discussion on various aspects of the project it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained from concerned competent authority for the proposed FSI.
2. Base line status of the existing traffic, impact on it due to the project activities (prior to construction, during construction and at full site operation), carrying capacity of the existing roads and details of traffic management in and outside the project during construction and operation phase of the project.
3. Copy of permission obtained from Airports Authority of India for the proposed building height.
4. Layout plan showing provision of two separate gates for entry / exit.
5. Minimum fire water requirement for the proposed project based on the fire study.
6. Type of activities to be carried out in the proposed commercial units. Notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit 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.
8. E waste management plan.
9. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
10. Details on ventilation, lighting arrangements and CO sensors to be provided in the basements.

Details on provision to be made for natural lighting & ventilation in the proposed commercial units.

11. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.
12. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
13. Details & plans showing floor wise emergency evacuation for the proposed project.

The project proponent submitted the above mentioned details vide their letter dated 03/10/2016.

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

During the meeting, they have submitted a copy of permission dated 23/11/2016 obtained from the Urban Development & Urban Housing Department for the proposed FSI & ground coverage. Traffic survey carried out on adjacent canal road shows that the road having carrying capacity of 7200 PCU/hr will be adequate to cater the total traffic load of 1085 PCU/hr in the proposed scenario. Copy of permission obtained from Airports Authority of India for top elevation of 110.67 m above AMSL(MSL is 10.67 m.) has been submitted. Layout plan showing provision of two separate gates for entry / exit has been submitted. 200 KL capacity underground fire water tank will be provided for the proposed project. They have submitted a notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. It was presented that eco friendly building material will be used for walls & ceiling and properly sized & efficient heating, ventilation & air conditioning system will be provided to avoid the heat island effect in the surrounding. E-waste management plan, plan for loading / unloading of goods & provision of common amenities on each floor were presented & discussed during the meeting. They have submitted plans showing air cut outs & location of CO sensors in the basements as well as floor wise emergency evacuation plan for the proposed project.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/56438/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a) - Building and construction projects; Category: B
4.	Name of the project	Commercial project by Mr. Nareshbhai H. Babariya
5.	Name of Developer	Mr. Nareshbhai H. Babariya
6.	Estimated Project Cost (Rs. In Crores)	25 Crore
7.	Whether construction work has been initiated at site? If yes, details thereof	No

<table>
<tr><td>8.</td><td>Project Details</td><td>
• Land / Plot Area (m^2): 4,410.0 m^2
• FSI area (m^2): 17,497.80 m^2
• Total BUA (m^2): 27,272.96 m^2
<table>
<tr><td></td><td>Permissible</td><td>Proposed</td></tr>
<tr><td>FSI Area (m^2)</td><td>17,640</td><td>17,497.80</td></tr>
<tr><td>Ground Coverage (m^2)</td><td>---</td><td>1,652.36</td></tr>
<tr><td>Common Plot Area (m^2)</td><td>441.0</td><td>451.25</td></tr>
<tr><td>Max. building height (m)</td><td>-</td><td>68.69</td></tr>
</table>
</td></tr>
<tr><td>9.</td><td>Building Details</td><td>
• No. of Buildings: 1 Nos.
• No. of Blocks: 1
• Scope of buildings/blocks: 2 level basement + Ground floor + 12 floors
• No. of residential units: ---
• No. of commercial units: 680 sops
</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>1360 nos. Commercial Users</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>
• Water requirement (KL/day): 10.3
• Source of water: Water supply from Surat Municipal Corporation (SMC)
• Waste water generation quantity (KL/day): 1.20
• Mode of disposal: Onsite Sanitation facilities (Septic tank/ Soak Pit) will be provided during the construction phase
</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>
• Fresh water requirement (KL/day): 60.0
• Source of water: Water supply from Surat Municipal Corporation (SMC)
• Waste water generation quantity (KL/day): 46.0
• Mode of disposal: Into drainage line of Surat Municipal Corporation (SMC)
</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>S.M.C. Water Supply and Underground Sewer line available at project site.</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td>36,149.31</td><td>36,149.31</td><td rowspan="3">Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be used for development of greenbelt.</td></tr>
<tr><td>Other excavated earth</td><td></td><td></td></tr>
<tr><td>Construction debris</td><td>40</td><td>40</td></tr>
</table>
</td></tr>
</table>

Steel scrap	3.8 MT	---	Will be sold to recycler/vendors
Discarded packing materials	1 MT	---	Will be sold to recycler/vendors

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	408 Kg	Into bins to be provided for waste collection.	Collection & final Disposal through SMC.
Wet waste			

- Details of segregation if to be done: The solid wastes to be 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; 12 nos. of bins;
- Landfill site where waste will be ultimately disposed by local authority: M.S.W will be finally transferd to the final disposal site at Khajod

15.	Parking Details	• Total parking area requirement for the project as per GDCR: 8,820 m^2 • Parking area requirement for commercial units as per GDCR: 8,820 m^2 • Total number of CPS requirement for the project as per NBC: 350 nos. • Number of CPS requirement for commercial units as per NBC: 350 nos. • Total Parking area provided (m^2) & No. of CPS: 11,043.25 m^2, 358 nos. • Parking area provided in basement (m^2) & No. of CPS: 6,937.24 m^2, 217 nos. • Parking area provided as open surface (m^2) & No.of CPS: 825.94 m^2,36 nos. • Parking area provided (at any other place-specify) (m^2) & No. of CPS: Mechanical – 3,280.07 m^2, 105 nos.
16.	Traffic Management	• Width of adjacent public roads: 12.19 m wide road • Number of Entry & Exit provided on approach road/s: 2 gates will be provided. • Width of Entry & Exit provided on approach road/s: 6 &9 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 4 m • Width of all internal roads: 6 &4
17.	Details of Green Building measures proposed.	Maximum utilization of natural light, CFL & LED lighting fixtures in common areas, use of solar energy in external lighting, rain water harvesting & ground water recharge etc.
18.	Energy Requirement, Source and Conservation	• Power supply Maximum demand: 1000 KVA Connected load: -- • Source: D.G.V.C.L • Energy saving measures: Maximum utilization of natural light, CFL & LED lighting fixtures in common areas, use of solar energy in external

<table>
<tr><td></td><td></td><td>lighting, aerated block [Cement + Fly Ash + Air mixture will be used to reduce heat stress inside building etc.
• DG Sets:
No. and capacity of the DG sets: 2 x 50 KVA
Fuel & its quantity: Diesel, 12 Lit./Hr.</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>• Fire extinguishers & hose reel at each floor, wet riser opening at each floor, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 200 KL capacity for each building, terrace water tank of 25 KL on each building block etc.
• Nearest fire station: Man Darwaja fire station.
Distance from the project site: approximate at about 1.5 km.
Time required by the fire tender to reach the project site: 5 minutes.</td></tr>
<tr><td>20.</td><td colspan="2">Details on staircase
<table>
<tr><th>No. 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>
<tr><td>1</td><td>Joint</td><td>2B+G + 12</td><td>1418.13</td><td>03</td><td>2.0</td><td><30</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 80-100 ft
• No. and depth of percolations wells : 2 nos.,
• Details on Pre-treatment facilities : Gravity filter, MOC: PE.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) : 586.88 m^2
• Area covered by shrubs and bushes (m^2): ---
• Lawn covered area (m^2): ---
• Total Green Area (m^2): 586.88 m^2
• Green Area % of plot area: 13%
• No. of trees and species to be planted: 100 nos. of trees like Asopalav, Gulamhor, Palm, Neem, Badam tree etc.</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Capital Cost (Rs. In Lacs)</th></tr>
<tr><td>1</td><td>Landscaping</td><td>15 Lacs</td></tr>
<tr><td>2</td><td>Groundwater Recharge Structure</td><td>7 Lacs</td></tr>
<tr><td>3</td><td>Solar Energy Utilization</td><td>4 lacs</td></tr>
<tr><td>4</td><td>Energy Efficient Lighting</td><td>2 lacs</td></tr>
<tr><td>5</td><td>Solid Waste Management</td><td>2 lacs</td></tr>
<tr><td>6</td><td>Monitoring of Air, Water, Noise & Soil</td><td>0.75 lacs</td></tr>
<tr><td colspan="2">Total</td><td>30.75 Lacs</td></tr>
</table></td></tr>
<tr><td>24.</td><td>Proposed dust control measures during the construction phase</td><td>Vertical curtails, water sprinkling, covering the building materials with the tarpaulin sheet etc.</td></tr>
<tr><td>25.</td><td>Eco friendly building material usage details.</td><td>Fly ash based bricks, Ready Mix Concrete, A.C.C Blocks will be used.</td></tr>
</table>

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.	Copy of village form no. 7 & 12 submitted by them shows that the land is in the name of applicant & others. Copy of application made for obtaining N.A permission has been submitted.

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

1. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
2. Notarized consent of the other land owners for issuing environmental clearance for the proposed project in the name of the applicant.

3.	Jasud Extrusions Pvt. Ltd.	S.P. No: 52+53+54, F.P. No: 229/A/1, TPS No: 1, Odhav, Ahmedabad	Appraisal case

The project was earlier taken up in the meeting of SEAC held on 09/08/16. During the meeting held on 09/08/2016, it was presented that the nearest TSDF site is at a distance of 1.34 km from the project site. It was also presented that the basement car parking will be provided with mechanical ventilation system (exhaust fans) and designed with negative air pressure to ensure 12 air changes per hour during normal mode and 30 air changes per hour during fire mode in accordance with NBC. Carbone monoxide sensors will be provided in basement and the speed of the fans will be automatically adjusted in a way that when the concentration exceeds 25 ppm the fans will run at maximum speed and when the concentration is below 9 ppm the fans will be operated at lower speed. Combination of duct and ductless jet nozzle fan system will be adopted to push and pull the air in the car park areas from the intake point to the discharge point. Traffic survey carried out on 30 m wide adjacent road shows that the road having carrying capacity of 2800 PCU/hr will be adequate enough to cater the total traffic load of 1602 PCU in the proposed scenario. After detailed discussion, it was decided to appraise the project only after submission of the following:

1. A notarized undertaking stating that 1. 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 and 2. There shall not be any borewell within premises.
2. 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.
3. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
4. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.
5. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
6. E waste management plan.

The project proponent submitted the above mentioned details vide their letter dated 26/09/2016.

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

During the meeting, it was found that they have submitted a notarized undertaking stating that any kind of manufacturing activity will not be allowed in the commercial units of the proposed project and any commercial unit will not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics and there will not be any borewell within premises. E- waste management plan, plan for loading / unloading of goods at ground floor during the off peak hours and provision of common amenities to be provided on each floor were presented & discussed during the meeting. Perspective view of the building was presented and mentioned that maximum efforts will be taken to maintain the U value of the materials to be used on the outer sides/walls of the building. Details of the mechanical parking to be provided in the 1st level basement were presented and it was mentioned that the height of the 1st basement will be 4 m to accommodate the 2 level mechanical parking.

Salient features of the project are as under:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Proposal is for</td><td>New Project</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Commercial Project</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8 (a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>Commercial Project</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Jasud Extrusions Pvt Ltd</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>35 Crores</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 7,333.13
• FSI area (m^2): 13,160.76
• Total BUA (m^2):25,746.53
<table><tr><th></th><th>Permissible</th><th>Proposed</th></tr><tr><td>FSI Area (m^2)</td><td>13,199.63</td><td>13,160.76</td></tr><tr><td>Ground Coverage (m^2)</td><td>NA</td><td>3,359.52</td></tr><tr><td>Common Plot Area (m^2)</td><td>733.3</td><td>1,642.06</td></tr><tr><td>Max. building height (m)</td><td>45</td><td>25</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings:1
• No. of Blocks:1</td></tr>
</table>

<table>
<tr><td></td><td></td><td>• Scope of buildings/blocks: 2 level basement + ground floor + 4 floors.
• No.& size of Residential Units: NA
• No. & type of Commercial Units: 133 shops, 1000 seats in Multiplex and 100 seats in restaurant
• Details of amenities if any: No.</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>1990 occupants and 300 visitors</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• 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
• Details of reuse of water, if any: No</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Fresh water requirement (KL/day):73.11
• Source of water: Water supply from Ahmedabad Municipal Corporation (AMC).
• Waste water generation quantity (KL/day):53.24
• Mode of disposal: Into drainage line of Ahmedabad Municipal Corporation (AMC).</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Available at site</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td>2000</td><td>2000 will be completely used for greenbelt development</td><td>--</td></tr>
<tr><td>Other excavated earth</td><td>38,000</td><td>16,800 m^3 will be reused for back filling within premises.</td><td>Balance earth will be used in other project</td></tr>
<tr><td>Construction debris</td><td>250</td><td>150 m^3 will be used for road & plinth filling.</td><td>Balance debris will be handed over to AMC</td></tr>
<tr><td>Steel scrap</td><td>10</td><td>0</td><td>Sold to vendors</td></tr>
<tr><td>Discarded packing materials</td><td>8</td><td>0</td><td>Sold to vendors</td></tr>
</table>
Operation Phase:
<table>
<tr><td>Type of waste</td><td>Generation Quantity (Kg/day)</td><td>Mode of waste collection</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Dry waste</td><td>210.8</td><td>White bins</td><td>Sold to vendors</td></tr>
</table></td></tr>
</table>

		<table><tr><td>Wet waste</td><td>316.2</td><td>Green Bins</td><td>Municipal bins</td></tr></table> • Details of segregation if to be done: yes • Capacity and no. of community bins to be placed within premises: 15 kg and 12 number of community bins to be placed in common area • Landfill site where waste will be ultimately disposed by local authority: at the nearby waste collection point of AMC.
15.	Parking Details	• Total parking area requirement for the project as per GDCR: 6,599.81 m^2 • Parking area requirement for Commercial units as per GDCR: 6,599.81 m^2 • Total number of CPS requirement for the project as per NBC :455 • Number of CPS requirement for commercial units as per NBC:335 • Number of CPS requirement for Multiplex: 100 CPS • Number of CPS requirement for Restaurant : 20 CPS • Total Parking area provided (m^2) & No. of CPS: 15,474.36 & 491 CPS • Parking area provided in basement (m^2) & No. of CPS: 9,816.24 & 306 CPS • Parking area provided as open surface (m^2) & No. of CPS:750 & 32 CPS • Parking area provided (at any other place-specify) (m^2) & No. of CPS: Mechanical 4,908.12 & 32 CPS.
16.	Traffic Management	• Width of adjacent public roads: 18 m and 30 m wide roads. • Number of Entry & Exit provided on approach road/s: 4 gates will be provided. • 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): 4.5 m • Width of all internal roads: 6.0 m and 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, maximum use of RMC & aerated blocks, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas- 8 numbers of solar lighting, roof-top thermal insulation, rain water harvesting & ground water recharge through 2 nos. of percolating wells etc.
18.	Energy Requirement, Source and Conservation	• Power supply: Maximum demand: 1000 KVA Connected load: 1200 KVA • Source: Torrent Power Limited • % of saving with calculations: ~40% by use of LEDs, 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 125 KVA Fuel & its quantity: HSD, 50 litre/hr
19.	Fire and Life Safety Measures	• During Construction Phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid

<table>
<tr><td></td><td></td><td>room with first aid kit, doctor & ambulance service.
• During operation phase: Fire extinguishers, hose reel, manually operated electric fire alarm system, wet riser, automatic sprinkler system in basement & multiplex, underground static water storage tank-200 KL capacity, terrace tank -40 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.</td></tr>
<tr><td>20.</td><td colspan="2">Details on staircase
<table>
<tr><th>Type & no. of buildings</th><th>No. of floors</th><th>Floor area m^2</th><th>No. of staircase</th><th>Width of the staircase (m)</th><th>Travel distance (m)</th></tr>
<tr><td>Commercial</td><td>2B+G+4</td><td>3,145.91</td><td>5</td><td>2.0</td><td><30</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 21 m
• No. & dimensions of RWH tank(s) : 2 No and 2.5m X 2.0 m X 3.0 m
• No. and depth of percolations wells : 2 nos
• Details on Pre-treatment facilities : oil and grease removal and filter.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) :600
• Area covered by shrubs and bushes (m^2):400
• Lawn covered area (m^2):642.06
• Total Green Area (m^2):1,642.06
• Green Area % of plot area: 10%
• No. of trees and species to be planted: 110 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar</td></tr>
<tr><td>23.</td><td>Dust control measures</td><td>Spraying of water, peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.</td></tr>
<tr><td>24.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>Allocation of Rs.13.5 lacs & Rs.7.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.</td></tr>
<tr><td>25.</td><td>Details of ecofriendly building materials</td><td>Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.</td></tr>
<tr><td>26.</td><td>Details of amenities to be provided to construction workers.</td><td>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.</td></tr>
<tr><td>27.</td><td>Documents related to land possession.</td><td>Copy of village form no. 7 submitted by them shows that the land admeasuring 7,573.0 m^2 of the project site for commercial use is in the name of Jasud Extrusions Pvt. Ltd.</td></tr>
</table>

During the meeting, after detailed discussion, it was decided to recommend the project to SEIAA Gujarat for granting Environment Clearance subject to the strict compliance of the following project specific conditions as well as the standard conditions finalized during the meeting of SEAC held on 09/09/2015 for building construction projects falling under project activity no. 8(a) as per the schedule of the EIA Notification 2006:

SPECIFIC CONDITIONS:

1. No any kind of manufacturing activity shall be allowed in the proposed commercial project.
2. The project proponent shall not sell / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.

CONSTRUCTION PHASE :

WATER:

3. Fresh water requirement during the construction phase shall be 21.75 KL/day and it shall be met through the local water tanker suppliers. No ground water shall be tapped during the construction phase.
4. Sewage generated during the construction phase shall be disposed off through septic tank and soak pit.

OPERATION PHASE:

WATER:

5. Water requirement during the operation phase shall be 73.11 KL/day and it shall be met through water supply system of Ahmedabad Municipal Corporation (AMC). No ground water shall be tapped during the operation phase. Metering of the water shall be done and its records shall be maintained.
6. No bore well shall be constructed and existing bore well/s, if any, shall be either sealed or converted into the recharge well.
7. Sewage generation during the operational phase shall be 53.24 KL/day and it shall be discharged through the drainage system of Ahmedabad Municipal Corporation (AMC).
8. Rain water harvesting from rooftop and paved areas and ground water recharge through 2 nos. of percolation wells shall be carried out as per the details submitted. Before recharging the runoff, pre-treatment must be done to remove suspended matter.

AIR:

9. D. G. sets (2 × 125 KVA) proposed as backup power shall be of enclosed type and confirm to prescribe standards under EPA rules. Necessary acoustic enclosures shall be provided at diesel generator set to mitigate the impact of noise.
10. The gaseous emissions from the D.G. Sets shall conform to the standards prescribed under EPA Rules as amended from time to time. At no time, the emission levels shall go beyond the stipulated standards.
11. The stack height of the D.G.sets shall be equal to the height needed for the combined capacity of all proposed D.G.sets.

SOLID WASTE:

12. The solid waste generated shall be properly collected and segregated at source. The recyclable material shall be sold to vendors whereas other garbage shall be disposed off properly as per the provisions made by the Ahmedabad Municipal Corporation (AMC).

SAFETY:

13. All the staircases and lifts shall open out at ground level from the highest point of building [with access from each floor] for emergency evacuation. Two staircases shall be provided in each building having

floor area more than 500 m2 on each floor.

14. Fire fighting facilities like fire extinguishers, hose reel, manually operated electric fire alarm system, wet riser, automatic sprinkler system in basement & multiplex, underground static water storage tank-200 KL capacity etc. shall be provided as proposed.
15. In basement at least two separate ramps of adequate width and slope shall be provided, located preferably at opposite ends.
16. Provision for adequate air changes per hour in the basement shall be made so as to avoid build up of CO in the area.
17. Car park exhaust system equipped with CO (Carbon Monoxide) sensor shall be provided to ensure operation of exhaust fans as CO concentration levels.

PARKING / TRAFFIC CONGESTION:

18. Minimum Parking space of 15,474.36 m^2 [9,816.24 m^2 in basement + 750.0 m^2 as open surface parking + 4,908.12 m^2 as mechanical parking in basement] shall be provided as proposed.
19. No public space including the service road shall be used or blocked for the parking and the trained staff shall be deployed to guide the visitors for parking and helping the senior citizens and physically challenged people to park their vehicles at appropriate parking places (valet parking).
20. Necessary signage including continuous display of status of parking availability at entry, exit and all other appropriate places shall be provided which should have appropriate size of letters and shall be visible from the at least 50 meter distance.

ENERGY CONSERVATION:

21. Energy conservation measures viz maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, maximum use of RMC & aerated blocks, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas- 8 numbers of solar lights etc. shall be implemented as proposed.
22. The energy audit shall be conducted at regular interval for the project and the recommendations of the Audit Report shall be implemented with spirit.

GREEN BELT:

23. Green belt area of 1,642.06 m^2 comprising of 600.0 m^2 tree covered area shall be developed as proposed. The other open spaces inside the plot shall be suitably landscaped and covered with vegetation of indigenous tree species.

4.	Ratilal V Patel	T.P.S. No. 64 (Dumbhal-Magob), Block No. 144, O.P. No. 94, F.P. No. 94, Surat.	Appraisal case

The project was taken up in the meeting of SEAC held on 03/08/2016. During the meeting held on 03/08/2016, it was presented that they have applied for getting Environmental Clearance for the proposed project of textile houses with built up area of 72,153.88 m^2 & FSI area of 47,649.29 m^2 (FSI of 3.99)on plot area of 11,914.0 m^2. They have applied for obtaining permission from the Urban Development & Urban Housing Department for the FSI of 3.99 and same is awaited. Meanwhile they have decided to obtain Environmental Clearance for the project with the base FSI which is available to the project as per the GDCR in force.

During the meeting held on 03/08/2016, it was found that parking area provision has been made considering the additional FSI also for which they have applied to the Urban Development & Urban Housing Department. Based on the project plans submitted by them, it was found that the travel distance to the staircase from the farthest corner of the floor is less than 30 m. It was presented that the existing saw mill at the project site will be demolished for the proposed project and the demolition waste will be completely used for the back filling, plinth filling & road development, hence demolition waste will not be transported at any other place. Traffic survey carried out on the existing 60 m wide Surat-Kadodara road

shows that the road, having carrying capacity of 6000 PCU/hr, is capable enough to accommodate total traffic load of 1505.2 PCU/hr. in the proposed scenario. It was presented that space will be provided for loading & unloading activity at open surface & in basements in such a way that 88 tempos & 324 tempos respectively can carry out loading & unloading activity simultaneously within every 30 minutes. Provision of DGMS approved flame proof electrical material like electric wires & switches etc. also conforming to the relevant IS standards will be made, provision of one automatic power ON/OFF switch(MCB/RCB) will be made for each textile house to avoid chances of sparkling/fire in case of fluctuation or higher power load. Power load will be considered for each individual textile house higher than the actual power load requirement. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Revised Form 1 & Form 1A for the proposed changes in the project.
2. Project plans with built up area & FSI area table and plot area statement for the proposed changes in the project.
3. Details on provision of ventilation, lighting arrangements, CO sensors & their functioning etc. in basement.
4. Details on provisions to be made for cross ventilation in the commercial units of the project.
5. Copy of N.A. permission obtained for commercial use of the project site or copy of documents showing correspondences made with concerned competent authority in this regard.
6. Details on parking area to be provided for vehicles for loading /unloading at ground level & both the basement level, basis taken for arriving at the equivalent parking space requirement for the loading/unloading vehicles, plans showing location of spaces designated for loading / loading at ground level & basements level etc.
7. Complete construction & demolition waste management plan in view of the duties of the waste generator mentioned in the Construction & Demolition Waste Management Rules – 2016.

The project proponent submitted the above mentioned details vide their letter dated 21/10/2016.

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

During the meeting, it was found that the project proponent has submitted revised Form – 1, 1A & project plans showing the revised details of the project. Provision of natural ventilation in the form of air cut outs, mechanical ventilation in the form of exhaust fans at 18 locations, CO sensors with automatic alarm system, oxygen level sensors (2 nos.) etc. will be made in the basements. Cross ventilation in the form of door & window / ventilator with exhaust fan will be provided. It was presented that they have applied for obtaining N.A permission for commercial use and the copy of the same has been submitted. It was presented that the parking space for loading / unloading will be provided at open surface & in the basements and the activity will be carried out during the off peak hours. It was presented that demolition waste – 180 m^3 to be generated will be completely utilized within premises and no construction / demolition waste will be transported outside the premises.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project
2.	Type of Project	Commercial

<table>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8(a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>“Shiv Shakti Textile Hub”</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Ratilal V. Patel</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>Rs. 45 Crore</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 11,914.0
• FSI area (m^2): 14,680.44
• Total BUA (m^2) : 35,913.93
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>26,210.8</td><td>14,680.44</td></tr><tr><td>Ground Coverage (m^2)</td><td>5,361.30</td><td>5,360.78</td></tr><tr><td>Common Plot Area (m^2)</td><td>1,191.40</td><td>1,307.00</td></tr><tr><td>Max. building height (m)</td><td>--</td><td>14.64</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings: 1
• No. of Blocks: 1
• Scope of buildings/blocks: 2 level basement + ground floor + 2 floors
• No. & size of Residential Units: --
• No. & type of Commercial Units: 403 Textile Houses
• Details of amenities if any: --</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>Expected residents: --
Expected shop users: 1612
Expected visitors: 900</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 14.50
• Source of water: Borewell water
• Waste water generation quantity (KL/day): 2.16
• Mode of disposal: Soak pit
• Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment.</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day): 91.50
• Fresh water requirement (KL/day): 51.50
• Source of water: Water supply from Surat Municipal Corporation.
• Waste water generation quantity (KL/day): 69.0
• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose and only remaining quantity of treated sewage will be discharged into the drainage line of SMC.
• In case of STP provision, capacity of STP: Yes 200 KL/day
• STP Technology: Ozonization Treatment
• Purposes for treated water utilization: gardening and flushing</td></tr>
</table>

<table>
<tr><td></td><td></td><td>

Quantity of treated water to be reused: 1. Gardening (KL/day): 5.50 KL/Day, 2. Flushing (KL/day): 34.50 KL/Day
Provision of dual plumbing system (Yes/No): Yes
Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose and only remaining quantity of treated sewage will be discharged into the drainage line of SMC.
Mode of disposal: As above.

</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Applied for connection of water supply and drainage line to S.M.C. The facilities will be available to the project at the time of getting B.U permission.</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><th></th><th>Generation (m^3)</th><th>Quantity to be reused (m^3)</th><th>Mode of Disposal / Reuse</th></tr>
<tr><td>Top Soil</td><td>653.50</td><td>653.50</td><td>Reuse for developing garden area</td></tr>
<tr><td>Other excavated earth</td><td>84,147.00</td><td>156.29 m^3 will be used for back filling</td><td>Remaining will be send to other project site for back filling & raising the plinth level in consultation with SMC.</td></tr>
<tr><td>Construction debris</td><td>200</td><td>180</td><td>Reused as a filler up to plinth level and remaining will be reused in outer road development</td></tr>
<tr><td>Steel scrap</td><td>20</td><td>--</td><td>Sold to local scrap vendors</td></tr>
<tr><td>Discarded packing materials</td><td>08</td><td>--</td><td>Sold to local vendors</td></tr>
</table>
Operation Phase:
<table>
<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>
<tr><td>Dry waste</td><td>257.92</td><td>Blue colour bucket</td><td>Through S.M.C's door to door waste collection system</td></tr>
<tr><td>Wet waste</td><td>128.96</td><td>Green colour bucket</td><td>Through S.M.C's door to door waste collection system</td></tr>
<tr><td>STP Sludge</td><td>10</td><td>On SDB</td><td>Reused in gardening as manure within project premises</td></tr>
</table>

Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste.

</td></tr>
</table>

		• Capacity and no. of community bins to be placed within • premises: Two separate community bins for the building to • collect dry & wet waste. • Landfill site where waste will be ultimately disposed by local authority: Khajod Landfill Site of S.M.C
15.	Parking Details	• Total parking area requirement for the project as per GDCR: 4,404.13 m^2 • Parking area requirement for Commercial units as per GDCR: 4,404.13 m^2 • Total number of CPS requirement for the project as per NBC: 294 • Number of CPS requirement for commercial units as per NBC: 294 • Total Parking area provided (m^2) & No. of ECS: 39,938.0 m^2 & 1260 ECS • Parking area provided in basement (m^2) & No. of ECS: 38,925.0 m^2 & 1216 ECS • Parking area provided as open surface (m^2) & No. of ECS: 1,013.0 m^2 & 44 ECS
16.	Traffic Management	• Width of adjacent public roads: 60.0 m wide road • 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): 4 m • Width of all internal roads: 7.50 m & 6 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, use of solar energy in external lighting, reflective/ white tiles in common areas, maximum use of natural light, provision of STP & reuse of treated sewage etc.
18.	Energy Requirement, Source and Conservation	• Power supply Maximum demand: 1500 KVA Connected load: • Source: DGVCL • Energy saving measures: Use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles on terrace floor, maximum use of natural light etc • DG Sets No. and capacity of the DG sets: 03x 125 KVA Fuel & its quantity: Low Sulphur High speed Diesel (HSD) & quantity 55 L/h in each.
19.	Fire and Life Safety Measures	Fire extinguishers at each floor, hose reel at each floor, wet riser opening at each floor, yard hydrant, automatic sprinkler system in basement, manually operated electric fire alarm system, automatic fire detection & alarm system, underground static fire water storage tanks of 300 KL capacity, terrace tank of 30 KL capacity, one electric & one diesel pump of capacity 2280 L/min. & one electric pump of capacity 180 L/min. having pressure 3.5 kg/cm^2 at terrace level.

20.	Details on staircase	

No. of Floor	Floor Area (m^2)	No. of staircase	Width of Staircase (m)	No. of fire Lift, goods lift & passenger lift	Maximum Travel Distance up to the Staircase < 30 m
2B+G+2	4893.48	06	2.00	6,6 & 8	29.02

21.	Rain Water Harvesting (RWH)	• Level of the Ground water table: 22.00 m • No. & dimensions of RWH tank(s) : 06 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: 06 nos. of percolating well, 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	• Tree covered area (m^2) : 418.00 • Area covered by shrubs and bushes (m^2): -- • Lawn covered area (m^2): 889.00 • Total Green Area (m^2): 1307.00 • Green Area % of plot area: 10.00 % • No. of trees and species to be planted: 70 trees of Asopalav, coconut palm, Neem, Gulmohar etc. will be planted within premises.
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Capital cost of Rs. 67.75 lacs and recurring cost of Rs. 14.35 lacs has been allocated towards purposes like rain water harvesting & ground water recharge, greenbelt development, environment monitoring & management, waste management etc.
24.	Proposed dust control measures.	Water sprinkling, covered shed for cement unloading activity, tarpaulin cover on excavated earth & construction material etc.
25.	Use of Eco – friendly building materials.	Use of fly ash bricks & aerated blocks for water partition, paving blocks for parking areas & walk ways, Portland Pozzolona Cement for RCC structure, plaster & flooring etc.
26.	Details on amenities to be provided to construction workers	Drinking water & tap water, sanitation facilities, domestic waste water collection facility, lunch space, first aid box, free medicines, doctor service, PPEs etc.
27.	Documents related to land possession	Village form no. 7 submitted by them shows that the agricultural land of the project site is in the name of applicant & others.

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

1. Notarized consent of the other land owners for issuing environmental clearance for the proposed project in the name of the applicant.

5.	Building construction	Block No.: 24+25+33+34+35+36+42+354,	Appraisal case

	project by M/s Shiv Developers	Reconstituted Land No.: 24+ 25+33+ 34+ 35+ 36 +42 +354,A+B, at Kathodra, Ta: Kamrej, Dist: Surat	

The project was earlier taken up in the meeting dated 31.08.16. During the meeting held on 31.08.2016, the project proponent was suggested to increase the parking area provision for the project by making provision of basement, to which the project proponent was agreed upon. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Revised details on parking area provision for the project with complete back up calculation & parking plan.
2. Revised project plans & revised Form-I & Form-IA with revised built up area details due to proposed provision of the basement.
3. Detailed Environment Management Plan with respect to various environmental attributes- Water & waste water treatment, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay.
4. Status of availability of water supply & drainage connection to the project along with the authentic supporting documents.
5. Documents showing land ownership of block no. 36 by the project proponent.

The project proponent submitted the above mentioned details vide their letter dated 20/10/2016.

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

During the meeting, it was found that total 18,256.0 m^2 parking space [10,548.0 m^2 in basement + 6,594.0 m^2 in hollow plinth + 1,114.0 m^2 as open surface parking] equivalent to 614 CPS will be provided. Built up area of the project will become 53,279.21 m^2 instead of 42,376.78 m^2 due to addition of the basement. It is proposed that budget allocation of Rs. 5.25 crores will be made for the proposed EMP including rain water harvesting, drainage network, proposed STP with its operation & maintenance, MSW management, tree plantation, air & noise pollution control measures etc. Copy of letter obtained from Surat Urban Development Authority (SUDA) has been submitted which states that water supply & drainage connection will be provided to the project as and when the project proponent apply for the same. Copy of village form no. 7 & 12 submitted by them shows that the agricultural land in the name of applicant & others.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New project
2.	Type of Project	A low rise residential building construction project.
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of Project	A low rise residential building construction project.
5.	Name of Developer	Shiv Developers
6.	Estimated Project	14 Crores.

<table>
<tr><td></td><td>Cost (Rs. in Crores)</td><td></td></tr>
<tr><td>7.</td><td>Whether construction work initiated at site? If yes, details thereof</td><td>No</td></tr>
<tr><td>8.</td><td>Project Details</td><td>Land/Plot Area (m^2): 16,653.08
FSI area (m^2): 32,229.05
Total BUA (m^2): 53,279.21

<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>37,068.31</td><td>32,229.05</td></tr><tr><td>Ground Coverage (m^2)</td><td>7,493.88</td><td>6,929.54</td></tr><tr><td>Common Plot Area (m^2)</td><td>1,658.75</td><td>1,691.73</td></tr><tr><td>Max. building height (m)</td><td>As per rule</td><td>23.3</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings:14
• No. of Blocks: 26
• Scope of buildings/blocks: Hollow plinth + 5 floors.
• No.& size of Residential Units:560 Flats
• No. & type of Commercial Units: ---
• Details of amenities if any: No</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>2800 person Residential</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 30.0
• Source of water: Borewell water
• Waste water generation quantity (KL/day): 4.2
• Mode of disposal: Temporary septic tank & soak pit.
• Details of reuse of water, if any: Nil</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day): 369.0
• Fresh water requirement (KL/day): 217.0
• Source of water: water supply from Surat Urban Development Authority (SUDA)
• Waste water generation quantity (KL/day): 355.0
• 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 and remaining quantity of treated sewage will be discharged into the drainage line of SUDA.
• In case of STP provision, capacity of STP: Yes 400 KL/day
• STP Technology: STP with primary + secondary + tertiary treatment facilities.
• Purposes for treated water utilization: Gardening and Flushing
• Quantity of treated water to be reused:1.Gardening (KL/day):10.0, 2. Flushing (KL/day):142.0
• Provision of dual plumbing system (Yes/No): yes
• Quantity and type (treated/untreated) of sewage to be discharged: Treated sewage will be used for gardening & flushing purpose within</td></tr>
</table>

<table>
<tr><td></td><td></td><td>premises and remaining quantity of treated sewage will be discharged into the drainage line of SUDA.
• Mode of disposal: As above.</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>SUDA will provide water supply & drainage line.</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td>1,125</td><td>1,125</td><td>It will be reused for lawn and tree development on available area of 2000 m^2.</td></tr>
<tr><td>Other excavated earth</td><td>11,250 m^3</td><td>4,000 m^3

2,000 m^3

5,250 m^3</td><td>It is to be reused in plinth filling, trench filling

It is to be reused in internal road making

It will be handed over to SUDA.</td></tr>
<tr><td>Construction debris</td><td>5 m^3</td><td>5 m^3</td><td>Will be reused in trench filling.</td></tr>
<tr><td>Steel Scrap</td><td>1 MT</td><td>1MT</td><td>Reused in column footing and foundation work.</td></tr>
<tr><td>Discarded packing materials</td><td>Cement & Plastic Bags</td><td></td><td>Cement bag partly reuse in curing purpose & partly sale out in open market while plastic bag sale out to the registered recycler or vendor</td></tr>
</table>
Operation Phase:
<table>
<tr><td>Type of waste</td><td>Generation Quantity (Kg/day)</td><td>Mode of waste collection</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Dry & wet waste</td><td>1,120</td><td>Into bins to be provided within premises.</td><td>Collection and final disposal through agency authorized by SUDA.</td></tr>
<tr><td>STP sludge</td><td colspan="3">STP sludge will be passed out through sludge thinker to make cake of it. After drying of cake, it will be sold out as manure.</td></tr>
</table>
• Details of segregation if to be done: No
• Capacity and no. of community bins to be placed within premises: 280 bins having volume 1.7 m3</td></tr>
</table>

		• Authority / agency involved in waste disposal : SUDA • Landfill site where waste will be ultimately disposed by local authority: At the nearest MSW collection / disposal point of SUDA / SMC.
15.	Parking Details	• Total parking area requirement for the project as per GDCR: 4,834.35 m^2 • Parking area requirement for residential units as per GDCR: 4,834.35 m^2 • Total number of CPS requirement for the project as per NBC :280 • Number of CPS requirement for residential units as per NBC: 280 • Total Parking area provided (m^2) & No. of ECS: 18,256.0 & 614 ECS • Parking area provided in basement (m^2) & No. of ECS: 10,548.0 & 330 ECS • Parking area provided in hollow plinth (m^2) & No. of ECS:6,594.0 & 236 ECS • Parking area provided as open surface (m^2) & No. of ECS: 1,114.0 & 48 ECS.
16.	Traffic Management	• Width of adjacent / approach road: 18 m approach road on north side. • No. of Entry and Exit: 2 gates will be provided. • Width of internal roads: 7.5 m to 9.0 m • Minimum width of open path all around the buildings for easy access of fire tender: 3.0 m
17.	Green building features including measures for conservation of water & energy, use of eco-friendly building materials, etc.	• Use of autoclaved aerated block & RMC, solar based street lights, LED lightings fixtures and low voltage lightings in common areas, maximum natural & cross ventilation to get maximum natural light & ventilation etc.
18.	Energy requirement, source and conservation	• Power supply: Maximum demand: 1300 KVA Connected load: --- • Source: DGVCL • % of saving with calculations: 25% saving by using CFL & Star rated energy efficient electronic appliances as well as solar street lights. • 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:3 x 50 KVA Fuel & its quantity: HSD, 25 litre/hr
19.	Fire and Life Safety Measures	3 nos. of underground fire water tanks each of 50 KL capacity, overhead tank of 10 KL on each building, fire hydrant system with risers & hose reel, fire extinguishers (2-CO_2 type extinguishers of 4.5 kg capacity & 2 DCP type extinguishers of 5 kg on each floor & 2 DCP extinguishers of 50 kg capacity near electric panel, fire alarm with manual call point & sounders on each floor etc.

20. Details on staircase

Type & no. of buildings	No. of floors	Floor area (m^2)	No. of staircase	Width of the staircase (m)	Travel distance (m)
2 blds.	H.P.+5	466.78	1	1.2	<25
1 blds.	H.P.+5	233.22	1	1.2	<25
5 blds.	H.P.+5	443.07	2	1.2	<25
4 blds.	H.P.+5	464.66	2	1.2	<25
1 blds.	H.P.+5	695.91	3	1.2	<25
1 blds.	H.P.+5	509.13	2	1.2	<25

21.	Rain Water Harvesting (RWH)	• Level of the Ground water table: 25 feet in monsoon 55 feet in summer • No. & dimensions of RWH tank(s): • No. and depth of percolations wells: 5 nos. • Details on Pre-treatment facilities: Not Applicable
22.	Green area details	• Tree covered area (m^2): 1,155.0 m^2 on periphery along the boundary wall. • Area covered by shrubs and bushes (m^2): --- • Lawn covered area (m^2): 845 • Total Green Area (m^2): 2,000 • Green Area % of plot area: 12 % • No. of trees to be planted: 120 trees of local species.
23.	Dust control measures	Use of fully covered truck for transportation of construction material, sprinkling of water, provision of paved roads, overloading will be restricted, covered storage facility for construction material, wind shield barriers, peripheral barricading etc.
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	budget allocation of Rs. 5.25 crores will be made for the proposed EMP including rain water harvesting, drainage network, proposed STP with its operation & maintenance, MSW management, tree plantation, air & noise pollution control measures etc.
25.	Details of eco-friendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.
26.	Facilities to construction workers	Potable drinking water, temporary sanitary blocks, temporary septic tank & soak pit for domestic waste water disposal, rest room & ghodiya ghar, temporary canteen facility, welfare facilities as per the Gujarat Building & Other Construction Workers Rules etc.
27.	Documents related to land possession	Copies of village form no. 7 & 12 for all the block numbers submitted by them show that the agricultural land is in the name of applicant & others. Copy of partnership deed of M/s Shiv Developers has been submitted which show that three of the total four land owners are the partners of M/s Shiv Developers.

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

1. Consent of all the land owners for issuance of Environmental Clearance for the proposed project in

the name of the project proponent.			
6.	Fortune Business Hub	F.P. No. 34, O.P. No. 34, Survey No. 670, 671/1, Sola-Hebatpur-Thaltej (Science city road), Ahmedabad.	Appraisal case

The project was earlier taken up in the meeting of SEAC held on 31/08/2016. During the meeting held on 31/08/2016, it was presented that the project site falls in the Transit Oriented Zone as per the zoning certificate obtained from Ahmedabad Municipal Corporation and as per the revised GDCR, maximum available FSI of 4.0 is available to a building unit falling under Transit Oriented Zone. It was found that the parking area provision for the project is less than the parking requirement as per NBC norms and the project proponent was asked to provide parking space as per requirement of the NBC norms. Project plans submitted by them show that the travel distance to the staircase is less than 30 m. After detailed discussion, it was decided to appraise the project only after submission of the following:

1. Documents showing ownership of the land by the project proponent.
2. Details on parking area provision for the project as per requirement of the NBC norms along with breakup of parking area to be provided in basement, hollow plinth & as open surface parking, back up calculation & parking plan.
3. Explore the possibility of providing two separate ramps and revised plans showing location of both the ramps.
4. 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.
5. Base line status of the existing traffic, impact on it due to the project activities (prior to construction, during construction and at full site operation), carrying capacity of the existing roads and details of traffic management in and outside the project during construction and operation phase of the project.
6. Type of activities to be carried out in the proposed commercial units. Undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.
7. Details on ventilation, lighting arrangements and CO sensors to be provided in the basements.
8. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
9. Details on solar energy utilization for the proposed project and how much of the total energy requirement for the project will be compensated/reduced by the proposed energy conservation measures.
10. Details & plans showing floor wise emergency evacuation for the proposed project.

The project proponent submitted the above mentioned details vide their letter dated 18/10/2016.

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

During the meeting, it was found that a single ramp of 8.7 m width will be provided. It is proposed to use the glazed glass with low emissivity coating for windows to reduce the U factor and the U value of the wall

will be in such a way which results in low emissivity. Traffic survey carried out on 36 m wide road shows that the road having carrying capacity of 3600 PCU/hr will be adequate enough to cater the total traffic load of 1350 PCU/hr in the proposed scenario. They have undertaken that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. It is proposed to provide adequate ventilation considering 6 ACPH for fresh air circulation, occupancy sensed LED lighting fixtures, CO sensors with associated ventilation & alarm system in the basements. It is proposed to provide basic amenities in individual commercial units as well as common amenities in passages at each floor. First aid facility will be available at each floor. It is proposed to install solar energy generation & utilization system of about 1-2% of common electricity load requirement. It is proposed to provide rescue balconies at 4th, 8th & 12th floors. Emergency evacuation plan was submitted & discussed during the meeting.

Salient features of the project are as under:

<table>
<tr><td>No.</td><td>Particulars</td><td>Details</td></tr>
<tr><td>1.</td><td>Proposal for</td><td>New Project [SIA/GJ/NCP/57887/2016]</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Commercial Building Construction Project</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8 (a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>Fortune Business Hub</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Fortune Developers</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>60.0 crores</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 6,010.0
• FSI area (m^2):24,009.05
• Total BUA (m^2):47,972.65
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>24,040.0</td><td>24,009.05</td></tr><tr><td>Ground Coverage (m^2)</td><td>2,467.97</td><td>2,467.97s</td></tr><tr><td>Common Plot Area (m^2)</td><td>601.00</td><td>609.48</td></tr><tr><td>Max. building height (m)</td><td>49.94</td><td>49.94</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings:1
• No. of Blocks: 1
• Scope of buildings/blocks:3 level Basement + ground floor (parking & commercial units) + 13 floors.
• No. & size of Commercial Units: 286 number of offices, 27 shops/ Showrooms
• No. & type of Residential Units: -
• Details of amenities if any: ---</td></tr>
<tr><td>10.</td><td>No. of expected employees / users</td><td>2267 occupants and @1658 visitors/d</td></tr>
</table>

<table>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day):41.17
• Source of water: local water tanker & existing borewell
• Waste water generation quantity (KL/day):21.52
• Mode of disposal: Into septic tank and soak pits
• Details of reuse of water, if any: -</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day): 153.62
• Fresh water requirement (KL/day):77.38
• Source of water: Water supply from Ahmedabad Municipal Corporation (AMC)
• Waste water generation quantity (KL/day):118.23
• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening, flushing, fire water make up & cooling tower make up purposes within premises and remaining quantity of treated sewage will be discharged into the drainage line of AMC.
• STP Technology: -SBR/MBR
• Purposes for treated water utilization: Gardening, flushing, fire water & cooling tower make up.
• Quantity of treated water to be reused:1.Gardening (KL/day):7.60, 2. Flushing (KL/day):66.64 and 3. Fire water & cooling tower make up water (KL/day): 2.00
• Provision of dual plumbing system (Yes/No): - yes
• Quantity and type (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, fire water make up & cooling tower make up purposes within premises and remaining quantity of treated sewage will be discharged into the drainage line of AMC.
• Mode of disposal: As above.</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Water supply & drainage connection of AMC will be available to the project at the time of getting B.U. permission.</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><td></td><td>Generation</td><td>Quantity to be reused</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td>2,300 m^3</td><td>2,300 m^3</td><td>Will be reused for greenbelt development</td></tr>
<tr><td>Other excavated earth</td><td>51,000 m^3</td><td>2,700 m^3 will be used within premises for back filling</td><td>Remaining will be supplied to other low-lying areas</td></tr>
<tr><td>Construction debris</td><td>12.50(m^3)</td><td>12.50(m^3)</td><td>Will be used for re-filling and re-surfacing</td></tr>
<tr><td>Steel scrap</td><td>2.5 MT</td><td>-</td><td>Sale to vendor</td></tr>
<tr><td>Discarded packing materials</td><td>Whatsoever.</td><td>-</td><td>Sale to vendor</td></tr>
</table></td></tr>
</table>

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	800	Into bins to be provided to each individual unit.	Thorough agency appointed for collection and disposal
Wet waste	170	Into bins to be provided to each individual unit.	Subject to the proposed Organic Waste Convertor for producing manure.
STP Sludge	5 MT/annum	---	Thorough agency appointed for collection and disposal after proper treatment.

- Details of segregation if to be done: yes
- Capacity and no. of community bins to be placed within premises:57 bins of 80 L capacity
- Landfill site where waste will be ultimately disposed by local authority: At the nearest waste collection point of AMC.

15.	Parking Details	• Total parking area requirement for the project as per GDCR:12,005.0 (m^2) • Parking area requirement for Commercial units as per GDCR: 12,005.0 (m^2) • Total number of ECS requirement for the project as per NBC:960 • Number of CPS requirement for commercial units as per NBC:960 • Total Parking area provided (m^2) & No. of ECS:16,491.21 & 954 • Parking area provided in basement (m^2) & No. of ECS: 12,260.87 & 806 • Parking area provided in hollow plinth (m^2) & No. of ECS:738.0 & 38 • Parking area provided as open surface (m^2) & No. of ECS: 1,771.52 & 110.
16.	Traffic Management	• Width of adjacent public roads:36.0 m wide road on North side • Number of Entry & Exit provided on approach road/s: 2 entry/ exit will be provided. • Width of Entry & Exit provided on approach road/s:9.0 m & 6.0 m. • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation):4 m • Width of all internal roads: 9 m & 6 m.
17.	Details of Green Building measures proposed.	Energy efficient lighting system like use of LED, CFL for common lighting, to install solar energy generation & utilization system of about

<table>
<tr><td></td><td></td><td>1-2% of common electricity load requirement, water meter in every block and also near underground water tank, water control valves, low water consuming water fixtures, fly ash containing paver blocks, PPC blocks in flooring, ground water recharge through provision of 2 nos. of percolation wells etc.</td></tr>
<tr><td>18.</td><td>Energy Requirement, Source and Conservation</td><td>• Power supply:
Maximum demand: 2,000 KVA
Connected load:
• Source: Torrent Power Ltd
• Energy saving measures: Energy efficient lighting system like use of LED, CFL for common lighting.
• DG Sets: For Emergency Power only
No. and capacity of the DG sets:1 no. x 125 KVA capacity
Fuel & its quantity: 25 kg/hr</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>• During Construction Phase: Provision of Personal Protective Equipment's (PPEs) & its usage will be ensured as well as supervised.
• During Operation Phase: Underground fire water storage tank of 200 KL capacity, overhead fire water tank of 25 KL capacity, fire hydrant, sprinkler system, refuge are in the form of balcony proposed at 4th, 8th and 12th floor, fire extinguishers at each floor, rescue balconies at 4th, 8th & 12th floors etc.
• Nearest Fire Station: Thaltej Fire station
Distance from the fire station: 5.90 km
Time required for the fire tender to reach at the project site: 10 to 15 minutes.</td></tr>
<tr><td>20.</td><td colspan="2">Details on staircase
<table>
<tr><th>Type & no. of buildings</th><th>No. of floors</th><th>Floor area (m^2)</th><th>No. of staircase</th><th>Width of the staircase</th><th>Travel distance (m)</th><th>No. of lift</th></tr>
<tr><td>1 commercial building</td><td>3B+G+13</td><td>1693.65</td><td>3</td><td>2.0 m</td><td>22.24</td><td>10 (including 2 fire lifts)</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table:> 90 m
• No. & dimensions of RWH tank(s) :
• No. and depth of percolations wells: 2 nos and 30.0 m.
• Details on Pre-treatment facilities : Filtration.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) :91
• Area covered by shrubs and bushes (m^2): included in lawn covered area.
• Lawn covered area (m^2):609.48
• Total Green Area (m^2):700.48
• Green Area % of plot area:11.65
• No. of trees and species to be planted:91 trees like Limbdo, Asopalav, Desi Badam and Gulmohar.</td></tr>
</table>

<table>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>
<table>
<tr><th>No.</th><th>Head</th><th>Approximate recurring cost per annum (Rs. in lacs)</th><th>Approximate Capital cost (Rs. In lacs)</th><th>Basis for cost estimates</th></tr>
<tr><td>1.</td><td>Air</td><td>0.50</td><td>2.50</td><td>DG set Stack, maintenance and monitoring</td></tr>
<tr><td>2.</td><td>Solid and hazardous waste management</td><td>9.00</td><td>15.00</td><td>Provide bins door to door and transportation cost</td></tr>
<tr><td>3.</td><td>Providing STP</td><td>15.00</td><td>125.00</td><td>Providing STP, treated sewage OH & UG Storage tanks</td></tr>
<tr><td>4.</td><td>Environment monitoring</td><td>2.50</td><td>1.00</td><td>The recurring cost would be incurred on hiring of consultants and payment of various statutory fees to regulatory agencies.</td></tr>
<tr><td>5.</td><td>Rain water</td><td>0.50</td><td>6.00</td><td>Collection system, treatment and recharge well</td></tr>
<tr><td>6.</td><td>Green belt</td><td>0.50</td><td>0.50</td><td>Tree Plantation</td></tr>
<tr><td colspan="2">Total in lacs</td><td>28.0</td><td>150.0</td><td></td></tr>
</table>
</td></tr>
<tr><td>24.</td><td>Proposed dust control measures during the construction phase</td><td>Applying water or non-toxic chemicals to minimize dust, To transport the materials from nearest places to avoid the direct energy and associated vehicular emissions, to cover the materials during transportation to avoid the fugitive emissions from transportation operation, to use telescopic chute to regulate falling of fine powder materials from height during unloading at site to mitigate the fugitive emissions, vehicles will be well-maintained and properly serviced having PUC certificate etc.</td></tr>
<tr><td>25.</td><td>Eco friendly building material usage details.</td><td>Use of AAC blocks, fly ash paver blocks, PPC blocks etc.</td></tr>
<tr><td>26.</td><td>Basic amenities to be provided to</td><td>Sanitation facilities, periodic health check up, drinking water etc.</td></tr>
</table>

	construction workers.	

During the meeting, it was found that the parking area provision details along with its back up calculation submitted by them were not satisfactory. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Documents showing ownership of the land by the project proponent.
2. Details on parking area provision for the project as per requirement of the NBC norms along with breakup of parking area to be provided in basement, hollow plinth & as open surface parking based on actual parking area available, back up calculation & parking plan.

7.	Dhirubhai M Hirpara	R.S.No 683 & 684, At- Kosamdi,Tal-Ankleshwar,Dist Bharuch	Appraisal case

The project was earlier taken up in the meeting of SEAC held on 27/04/16. During the meeting held on 27/04/2016, 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.

The project proponent submitted the above mentioned details vide their letter dated 24/10/2016.

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

During the meeting, it was presented that the project site is at a distance of 1.7 km from the nearest TSDF site. They have submitted a copy of receipt obtained from Bharuch Ankleshwar Urban Development Authority (BAUDA) against the betterment charges paid by them. It was presented that the project site is falling in the limits of BAUDA and water supply as well as drainage connection will be available to the project during operation phase. It was presented that from the total water requirement of 312.0 KL/day, fresh water requirement of 171 KL/day will be obtained through water supply from BAUDA and remaining

water requirement of 141 KL/day will be met through treated sewage. Treated sewage will be reused for gardening (24 KL/day) & flushing (117 KL/day) purposes within premises and remaining quantity of treated sewage will be discharged into the drainage line of BAUDA. It is proposed to use Rs. 45 lacs for the proposed STP & composting facility of 900 kg/day capacity.

Salient features of the project are as under:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Proposal is for</td><td>New Project [SIA/GJ/NCP/58203/2016.]</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Residential & Commercial</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8(a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>Residential & Commercial Building construction project.</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Mr. Dhirubhai M. Hirpara</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>35 Crore</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No.</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 43,402.0
• FSI area (m^2): 31,986.43
• Total BUA (m^2): 44,604.98
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>52,470.27</td><td>31,986.43</td></tr><tr><td>Ground Coverage (m^2)</td><td>--</td><td>13,104.32</td></tr><tr><td>Common Plot Area (m^2)</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></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• 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)
• No. & type of Commercial Units: 66 Nos. Of Shops
• Details of amenities if any: No</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>2133 nos. residential users</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• 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</td></tr>
</table>

<table>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>
• Total water requirement (KL/day): 312.0
• 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): 24.0
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.
</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>----</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>
Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td rowspan="2">20,700</td><td rowspan="2">20,700</td><td rowspan="3">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></tr>
<tr><td>Construction debris</td><td>48 m3</td><td>48 m3</td></tr>
<tr><td>Steel scrap</td><td>5.6 MT</td><td>5.04 MT</td><td>Will be sold to scrap vendor</td></tr>
<tr><td>Discarded packing materials</td><td>1 MT</td><td>--</td><td>Will be sold to recycler</td></tr>
</table>
Operation Phase:
<table>
<tr><td>Type of waste</td><td>Generation Quantity (Kg/day)</td><td>Mode of waste collection</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Dry waste</td><td>1359 Kg</td><td>Into bins to be</td><td>The non-</td></tr>
</table>
</td></tr>
</table>

		Wet waste		provided for each individual unit.	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	• Total parking area requirement for the project as per GDCR: 3,572.11 m^2 • Parking area requirement for residential units as per GDCR: 3143.38 m^2 • 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 (m^2) & No. of ECS: 19,775.29 m^2, 769 nos. • Parking area provided in basement (m^2) & No. of ECS: 6544.78 m2, 204 nos • Parking area provided in hollow plinth (m^2) & No. of ECS: 1199.12 m2, 43 nos. • Parking area provided as open surface (m^2) & No. of ECS: 12031.39 m2, 522 nos.			
16.	Traffic Management	• 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: 12.0 m • Minimum width of open path all around the buildings for easy access			

<table>
<tr><td></td><td></td><td>of fire tender (excluding the width for the plantation): ---
• Width of all internal roads: 12 m & 7.5 m</td></tr>
<tr><td>17.</td><td>Details of Green Building measures proposed.</td><td>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.</td></tr>
<tr><td>18.</td><td>Energy Requirement, Source and Conservation</td><td>• 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.</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>Fire extinguisher, sprinkler system and fire hydrant systems will be provided for fire safety.</td></tr>
<tr><td>20.</td><td colspan="2">Details on staircase
<table>
<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>
<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>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• 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</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) : 2,688.09
• Area covered by shrubs and bushes (m^2): inclusive in lawn area
• Lawn covered area (m^2): 2,169.56
• Total Green Area (m^2): 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.</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Capital Cost (Rs. In Lacs)</th></tr>
<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>
<tr><td>3</td><td>Solar Energy Utilization</td><td>5 lacs</td></tr>
<tr><td>4</td><td>Energy Efficient Lighting</td><td>3 lacs</td></tr>
<tr><td>5</td><td>Solid Waste Management</td><td>1 lacs</td></tr>
<tr><td>6</td><td>Monitoring of Air, Water, Noise & Soil</td><td>0.75 lacs</td></tr>
<tr><td>7</td><td>STP & composting facility of 900</td><td>45 lacs</td></tr>
</table></td></tr>
</table>

		kg/day capacity |
		Total | 68.75 Lacs
24.	Proposed dust control measures during the construction phase	Vertical curtails, 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, after detailed discussion, it was decided to consider the project only after submission of the following;

1. Consent of other land owners regarding the issuance of Environmental Clearance for the proposed project in the name of the applicant.

2. Exact aerial distance of the project site from the nearest industrial cluster/ industrial unit.

8.	Vinodbhai P. Asodaria	Block No. 70, Moje-Bagusana, Bharuch	Appraisal case

The project was earlier taken up in the meeting of SEAC held on 27/04/16. During the meeting held on 27/04/2016, 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.

The project proponent submitted the above mentioned details vide their letter dated 20/10/2016.

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

During the meeting it was found that they have submitted a copy of receipt obtained from Bharuch Ankleshwar Urban Development Authority (BAUDA) against the betterment charges paid by them. It was presented that the project site is falling in the limits of BAUDA and water supply as well as drainage connection will be available to the project during operation phase. It was presented that from the total water requirement of 276 KL/day, fresh water requirement of 136 KL/day will be obtained through water supply from BAUDA and remaining water requirement of 140 KL/day will be met through treated sewage. Treated sewage will be reused for gardening (50 KL/day) & flushing (90 KL/day) purpose within premises and remaining quantity of treated sewage will be discharged into the drainage line of BAUDA. It is proposed to use Rs. 40 lacs for the proposed STP & composting facility of 700 kg/day capacity. Layout plan showing location of the proposed STP has been submitted. Copy of NOC obtained from GAIL (India) Limited & Gujarat Energy Transmission Corporation Limited respectively for the gas pipeline & overhead transmission line passing through the project site has been submitted. Project plan submitted by them confirms the provision of required margin space between the building control line & pipelines as per the NOCs obtained.

Salient features of the project are as under:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Proposal is for</td><td>New Project [SIA/GJ/NCP/58403/2016]</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Residential</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8(a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>Residential Project</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Mr. Vinodbhai P. Asodaria</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>28 Crore</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No.</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 61,620.0
• FSI area (m^2): 23,613.73
• Total BUA (m^2): 25,761.49
<table>
<tr><th></th><th>Permissible</th><th>Proposed</th></tr>
<tr><td>FSI Area (m^2)</td><td>61,525.24</td><td>23,613.73</td></tr>
<tr><td>Ground Coverage (m^2)</td><td>--</td><td>11,392.50</td></tr>
<tr><td>Common Plot Area (m^2)</td><td>6,152.52</td><td>6,993.92</td></tr>
<tr><td>Max. building height (m)</td><td>--</td><td>6.60 m</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>9.</td><td>Building Details</td><td>• 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)
• No. & type of Commercial Units: -
• Details of amenities if any: No</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>1687 nos. residential users</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• 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</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day): 276.0
• 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): 50
2. Flushing (KL/day): 90
• 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 iirrigation purpose.
• Mode of disposal: as above.</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>---</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td>1000</td><td>1000</td><td rowspan="3">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></tr>
</table></td></tr>
</table>

		Steel scrap | 2.6 MT | 2.04 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	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.
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	• 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 (m^2) & No. of ECS: 10,349.92 m^2, 450 nos. • Parking area provided as open surface (m^2) & No. of ECS: 10,349.92 m^2, 450 nos.
16.	Traffic Management	• 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	• Power supply

<table>
<tr><td></td><td>Requirement, Source and Conservation</td><td>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.</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>---</td></tr>
<tr><td>20.</td><td colspan="2">Details on staircase: one staircase of 1.2 m width will be provided in each individual row house.</td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• 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</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) : 3,776.87
• Area covered by shrubs and bushes (m^2): inclusive in lawn area
• Lawn covered area (m^2): 6,381.94
• Total Green Area (m^2): 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.</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>
<table>
<tr><th>Sr. No.</th><th>Description</th><th>Capital Cost (Rs. In Lacs)</th></tr>
<tr><td>1</td><td>Landscaping</td><td>6 Lacs</td></tr>
<tr><td>2</td><td>Groundwater Recharge Structure</td><td>6 Lacs</td></tr>
<tr><td>3</td><td>Solar Energy Utilization</td><td>3 lacs</td></tr>
<tr><td>4</td><td>Energy Efficient Lighting</td><td>2 lacs</td></tr>
<tr><td>5</td><td>Solid Waste Management</td><td>2 lacs</td></tr>
<tr><td>6</td><td>Monitoring of Air, Water, Noise & Soil</td><td>0.75 lacs</td></tr>
<tr><td>7</td><td>STP & composting facility of 700 kg/day capacity</td><td>40.0 lacs</td></tr>
<tr><td colspan="2">Total</td><td>59.75 Lacs</td></tr>
</table>
</td></tr>
<tr><td>24.</td><td>Proposed dust control measures during the construction phase</td><td>Vertical curtails, water sprinkling, covering the building materials with the tarpaulin sheet etc.</td></tr>
<tr><td>25.</td><td>Eco friendly building material usage details.</td><td>Fly ash based bricks, Ready Mix Concrete, A.C.C Blocks will be used.</td></tr>
<tr><td>26.</td><td>Amenities for the construction workers.</td><td>Sanitation facility, drinking water & tap water, soak pit for domestic waste water collection, first aid box, free medicine, doctor service, PPEs etc.</td></tr>
<tr><td>27.</td><td>Documents related to land</td><td>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.</td></tr>
</table>

	possession.		

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

1. Consent of other land owners regarding the issuance of Environmental Clearance for the proposed project in the name of the applicant.

9.	Vibrant City	S.No.433, B.No.11, City Survey No.4688, Garden road, Mahuva, Dist: Bhavnagar.	Appraisal case

The project was earlier taken up in the meeting of SEAC held on18/05/16. During the meeting held on 18/05/2016, after detailed discussion, it was decided to appraise the project further only after satisfactory submission of the following:

1. Copy of permission from the concerned competent authority for the proposed FSI & ground coverage.
2. Details on availability of water supply, drainage connection & municipal solid waste collection facility to the project and copy of permission obtained from the concerned competent authority in this regard.
3. Detailed fresh water consumption based on activities and area of the project as per the NBC norms. Details on sewage generation during the operation phase, its treatment, activity wise reuse of treated sewage and disposal plan. Details on how much of the total water requirement for the project will be met through treated sewage should also be submitted.
4. Details of Sewage Treatment Plant with its capacity, size of each unit, retention time and its location on the plan. Measures proposed to avoid odour nuisance due to the STP in operation phase. STP sludge management plan.
5. Realistic details with respect to the quantity of the generation of the garbage / Municipal Solid waste(biodegradable & recyclable waste) based on the number & type of units to come up in the project, Bio Medical waste, electronic waste and mode of its treatment and disposal. Details of composting facility, if any proposed for composting of bio-degradable waste.
6. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay.
7. Details on ventilation, lighting arrangements and CO sensors to be provided in the basements. Details on provision to be made for natural lighting & ventilation in the proposed commercial units.
8. Detailed parking plan showing accommodation of two wheelers and four wheelers, its adequacy for the project and norms adopted for the calculations. The details shall include the parking requirement on the basis of footfalls, as per present GDCR and National Building Code (NBC) guidelines for each individual component of the proposed project.
9. Detailed traffic study & traffic management plan considering the floating and fixed population including visitors as well as existing traffic density on adjacent road during peak hours, projected increase in traffic density in operation phase of the project, carrying capacity of the existing roads, its adequacy during operation phase of the project and the measures to avoid the traffic congestion in the interior as well as the exterior roads.
10. Details on solar energy utilization for the proposed project and how much of the total energy requirement for the project will be compensated/reduced by the proposed energy conservation measures.

11. Number of percolation wells to be provided for rain water harvesting & ground water recharge along with the layout plan showing their locations.
12. Details of fire fighting system including location of fire water tanks & capacity, separate power system for fire fighting, automatic sprinkler system, fire detection system with alarms & automatic fire extinguishers, location of fire lift and fire retardant staircases, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site etc. Calculation and provision of minimum fire water requirement based on fire study as well as the availability of external fire fighting facility.
13. Details of the exits and staircases on each floor in the proposed buildings for evacuation from the top level to the street level along with the distances between the staircases in each building and compliance to the GDCR and NBC in this regard.
14. Details of soil excavation / filling required for the project along with its quantification based on backup calculations. Details with respect to proposed use / disposal of excavated soil. Plan for management, use and disposal of construction debris including excavated materials during the construction phase. Details of top soil management plan during construction phase.
15. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.

The project proponent submitted the above mentioned details vide their letter dated 22/10/2016.

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

During the meeting, it was presented that they have applied to Mahuva Nagar Seva Sadan for the proposed FSI & ground coverage and they will submit the same as & when it will be obtained. Copy of receipt obtained from Mahuva Nagarpalika against the charges paid by them has been submitted and the project will get water supply as well as drainage connection from Mahuva Nagarpalika during operation phase. From the total water requirement of 199 KL/day, fresh water requirement of 106 KL/day will be obtained from water supply of Mahuva Nagarpalika and remaining water requirement of 93 KL/day will be met through treated sewage. Sewage – 160 KL/day to be generated during the operation phase will be treated in the proposed onsite STPs of 166 KL/day capacity & 30 KL/day capacity. Treated sewage will be reused for gardening & flushing purpose within premises and remaining treated sewage will be discharged into the drainage line of Mahuva Nagarpalika. STP sludge will be used as manure within premises & in surrounding agricultural land. Municipal solid waste to be generated during the operation phase will be disposed at the nearest waste collection point of Mahuva Nagarpalika. It is proposed to allocate the budget of Rs. 10.35 lacs for the proposed EMP including rain water harvesting, dust & noise control measures, greenbelt development in addition to the cost of installation, operation & maintenance of the proposed STPs. It is proposed to provide fresh air shaft, natural ventilation in the form of multiple openings of 500 m x 500 m size, mechanical ventilation in the form of exhaust fans, CO sensors with automatic alarm system etc. in basement. It is proposed to provide parking space of 13,080.93 m^2 [8,280.93 m^2 in 2 level basements + 4,800.0 m^2 as mechanical parking in one basement] which is equivalent to 408 CPS. Traffic survey carried out on the adjacent 60 ft. wide road shows that the road having carrying capacity of >2000 PCU/hr. will be adequate enough to accommodate the total traffic load of 1549 PCU/hr in the proposed scenario. It is proposed to provide solar street lights, solar water heating system and roof top solar system all over terrace of residential block. Details of the proposed rainwater harvesting & ground water recharge scheme were presented and mentioned that 2 nos. of recharge

structures will be provided within premises. Fire fighting facilities like 20 KL capacity terrace water tank, underground fire water tank of 200 KL capacity, external fire hydrant system, wet riser system, sprinkler system for offices, basements & common areas, portable fire extinguishers etc. will be provided. It is proposed to provide 4 staircases in the commercial building & 1 staircase in each of the two residential buildings. From the total earth – 30,537 m^3 to be generated, top soil will be used for development of greenbelt and other excavated earth will be used for back filling within premises. It is proposed to provide rest rooms on each floor of the commercial building and medical aid at the main office of the commercial building.

Salient features of the project are as under:

<table>
<tr><td>Sr. No.</td><td>Particulars</td><td>Details</td></tr>
<tr><td>1.</td><td>Proposal is for</td><td>New Project [SIA/GJ/NCP/52890/2016]</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Residential & commercial building project</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8(a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>Vibrant City</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>M/s. Vibrant Highrise LLP</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>Rs. 50 Crore approx.</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Total land area (m^2): 7,251.32
• FSI area (m^2): 21,454.88
• Total Built Up Area (m^2): 46,407.95
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>21,953.96</td><td>21,454.88</td></tr><tr><td>Ground Coverage (m^2)</td><td>6,163.62</td><td>4,085.68</td></tr><tr><td>Common Plot Area (m^2)</td><td>953.40</td><td>1,091.62</td></tr><tr><td>Max. building height (m)</td><td>45</td><td>20.28</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of buildings: 3
• No. of blocks: 3
• Scope of buildings/blocks: Block A(Commercial): 2 level basement + Ground Floor+ 8 floors. Block B & C (Residential): 2 level basement + Ground Floor+ 8 floors.
• No. of residential units: 38 flats.
• No. & type of commercial units: shops, offices, showrooms, party hall, game zone, food courts, theatre, banquet hall, coffee shop and gym.</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>---</td></tr>
<tr><td>11.</td><td>Water & waste water details during</td><td>• Water requirement (KL/day): 25.0
• Source of water: Mahuva Nagar Palika water supply
• Waste water generation quantity (KL/day): 3.0</td></tr>
</table>

<table>
<tr><td></td><td>construction phase</td><td>• Mode of disposal: Into septic tank / soak pit system.
• Details of reuse of water, if any: No</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day): 199.0
• Fresh water requirement (KL/day): 106.0
• Source of water: Water supply from Mahuva Nagarpalika.
• Waste water generation quantity (KL/day): 160.0
• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening & flushing purposes within premises and only remaining quantity of treated sewage will be discharged into the drainage line of Mahuva Nagarpalika.
• In case of STP provision, capacity of STP: 165 KL/day & 30 KL/day
• Purposes for treated sewage utilization: Flushing & Gardening
• Quantity of treated sewage to be reused: Gardening & Flushing (KL/day): 93.0
• Provision of dual plumbing system (Yes/No): Yes
• Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening & flushing purposes within premises and only remaining quantity of treated sewage will be discharged into the drainage line of Mahuva Nagarpalika.
• Mode of disposal: as above.</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Water supply & drainage connection will be provided by Mahuva Nagarpalika.</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction phase:
<table>
<tr><th></th><th>Generation (m^3)</th><th>Quantity to be reused (m^3)</th><th>Mode of Disposal / Reuse</th></tr>
<tr><td>Top Soil & Other excavated earth</td><td>30,5373.0</td><td>Top soil will be used for development of greenbelt and other excavated earth will be used for back filling within premises</td><td>Remaining quantity of excavated earth will be send out side for filling of low lying areas.</td></tr>
<tr><td>Construction debris</td><td>Whatsoever</td><td>Whatsoever</td><td>Reused as a filler up to plinth level & internal road development</td></tr>
<tr><td>Steel scrap</td><td>Whatsoever</td><td>Whatsoever</td><td>Sold to local scrap vendors</td></tr>
<tr><td>Discarded packing materials</td><td>Whatsoever</td><td>Whatsoever</td><td>Sold to local vendors</td></tr>
</table>
Operation phase:</td></tr>
</table>

		• Capacity and no. of community bins to be placed within premises: total 20 Nos. of bins with 120 Liter capacity will be provided within premises. • Commercial- Domestic (75 workers x 250 gm/Person/Day)- 19 kg/day • Residential - Domestic : (38 residential units x 4/6 persons per unit =220 persons x 450 gm/Person/Day) - 99 kg/day • Solid waste will be disposed to Common landfill/dumping site of Mahuva Nagarpalika. • STP sludge will be used as manure within premises & in surrounding agricultural land.
15.	Parking Details	• Total parking area requirement for the project as per GDCR: 6,633.41 m² • Total number of CPS requirement for the project as per NBC : 408 • Total Parking area provided (m^2) & No. of CPS: 13,080.0m^2 & 408 CPS • Parking area provided in basements (m^2) & No. of CPS: 8,280.93 m^2 & 258 CPS • Parking area provided as mechanical parking in basement (m^2) & No. of CPS: 4,800.0 m^2 & 150 CPS
16.	Traffic Management	• Width of adjacent public roads: 6 m & 24 m wide roads • Width of Entry & Exit provided on approach road/s: 7.5 m & 6 m. • Number of Entry & Exit provided on approach road/s: 2 gates will be provided. • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5 m • Width of all internal roads: 6 m & 4.5 m.
17.	Details of Green Building measures proposed.	Provision of VFD in chilled water & air distribution system, use of LED lights, ground water recharge through rain water harvesting, provision of STP & reuse of treated sewage, solar street lights, solar water heating system and roof top solar system all over terrace of residential block etc.
18.	Energy Requirement, Source and Conservation	• Power supply: During Construction Phase: 60 KW During Operational Phase: 2319 KW • Source: PGVCL • DG Sets: Commercial – 1x1250 KVA, Fuel : Diesel(125 lit/hour) & 1x1500 KVA, Fuel : Diesel(150 lit/hour) Residential – 1 x 200 KVA, Fuel : Diesel(20 lit/hour)
19.	Fire and Life Safety Measures	During Construction Phase: Provision of Personal Protective Equipment's (PPEs) and its usage shall be ensured and supervised, training on construction safety aspects, first aid room with first aid kit, doctor & ambulance service. During operation phase: 20 KL capacity terrace water tank, underground fire water tank of 200 KL capacity, external fire hydrant system, wet riser system, sprinkler system for offices, basements &

<table>
<tr><td></td><td></td><td>common areas, portable fire extinguishers etc.</td></tr>
<tr><td>20.</td><td>Details on staircase:
<table>
<tr><th>Type & no. of buildings</th><th>No. of floors</th><th>Floor area (m^2)</th><th>No. of staircase</th><th>Width of the staircase (m)</th><th>Travel distance (m)</th></tr>
<tr><td>Commercial building - A</td><td>2B+G+8</td><td>2659.83</td><td>4</td><td>1.5</td><td rowspan="2"><30</td></tr>
<tr><td>Residential buildings B+C</td><td>2B+G+8</td><td>574.30</td><td>2</td><td>1.5</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: ----
• No. & dimensions of RWH tank(s) : ----
• No. and depth of percolations wells : 2
• Details on Pre-treatment facilities : Desilting & filtration.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Green Belt Area : 906.67 m^2
• Tree covered area: 176.37 m^2
• Lawn covered area: 730.30 m^2
• No. of trees and species to be planted: 72–number of trees of Neem, Pipal , Asopalav, and Gulmohar</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan (Rs. in lacs)</td><td>Budget of Rs. 10.35 lacs for the proposed EMP including rain water harvesting, dust & noise control measures, greenbelt development in addition to the cost of installation, operation & maintenance of the proposed STPs.</td></tr>
<tr><td>24.</td><td>Dust control measures</td><td>Water sprinkling on loose soil, storing all the construction materials in covered structures/areas, cement bags will be separately stored under covered shed in bales, barricading of G.I sheet on the periphery of the project boundary etc.</td></tr>
<tr><td>25.</td><td>Eco friendly building materials</td><td>Fly ash bricks & PPC cement.</td></tr>
<tr><td>26.</td><td>Facilities to be provided to the construction workers</td><td>Sanitation facilities & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.</td></tr>
<tr><td>27.</td><td>Documents related to land possession.</td><td>Copy of index from Sub-Registrar’s office submitted by them shows that the N.A land is in the name of M/s Vibrant Highrise LLP.</td></tr>
</table>

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

1. Copy of permission from the concerned competent authority for the proposed FSI & ground coverage.
2. Actual number & type of commercial units to come up in the project. Revised details on component wise parking area provision for the project based on the actual parking requirement as per the NBC norms.

10.	Satyamev Eminence	Survey No: 456, 457/3, 457/4, F.P. Number 102, T.P.S.No: 42 at Village Sola, Taluka Ghatlodiya, Ahmedabad.	Appraisal case

The project was earlier taken up in the meeting of 31/8/16. During the meeting of SEAC held on 31/08/2016, it was presented that limited traffic survey carried out on adjacent 12 m wide road during peak hours which shows that the road having carrying capacity of 2200 PCU/hr will be adequate enough to accommodate the total traffic load of 1664/hr 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 norms. Carbone monoxide sensors will be used to reglate the amount of extraction air and supply air. In general, when the concentration exceeds 25 ppm, the fans will run at maximum speed and when the concentration is below 9 ppm, the fans will be operated at lower speed. 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. Perspective view of the building was presented and It was mentioned that the building material with suitable U value will be used on outer facades considering the composite climate zone. During the meeting, after detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained from the concerned competent authority or authentic supporting documents showing availability of the proposed FSI to the project.
2. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
3. Undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.
4. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.
5. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
6. Details & plans showing floor wise emergency evacuation for the proposed project.
7. Details on provisions to be made for cross ventilation in the commercial units of the project.

The project proponent submitted the above mentioned details vide their letter dated 18/10/2016.

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

During the meeting, it was found that as per the copy of zoning certificate obtained from Ahmedabad Municipal Corporation submitted by them the project site falls in the Transit Oriented Zone (TOZ) and as per the prevailing GDCR the projects falling in the TOZ can use maximum FSI up to 4.0. Details of the mechanical parking were presented & discussed during the meeting. Height of the 2nd & 3rd level basement will be 4 m to accommodate 2 level mechanical parking & height of the 1st level basement will be 5.8 m to accommodated 3 level mechanical parking. They have submitted a notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. Plan for loading / unloading of goods, provision of common amenities like drinking water, sanitation blocks (separate for male & female) & first aid facility at each floor and floor wise emergency evacuation plan were presented & discussed during the meeting. It was presented that each of the commercial unit will be facilitated with the cross ventilation through door & window on one side and open ventilator on the other side.

Salient features of the project are as under:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Proposal is for</td><td>New Project [SIA/GJ/NCP/57518/2016]</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Commercial Project</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8 (a)</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>Satyamev Eminence</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Pranav Patel</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>70 Crores</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• and / Plot Area (m^2): 6,160
• FSI area (m^2): 24,639.24
• Total BUA (m^2):46,054.70
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area</td><td>24,640</td><td>24,639.24</td></tr><tr><td>Ground Coverage</td><td>NA</td><td>3158.32</td></tr><tr><td>Common Plot Area</td><td>616</td><td>617.52</td></tr><tr><td>Max. building height</td><td>70</td><td>45</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings:1
• No. of Blocks:1
• Scope of buildings/blocks: 3 level basement + ground floor + 13 floors.
• No.& size of Residential Units: NA
• No. & type of Commercial Units: 142 shops and 153 offices
• Details of amenities if any: No</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>2500 occupants and 400 visitors</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• 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
• Details of reuse of water, if any: No</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Fresh water requirement (KL/day): 120.97
• Source of water: Water supply from Ahmedabad Municipal Corporation (AMC)
• Waste water generation quantity (KL/day):94.80
• Mode of disposal: Into underground drainage line of Ahmedabad</td></tr>
</table>

<table>
<tr><td></td><td></td><td>Municipal Corporation (AMC).</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Available at site</td></tr>
<tr><td>14.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><td></td><td>Generation (m^3)</td><td>Quantity to be reused (m^3)</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Top Soil</td><td>3000</td><td>3000</td><td>Will be used for greenbelt development.</td></tr>
<tr><td>Other excavated earth</td><td>57,000</td><td>22,200 m^3 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>470</td><td>150 m^3 will be used for development of internal road and back filling.</td><td>Balance debris will be handed over to AMC</td></tr>
<tr><td>Steel scrap</td><td>12</td><td>0</td><td>Sold to vendors</td></tr>
<tr><td>Discarded packing materials</td><td>8</td><td>0</td><td>Sold to vendors</td></tr>
</table>
Operation Phase:
<table>
<tr><td>Type of waste</td><td>Generation Quantity (Kg/day)</td><td>Mode of waste collection</td><td>Mode of Disposal / Reuse</td></tr>
<tr><td>Dry waste</td><td>316</td><td>White bins</td><td>Sold to vendors</td></tr>
<tr><td>Wet waste</td><td>474</td><td>Green Bins</td><td>Municipal bins</td></tr>
</table>
• Details of segregation if to be done: yes
• Capacity and no. of community bins to be placed within premises: 15 kg and 12 number of community bins to be placed in common area
• Landfill site where waste will be ultimately disposed by local authority: At the nearby waste collection point of AMC.</td></tr>
<tr><td>15.</td><td>Parking Details</td><td>• Total parking area requirement for the project as per GDCR: 12,319.62 m^2
• Parking area requirement for Commercial units as per GDCR: 12,319.62 m^2
• Total number of CPS requirement for the project as per NBC :986
• Number of CPS requirement for commercial units as per NBC:986
• Total Parking area provided (m^2) & No. of ECS: 31,405.77 & 986 ECS
• Parking area provided in basement (m^2) & No. of ECS: 13,534.47 & 422 ECS
• Parking area provided in hollow plinth (m^2) & No. of ECS: 441.39 &</td></tr>
</table>

		15 ECS • Parking area provided as open surface (m^2) & No. of ECS:405.91 &17 ECS • Parking area provided as mechanical parking in basements (m^2) & No. of ECS: Mechanical 17,024 & 532 ECS (i.e 2 layer parking in 2nd & 3rd level basements & 3 layer mechanical parking in 1st level basement).
16.	Traffic Management	• Width of adjacent public roads: 36 m and 18 m wide road • Number of Entry & Exit provided on approach road/s: Three gates will be provided. • 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): 4.0 m • Width of all internal roads: minimum 6.0 m
17.	Details of Green Building measures proposed.	Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, solar lights in open & landscape areas – 12 solar street 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 2 nos. of percolating wells etc.
18.	Energy Requirement, Source and Conservation	• Power supply: Maximum demand: 2250 KVA Connected load: 2500 KVA • Source: Torrent Power Limited • % of saving with calculations: ~40% by use of LED and star rated energy efficient electronic consumer durables as well as solar street lights. • 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:1x 125 KVA Fuel & its quantity: HSD, 25 litre/hr
19.	Fire and Life Safety Measures	• 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, manually operated electric fire alarm system, automatic sprinkler system, underground static water storage tank-300 KL capacity, terrace tank -60 KL capacity (total capacity), provision of refuge area as per the requirement of GDR and/or NBC norms, pump near underground static water storage tank (fire pump) with minimum pressure of 3.5 kg/cm^2 at terrace level –One Electric and one diesel pump of capacity 2 280 lit/min and one electric pump of capacity 180 lit/min etc.

<table>
<tr><td>20.</td><td colspan="2">Details on staircase
<table>
<tr><th>Type & no. of buildings</th><th>No. of floors</th><th>Floor area m^2</th><th>No. of staircase</th><th>Width of the staircase (m)</th><th>Travel distance (m)</th></tr>
<tr><td>Commercial</td><td>B+G+13</td><td>2702.71</td><td>3</td><td>2.0</td><td><30</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 21 m
• No. & dimensions of RWH tank(s) : 2 Nos and 2.5m X 2.0 m X 3.0 m
• No. and depth of percolations wells : 2 nos
• Details on Pre-treatment facilities : oil and grease removal and filter.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) :300
• Area covered by shrubs and bushes (m^2):200
• Lawn covered area (m^2):117.52
• Total Green Area (m^2):617.52
• Green Area % of plot area: 10%
• No. of trees and species to be planted: 93 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar</td></tr>
<tr><td>23.</td><td>Dust control measures</td><td>Spraying of water, peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.</td></tr>
<tr><td>24.</td><td>Budgetary allocation for Environmental Management Plan (Rs. in lacs)</td><td>Allocation of Rs. 14.5 lacs & Rs.8 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.</td></tr>
<tr><td>25.</td><td>Details of ecofriendly building materials</td><td>Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.</td></tr>
<tr><td>26.</td><td>Details of amenities to be provided to construction workers.</td><td>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.</td></tr>
<tr><td>27.</td><td>Documents related to land possession.</td><td>Copies of village form no. 7 & N.A order submitted by them show that the land for commercial use is in the name of applicant & two other persons. Copy registered sale deed submitted by them shows that the land is purchased by the applicant from the other two land owners.</td></tr>
</table>

During the meeting, after detailed discussion, it was decided to recommend the project to SEIAA Gujarat for granting Environment Clearance subject to the strict compliance of the following project specific conditions as well as the standard conditions finalized during the meeting of SEAC held on 09/09/2015 for building construction projects falling under project activity no. 8(a) as per the schedule of the EIA Notification 2006:

SPECIFIC CONDITIONS:

1. No any kind of manufacturing activity shall be allowed in the proposed commercial project.
2. The project proponent shall not sell / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.

CONSTRUCTION PHASE :

WATER:

3. Fresh water requirement during the construction phase shall be 21.75 KL/day and it shall be met through the local water tanker suppliers. No ground water shall be tapped during the construction phase.
4. Sewage generated during the construction phase shall be disposed off through septic tank and soak pit.

OPERATION PHASE:

WATER:

5. Water requirement during the operation phase shall be 120.97 KL/day and it shall be met through water supply system of Ahmedabad Municipal Corporation (AMC). No ground water shall be tapped during the operation phase. Metering of the water shall be done and its records shall be maintained.
6. No bore well shall be constructed and existing bore well/s, if any, shall be either sealed or converted into the recharge well.
7. Sewage generation during the operational phase shall be 94.80 KL/day and it shall be discharged through the drainage system of Ahmedabad Municipal Corporation (AMC).
8. Rain water harvesting from rooftop and paved areas and ground water recharge through 2 nos. of percolation wells shall be carried out as per the details submitted. Before recharging the runoff, pre-treatment must be done to remove suspended matter.

AIR:

9. A D. G. Set (1 x 125 KVA) proposed as back up power shall be of enclosed type and confirm to prescribe standards under EPA rules. Necessary acoustic enclosures shall be provided at diesel generator set to mitigate the impact of noise.
10. The exhaust of the D. G. Set shall be at least 3 m above roof top.
11. The gaseous emissions from the D.G. Sets shall conform to the standards prescribed under EPA rules as amended from time to time. At no time, the emission levels shall go beyond the stipulated standards..

SOLID WASTE:

12. The solid waste generated shall be properly collected and segregated at source. The recyclable material shall be sold to vendors whereas other garbage shall be disposed off properly as per the provisions made by the Ahmedabad Municipal Corporation (AMC).

SAFETY:

13. All the staircases and lifts shall open out at ground level from the highest point of building [with access from each floor] for emergency evacuation. Two staircases shall be provided in each building having floor area more than 500 m2 on each floor.
14. Fire fighting facilities like fire extinguishers, hose reel, wet riser, manually operated electric fire alarm system, automatic sprinkler system, underground static water storage tank-300 KL capacity, terrace tank -60 KL capacity (total capacity), provision of refuge area as per the requirement of GDR and/or NBC norms etc. shall be provided as proposed.
15. In basement at least two separate ramps of adequate width and slope shall be provided, located preferably at opposite ends.
16. Provision for adequate air changes per hour in the basement shall be made so as to avoid build up of CO in the area.
17. Car park exhaust system equipped with CO (Carbon Monoxide) sensor shall be provided to ensure operation of exhaust fans as CO concentration levels.

PARKING / TRAFFIC CONGESTION:

18. Minimum Parking space of 31,405.77 m^2 [13,534.48 m^2 in basement + 441.39 m^2 in hollow plinth + 405.91 m^2 as open surface parking + 17,024.0 m^2 as mechanical parking in basement] shall be provided as proposed.
19. No public space including the service road shall be used or blocked for the parking and the trained staff shall be deployed to guide the visitors for parking and helping the senior citizens and physically challenged people to park their vehicles at appropriate parking places (valet parking).
20. Necessary signage including continuous display of status of parking availability at entry, exit and all other appropriate places shall be provided which should have appropriate size of letters and shall be visible from the at least 50 meter distance.

ENERGY CONSERVATION:

21. Energy conservation measures viz Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, solar lights in open & landscape areas – 12 solar street lights, use of aerated blocks & RMC, use of LED lighting fixtures and low voltage lighting, roof-top thermal insulation etc. shall be implemented as proposed.
22. The energy audit shall be conducted at regular interval for the project and the recommendations of the Audit Report shall be implemented with spirit.

GREEN BELT:

23. Green belt area of 617.52 m^2 comprising of 300.0 m^2 tree covered area shall be developed as proposed. The other open spaces inside the plot shall be suitably landscaped and covered with vegetation of indigenous tree species.

11	SIA/GJ/IND2/16866/2016	**M/s: Primarius Custom Synthesis Pvt Ltd** Plot No.48/3 GIDC Nandesari, Taluka: Vadodara, Dist: Vadodara	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: Primarius Custom Synthesis Pvt. Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/16866/2016 dated 30/07/2016.
- PP was called for presentation in the SEAC meeting dated 21/09/2016.
- During the SEAC meeting dated 21/09/2016, technical presentation made during the meeting by project proponent. During meeting, Committee noted that there is a letter received from CETP of Nandesari regarding request to not give any permission to any Industry applying for Environmental Clearance without prior consent letter, treatability studies conducted by CETP GIDC Nandesari. Upon asking about such permission from the CETP NIA, PP informed that they will submit the same. After detailed deliberations the Committee sought following additional information for further consideration of the proposal: (1) Permission letter from CETP-NIA regarding your proposed project.
- PP has submitted Permission letter from CETP-NIA regarding proposed project vide their letter on 23/09/2016.

Project status: New

Project / Activity Details:

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

S. No.	Name of Products	Quantity MT /Month
Tetrazolium chloride and Tetrazolium Derivatives		
1.	Triphenyl Tetrazolium Chloride	0.2
2.	Nitro Blue Tetrazolium Chloride	
3.	Blue Tetrazolium Chloride	
4.	Iodo Nitro Tetrazolium Chloride	
5.	Thiozolyl Tetrazolium Blue Bromide (MTT)	
Phenanthroline Derivatives		
6.	Neocuproine	0.5
7.	1,10 Phenanthroline	
Quinoline and Quinaldine Derivatives		
8.	8 Nitro Quinoline	0.5
Methylene Blue and its intermediates		
9.	Azure A	0.2
10.	Azure B	
11.	Methylene Blue	
Other Products		
12.	Di-Phenyl Iodonium Nitrate	0.1
13.	Dithizone	0.1
14.	Resazurin Sodium	0.1
15.	1,5 Di-Phenyl Carbazide	0.1
16.	1,5 Di-Phenyl Carbazole	0.1
TOTAL		**1.9**

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

Total plot area is 464.50 sq. m & unit has proposed 100 sq m area for the green belt development/Tree plantation. Expected project cost is INR. 20 Lakhs. Water requirement for the proposed project will be 4.9 KL/day (1 KL for Domestic, 1 KL for Gardening and 2.9 KL for Industrial Purpose). Unit has proposed to reuse 0.3 KL/day of process effluent. Hence, fresh water requirement will be 4.6 KL/day which will be sourced from GIDC. Industrial waste water generation will be 2.9 KL/day, which will be treated in proposed Primary treatment plant and treated waste water will be sent to CETP-Nandesari. Domestic waste water (0.7 KL/day) will be disposed off into septic tank/soak pit system. There will be no use of fuel hence no generation of flue gas. Process gaseous emissions will be as below:

Sr. no	Source of emission (Name of Product)	Type of Emission	APCM
1	1,5 diphenyl carbazide	NH_3	Acidic Scrubber
2	Tetrazolium derivatives	NO_2	Alkali scrubber
3	Dithizone	H_2S	Alkali scrubber

Hazardous waste generation and management :

Sr. no.	Type/Name of Hazardous waste	Source of generation	Quantity (MT/Annum)	Disposal Method
1.	ETP Sludge	Waste Water Treatment	12.0 MT/Annum	TSDF site

2.	Process solid waste (inorganic salts)	Process	27.6 MT/Annum	TSDF site
3.	Process Residue	Process	25.2 MT/Annum	CHWIF site
4.	Discarded Containers/ bags	Raw material storage	12.0 MT/Annum	Authorized recyclers.

Observations/Discussion:

Technical presentation made during the meeting by project proponent. Committee observed that the effluent after primary treatment will be sent to CETP-Nandesari and CETP – NIA has issued NOC letter to this project for manufacturing of synthetic organic chemicals. CETP performance was discussed. While discussing about the hazardous waste management, Committee suggested to explore the possibilities for co-processing of the waste before sent to TSDF or CHWIF. 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 Nandesari.
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. (Give specific details about source of effluent generation).
6. Chemical name of each proposed products to be manufactured. Details on end use of each product. Ensure that proposed products are not used as a pesticides or specific Intermediates of Pesticides and submit an undertaking in this regard.
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. Quality and quantity of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
11. Stream wise qualitative & quantitative analysis of each waste stream (including process water, cooling tower blow down, boiler blow down, washing effluent etc.) to be generated. Give segregation scheme at source. Characteristics of untreated and treated wastewater. A detailed effluent treat ability study vis-à-vis the adequacy and efficacy of the treatment

facilities proposed for the wastewater to be generated. The characteristic on which treatability is based shall also be stated.

12. Details of the ETP units including its capacity, size of each unit, retention time and other technical parameters. Details regarding provision of online continuous pH meter, TOC analyser and flow meter at the final outlet of the ETP.
13. Details of CETP- Nandesari including (1) Total capacity of the CETP (2) Actual load at present (Qualitative and Quantitative – per day) (3) CETP Up gradation scheme, if any (4) Last 6 analysis Reports of GPCB for Inlet and outlet of CETP (5) Spare capacity of CETP with treatability and feasibility report. (6) Recommendations and suggestions of the last two Environment Audit reports of CETP- Nandesari and its compliance report.
14. 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.
15. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
16. 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.
17. 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.
18. Modelling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modelling 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 modelling should be superimposed on satellite image / geographical area map.
19. 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.
20. 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.

21. 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.
22. Membership of Common Environmental Infrastructure including the CETP, TSDF / Common Hazardous Waste Incineration Facility (CHWIF), Common MEE (Whichever is applicable) along with an assessment to accommodate the additional quantity of wastes to be generated. Explore the possibilities for co-processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
23. Complete Management plan for By-products/Spent acids to be generated, (if any) from the project including their quantity, quality, characteristics, end use etc. along with the name and address of end consumers to whom the by-product will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-product from the proposed project. Also give characteristics of the by products and feasibility of their actual use in respective products as a raw material.
24. 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.
25. 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/Year earmarked for environment pollution control measures.
26. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
27. 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.
28. 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.
29. MSDS of all the products and raw materials.
30. 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.

31. 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?
32. 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.
33. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
34. 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.
35. 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.
36. (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.
37. 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.
38. 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.
39. Compliance of the MoEF's OM dated 04/08/2009 and 05/10/2011 regarding compliance of TOR prescribed & factual correctness of the data submitted in the EIA report, the names of experts associated with / involved in the preparation of the EIA report and the ownership of the EIA report by the Project proponent.
40. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
41. 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 30/11/2019.
- 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.

12	**M/s: Lion Tapes Pvt. Ltd.** Plot No:293 GIDC-Chitra Estate Dist: Bhavnagar	Appraisal

Project / Activity No.: 5(f)

Project status: New

Chronology of EC Process:

- This project proposed by M/s: Lion Tapes Pvt. Ltd. (herein after Project Proponent – PP) has submitted Application vide their letter dated 16/01/2013.
- The project proponent was called for presentation and discussion in the meeting of SEAC held on 12/03/2013.
- During the meeting, the committee informed the project proponent that as per the report on "Comprehensive Environmental Assessment of Industrial Clusters", CEPI scores of Chitra - Bhavnagar was above 70 and hence considered as critically polluted. The proponent was also informed that the MoEF has imposed temporary restrictions on consideration of developmental projects in such clusters / areas vide their Office Memorandum dated 13/01/2010 and hence the proposed project can't be considered as it is situated in Chitra - Bhavnagar having CEPI score above 70. At this, the project proponent presented that as per the latest assessment done recently, CEPI score of Chitra – Bhavnagar is less than 70 and hence their application should be considered. However, the committee decided not to reconsider the project as new report on CEPI score is not yet published. It was decided to consider this project only after verifying that CEPI score of Chitra – Bhavnagar is less than 70.
- The project proponent was again called for presentation and discussion in the meeting of SEAC held on 24/06/2014.
- During the meeting, the project proponent requested for categorizing the project as B2 and to exempt them from carrying out detailed EIA study which was not considered by the committee and the project proponent was asked to include the additional TORs for the EIA study to be done covering 5 km radial distance from the boundary of the project.
- EIA Report prepared by M/s: Precitech Laboratories Pvt. Ltd., Vapi was submitted by project

proponent vide dated 09/11/2015.

- PP was called for presentation in the SEAC meeting dated 22/12/2015.
- During the meeting dated 22/12/2015, Committee noted that the site of the proposed project is located within the Chitra GIDC, where all the industrial units are of Inorganic chemical nature. On asking about the waste water treatment and disposal, PP informed that they will treat the entire effluent within premises and send it to disposal pipeline of GIDC Chitra which ultimately leads to Arabian Sea. Committee was of the view that Organic Chemical industries having high organic load containing effluent shall not be allowed to discharge in this industrial estate. After detailed deliberation, Committee asked to change the proposal and go for complete zero liquid discharge (ZLD). Considering the above facts, it was unanimously decided to consider the project for appraisal only after submission of revised proposal with complete zero liquid discharge (ZLD) system.
- PP submitted corrigendum to the EIA report considering Revised proposal with complete zero liquid discharge (ZLD) system vide their letter no. Nil dated on 27/10/2015.

Project / Activity Details:

This is a proposed unit applied for manufacturing of following Dye & Dye Intermediates.

Sr.No.	Name of Products	Quantity MT/Month
1.	Fast Red B Base	40
2.	Fast Bordeaux GP Base	20
3.	Fast MNPT (Red G) Base	10
4.	Fast Red 3GL Base	5
5.	Fast Scarlet R Base	10
6.	Fast Yellow GC Base	5
7.	Fast Orange GC Base	5
8.	Fast Red RC Base	5
Total		100

The proposed production activity falls in the project activity 5(f) as per the Schedule of EIA Notification, 2006 as amended from time to time.

Capital cost of the project is Rs.3.54 Crores. Total plot area of the proposed project is 4,389.67 sq. m including green belt area 710 sq. m. Fresh Water requirement of 42.5 KL/day will be met through GIDC water supply system. Industrial effluent generation will be 29.5 KL/day which will be treated in the proposed onsite ETP and will be discharged through common pipeline of GIDC. Wood briquette will be used as fuel in Thermic Fluid heater (2 lac Kcal/hr.) and HSD will be used fuel in the proposed D.G. Set (31.25 KVA). Bag filter will be provided as APCM to Thermic Fluid heater. ETP waste, process waste, discarded containers/bags and recovered solvent are the hazardous waste to be generated from the proposed production.

Observations/Discussions:

Technical presentation made during the meeting by project proponent. The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspects. The baseline environmental study has been conducted for

the study area of 5 km radial distance from project site for the period October 2014 to December 2014. Ambient Air Quality monitoring was carried out for PM10, PM2.5, SO2, NOx, and VOC at Six locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. The resultant concentrations are within the NAAQS. While discussing about the treatability for treatment of waste water to be generated, PP informed that they have proposed segregation of industrial effluent at source and Zero Liquid Discharge status will be maintained. Upon asking about the adequacy of the proposed treatment facilities, PP could not reply satisfactorily. In-process distillation will be carried out to recover spent solvent. Committee asked to submit adequacy certificate with qualitative analysis of the each waste stream. Sodium acetate solution (217 MT/Month) and spent Acetic acid (234 MT/Month) will be generated as waste streams from the manufacturing process. Sodium acetate will be used in Benzyl Acetate manufacturing & spent Acetic acid will be used in Manganese acetate manufacturing. However actual consumers have not been identified. After detailed discussion on the matter, It was decided to consider the project only after submission of the following:

1. A detailed effluent treatability study vis-a-vis the adequacy and efficacy of the treatment facilities proposed for the waste water to be generated. Give stage wise reduction of main parameters. Certificate from Schedule I auditor for complete Zero Liquid Discharge.
2. Management of Sodium acetate solution and spent Acetic acid as per the Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.

13	SIA/GJ/IND2/11094/2016	**M/s: Anagha Chem Pvt. Ltd**. Plot no. D/2/CH-318, Phase-II, Dahej GIDC Estate, Ta.: Vagra, Dist.: Bharuch	Appraisal

Project / Activity No.: 5(f)

Project status: Existing

Chronology of EC Process:

Project / Activity No.: 5(f)

- M/s: Anagha Chem Pvt. Ltd (herein after Project Proponent – PP) has submitted online proposal vide no. SIA/GJ/IND2/11094/2015 dated 16/04/2016 for EC amendment.
- PP was called for presentation in the SEAC meeting dated 29/06/2016.
- During the meeting dated 29/06/2016, while discussing about the justification for change in fuel and capacity of the Boiler, PP informed that the Natural gas pipeline is not available in area. PP could not justify properly about the change in capacity of the Boiler. Total fuel (Bio-Coal) consumption for the 3 TPH Boiler will be 600 Kg/hr. PP has proposed MDC followed by Bag filter as APCM. After detailed discussion on the matter, It was decided to consider the project only after submission of the following: (1) Detailed justification for proposed change in fuel along with the supporting documents. (2) Technical Justification for change in capacity of the Boiler from 0.3 TPH to 3 TPH. (3) Give above mentioned justification with regard to earlier EIA report. (4) Specific details on (i) Type, quantity and quality (CV, Sulphur content, Ash content, etc,) of coal to be used (iii) Flue gas emission details (iv) Air pollution Control Measures along with its adequacy to achieve the GPCB Norms. (v) List the sources of fugitive emission from

the unit along with its quantification and proposed measures to control it. (Attach copy of earlier Form-1 also). (5) Existing base line status of ambient air quality and its comparison with ambient air quality results mentioned in previous EIA Report for assessing change in ambient air quality. (6) Prediction of likely impacts on ambient air quality due to change of fuel by use of modeling. Air quality modeling to be carried out considering the worst case scenario partial and complete failure of the APCM. 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. (7) Technical details of APCM along with its adequacy, details of its operational controls with DCS, system for online monitoring of the pollutants from the stack etc. Details of provisions to be kept in APCM to ensure that in any case the air emission does not cross the GPCB norms including preventive maintenance, failure / tripping control system, guarantee from the APCM supplier, alternative arrangements in case of the failure of the APCM etc. Give line diagram of APCM. (8) Fly ash management plan and copies of MOU / agreements done with actual consumers regarding utilization of fly ash & bottom ash etc. should also be incorporated. (9) Compliance status as per the MoEF&CC Circular vide dated 20/10/2009 & 30/05/2012 regarding expansion project. Also include inspection reports of GPCB for last two years.

- PP has submitted aforementioned details vide their letter on 23/09/2016.

Project status: Existing

Project / Activity Details:

This is an existing Specialty Chemical manufacturing unit which was accorded Environmental Clearance vide letter no. SEIAA/GUJ/EC/5(f)/93/2015 dated 02/03/2015. Environmental Clearance was granted for Custom Synthesis Products – 10 MT/Month & Theobromine – 20 MT/Month with a condition to use Natural gas – 240 SCM/day for proposed steam boiler (Capacity 300 Kg/hr) shall be used as fuel in the proposed Boiler. The project proponent vide their application requested for amendment in Environmental Clearance order dated 02/03/2015 with respect to the change in capacity of the Boiler and change in type of fuel from Natural gas to Briquettes of Bio-Coal. It was presented that the EC was granted with Natural gas based Boiler. Now, they intend to change fuel from Natural gas to Bio-Fuel and to change capacity of the Boiler.

Discussions & Observations:

During the meeting committee observed that PP has submitted point wise reply for the additional details sought as below: (1) PP had proposed piped natural gas as fuel. However, there is no pipeline laid by any agency. Under the circumstances, they have applied for switch over to other fuel. Letter in this regard is submitted. (2) & (3) PP has given list of machineries mentioned in the EIA Report submitted earlier. Now they have provided steam requirement for each equipment. Thus, total steam requirement will be 2540 Kg/Hr. Against this requirement they have proposed 3000 kg/hr Steam Boiler with 85 to 90 % efficiency. Thus, from the project conception time itself they were clear that their boiler requirement will be 3000 kg/hr. Bio Coal (Briquette) to the tune of 600 Kg/hr will be used as fuel for 3 TPH steam Boiler and it will be purchased from the local market. Analysis report of Bio-Coal is submitted. (4) Multi Dust Collector followed by Bag filter & stack of 31 m height will be provided with 3 TPH Boiler. There will be no change in fugitive

emission due to change in fuel. (5) Comparison with ambient air quality results mentioned in previous EIA Report for assessing change in ambient air quality is given. Based on data obtained, it could be stated that, during the study period the average concentration of PM 10, PM2.5, SO2, NOx and HCl were within prescribed limit at all locations. During the study period (March 2015 to May 2015) the value of PM10 at monitored locations is ranged between 90-58 µg/m3 while the value PM2.5 fluctuates in the range of 45-16 µg/m3. The values of SO2 and NOx were observed to be in the range of 26-14 µg/m3 and 31-14 µg/m3 respectively. The values of HCl were found BDL. The value of VOC at monitored locations is in the range of 0.7-0.3 ppm. The average concentrations of PM10, PM2.5, SO2, NOx, HCl, and VOC are within prescribed limit at all locations. (6) They have carried out air pollution modelling and found there will be marginal effect of PM level in the surrounding area. Details for doing air modelling for natural gas and bio coal both are given. From the dispersion modelling studies conducted, it was observed that the maximum ground level concentration occurs in the South East direction. The maximum incremental increase in concentration for PM is 2.8 µg/m3 at a distance of about 1 km in the South East direction. In the base line the average PM Concentration is in the range of 90 -64 µg/m3 for the period March 2015 to May 2015. Thus, the overall PM in the area will be in the range of 92.8 to 66.8 µg/m3 this will be in the limit of CPCB Norms. Bio Coal (Briquette) to the tune of 600 Kg/hr will be used as fuel for 3 TPH steam Boiler. (7) Multi Dust Collector followed by Bag filter & stack of 31 m height will be provided with 3 TPH Boiler. They will provide online monitoring system. In case of failure of APCM, Boiler will stop automatically. (8) They will follow the fly ash handling guidelines. Fly ash 450 MT/year will be taken by Mr. Kanaiya bricks. (9) PP mentioned that, this is not an expansion proposal. This is amendment in EC only. However, self certified compliance report is attached. PP stated that they have yet not started the production activity. The committee was satisfied with the clarification given by the project proponent and unanimously decided to recommend the case for amendment of environmental clearance as requested. In view of the above stated facts, it is hereby recommended to amend the EC order no. SEIAA/GUJ/EC/5(f)/93/2015 dated 02/03/2015 to replace Condition no. 13 on page no. 2 as follows:

Condition no. 13: Briquettes of Bio-Coal to the tune of 600 Kg/hr shall be used as a fuel in Steam Boiler (3 TPH).

a. A flue gas stack of 31 m height shall be provided
b. Adequate APCM comprises of Multi Cyclone separator followed by Bag filter shall be installed as APCM with Boiler and operated regularly to ensure that particulate matter emission does not exceed the norms prescribed by the GPCB/CPCB/MoEF&CC.
c. Adequate storage facility for the fly ash shall be provided at site. Ash shall be handled only in dry state.
d. The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.
e. The fugitive emission in the work zone environment shall be monitored. The emission shall confirm to the standards prescribed by the concerned authorities from time to time (e.g. Directorate of Industrial Safety & Health). Following guidelines shall be followed to reduce the fugitive emission:
   - Enclosure shall be provided at all loading and unloading operations.
   - Adequate dust extraction system such as bag filter, water spray system in the dusty area like fly ash handling area and other vulnerable areas shall be provided.

- All transfer points shall be fully enclosed.
- Accumulated coal dust /fly ash on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.
- Internal road shall be either paved properly to reduce the fugitive emission during vehicular movement.
- Air borne dust shall be controlled with water sprinklers at suitable interval in the plant.

14	SIA/GJ/IND2/16532/2016	**M/s: Esdee Paints Ltd.,** Survey No. 174/P & 175/P, Vill. Vasna-Chacharwadi, Ta. Sanand, Dist. Ahmedabad.	Screening & Scoping

Project / Activity No.: 5(h)

- M/s: Esdee Paints Ltd (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11006/2016 dated 13/04/2016.
- Project proponent was called for presentation in the SEAC meeting dated 07/05/2016.
- During the meeting, Committee noted that this proposal falls under Integrated Paint industry as their proposal is manufacturing of Various Paints including Acrylic Co-Polymer Resin. Upon asking about the reason for applying under 5(f) only, PP could not reply satisfactorily. Committee also observed that PP has mentioned that EC is not required for manufacturing of various Paints and they have applied for manufacturing of Acrylic Copolymer Resin under the 5(f) category as per the schedule of EIA Notification 2006. The Committee noted that proposal is incomplete in respect of categorization & other relevant details and is deferred. Committee unanimously decided to consider this proposal only after submission of the revised complete proposal through online web portal.
- PP has submitted revised proposal vide their letter on 09/07/2016
- PP was called for presentation in the SEAC meeting dated 03/08/2016.
- During the meeting on 03/08/2016, Committee observed that project proponent has shown that there is no generation of industrial waste water, however there is a proposal for decontamination of discarded containers to the tune of 110 MT/Annum. Upon asking about the method of decontamination and management of waste to be generated from the decontamination process, PP could not reply satisfactorily. Committee also noted that proposed site is located in a water logged area and there is no common infrastructure available for the waste treatment. Committee also asked to submit detailed manufacturing process with mass balance along with sound management for treatment of water, air and hazardous waste streams. After deliberation on various aspects, the committee unanimously decided to consider the case for TOR/Scoping only after submission of revised proposal.

Project status: New

Project / Activity Details:

This is a new unit proposes the manufacturing of following items.

Sr. no.	Name of the products	Phase-I	Phase-II

1	Various Paints	2,673 MT/Month	--
2	Acrylic Co-Polymer Resin	--	130 MT/Month

The project falls under Category B of project activity 5(h) as per the schedule of EIA Notification 2006. Total plot area is 20036 sq. m & unit has proposed 4634.72 sq mtr area for the green belt development/Tree plantation. Expected project cost is Rs.30.35 Crores. Total water consumption for proposed project will be 32 KL/day (Industrial 23.5 KL, Domestic 8.7 KL & Gardening 5 KL). Industrial waste water generation from process will be 1.5 KL/day. Cooling blow down (1.5 KL/day) will be reused for toilet flushing. Domestic waste water (3.5 KL/day) will be disposed off into soak pit system. It is proposed to install one TFH (2 Lac Kcal/hr). HSD (0.23 MT/day or 6 MT/Month) will be used as fuel for TFH. Unit has proposed one DG set (500 KVA) in which Diesel (15 Lit./hr) will be used as fuel. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be Paint residue (7.5 MT/Year), Cotton waste contaminated with Paint & Oil (48 MT/Year), Discarded containers/Bags/Liners (110 no.s /Year) and used oil (0.1 KL /Year).

Observations & Discussions:

Technical presentation made during the meeting by project proponent. Project proponent has already obtained CTE of GPCB for Various Paints and now they intend to manufacture Acrylic Co-Polymer Resin which will be used as a raw material for Paints manufacturing. In view of low pollution potential, the project proponent requested for categorizing the project as B2 and to exempt them from carrying out detailed EIA study which was not considered by the committee and the project proponent was asked to include the following TORs for the EIA study to be done covering 5 km radial distance from the boundary of the project.

1. Land Possession Documents of the proposed site. NA permission letter from concern authority.
2. Demarcation of proposed project activities in lay out plan.
3. Exact details about infrastructural facilities, plant machineries etc. required for the proposed project.
4. Details of surrounding industrial units within 2 km radius with details like Name and address of the unit, type and nature of industrial activity etc.
5. Project site specific details such as aerial distance of the project site from the nearest (1) Village-Nearest residential area (2) Water Body: Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) 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 1 km radius.
6. Ensure that there is no National Park / Wild Life Sanctuary/Eco Sensitive area etc. Within 5 km radius of the proposed project.
7. Legal Undertaking stating that unit is complying the three conditions [i.e. water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989] as per the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014.

8. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
9. Proposed monthly production of each product and product wise monthly consumption of each raw material.
10. Chemical name of each proposed product to be manufactured. Details on end use of each product. Manufacturing process along with chemical reactions, mass balance for each product.
11. Water balance diagram (including reuse-recycle, if any) along with qualitative and quantitative analysis of each waste stream to be generated from the manufacturing process of each product to be manufactured along with mass balance.
12. Stream wise qualitative & quantitative analysis of each waste stream (including process water, cooling tower blow down, boiler blow down, washing effluent etc.) to be generated. Give segregation scheme at source. Characteristics of untreated and treated wastewater. A detailed effluent treat ability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated. The characteristic on which treatability is based shall also be stated.
13. Details of the ETP units including its capacity, size of each unit, retention time and other technical parameters.
14. Action plan for 'Zero' discharge of effluent shall be included. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
15. 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.
16. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
17. 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.
18. 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.
19. 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.

20. 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.
21. 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.
22. 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.
23. Details of measures proposed for noise pollution abatement & its monitoring.
24. 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?
25. Methodology of de-contamination and disposal of discarded containers and its record keeping.
26. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
27. 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.
28. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment.
29. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
30. 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 Industrial estate and elsewhere.
31. 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.

32. 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?
33. Details of the separate isolated storage area for chemicals. Details of fire extinguishers, flame proof electrical fittings, DCP extinguishers and other safety measures proposed.
34. Specific safety details / provisions for various hazardous chemicals and detailed fire control plan for flammable substances.
35. Details of possibilities of occupational health hazards from the proposed manufacturing activities and proposed measures to prevent them.
36. 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.
37. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
38. A tabular chart with index for point-wise compliance of above details.

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

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 30/11/2019.
- 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	SIA/GJ/IND2/15681/2016	**M/s: Softouch Foam Products** Survey No. 308, Block No. 532, Vill. Sampa, Ta.: Dehgam, Dist.: Gandhinagar	Appraisal/ Reconsideration

Project / Activity No.: 5(f)

- M/s: Softouch Foam Products (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/15681/2016 dated 01/06/2016.
- PP was called for presentation during the SEAC meeting dated 29/06/2016.
- During the meeting dated 29/06/2016, looking to the small scale of the project, low pollution potential and the details presented during the meeting, after detailed discussion, the project

was categorized as B2 and additional information was sought from the project proponent for appraisal of the project.

- PP submitted the aforementioned additional information vide their letter on 28/09/2016.

Project status: New

Project / Activity Details:

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

Sr. No.	Name of the Product	Quantity
1	Polyurethane Foam	20 MT/Month

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 4.21 KL/day. Fuel requirement is NIL and Chemicals to be used are not covered in MAH category. Hence, the proposed product of PU Foam falls under Category B of project activity 5(f) as per the EIA Notification 2006. Total plot area is 1898 sq. m & unit has proposed 750 sq mtr area for the green belt development/ Tree plantation. Expected project cost is INR. 0.1 Crores. Aerial distance of the nearest residential area of village Sampa is @ 2.75 km. Water requirement for the proposed project will be 4.21 KL/day (0.3 KL for Domestic, 3.75 KL for Gardening, 0.16 KL for Industrial Purpose). Industrial waste water will be NIL. Domestic waste water (0.2 KL/day) will be disposed off into septic tank/soak pit system. Discarded barrels / containers / bags / liners (500 Nos./year)will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil (3 liters/year) will be sold only to the registered recyclers.

Observations & Discussions:

During the meeting Committee discussed about the categorization of the proposed project. Committee noted that this project falls under 5(f) category of the EIA Notification 2006 and earlier, looking to the small scale of the project, location of the project in GIDC-Naroda and low pollution potential, this project was categorised as B2 and additional information sought from the project proponent. During the meeting, It was informed to the committee by secretarial staff that during various SEIAA meetings held on 17/09/2016, 23/09/2016, 30/09/2016, 29/10/2016 & 25/11/2016, various projects were referred back to SEAC for verification of categorization of the project keeping OM issued by MoEF&CC vide no J-13012/12/2013-IA-II(I) dated 24/12/2013 as same were categorized under "B2" category. After deliberation, referring to said OM for categorization of category "B" projects/activities in category "B1" and "B2" and keeping Synthetic Organic Chemicals projects in a view, it was unanimously decided by the committee to invite this project in one of the upcoming meeting of SEAC for further consideration after submission of revised Form-1, proposed ToR and relevant details.

16	SIA/GJ/IND2/53044/2016	**M/s: Shiven Yarn Pvt. Ltd.** Plot No. A/1, Block No. 179, Vill. Molvan, Ta. Mangrol, Dist. Surat	Screening & Scoping

Project / Activity No.: 5(d)

- M/s: Shiven Yarn Pvt. Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11422/2016 dated 10/05/2016.
- PP was called for presentation in the SEAC meeting dated 06/06/2016.
- During the SEAC meeting on 06/06/2016, presentation made by the proponent included the general information about the project, plant layout, raw material & resource consumption, manufacturing process, water balance diagram & waste water treatment scheme, hazardous waste generation and its disposal etc. On asking about the reuse of treated waste water, PP informed that they will reuse treated waste water for gardening & plantation to which Committee did not agree and asked to reuse treated waste water for any other purpose instead of gardening. PP informed that they will reuse treated waste water for cooling purpose and fresh water will be used for gardening purpose. The request of categorizing the project as B2 was considered by the committee as per OM issued MoEF vide no. J-13012/12/2013-IA-II (I) dated 24th December, 2013 and additional information was sought from the project proponent for appraisal of the project.
- PP submitted additional details sought vide letter on 07/09/2016.

Project status: New

Project / Activity Details:

This is a new unit proposes the manufacturing of following items.

Sr. No.	Name of Product	Quantity MT/Month		
		Phase-I	Phase-II	Total
1.	Nylon Fully Drawn Yarn	250	250	500
2.	Waste Yarn (By Product)	6.5	6.5	13

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

Total plot area is 4600 sq. m & unit has proposed 1509 sq m area for the green belt development/Tree plantation. Aerial distance of nearest residential area of Village Molvan is @ 2.5 km from the project site. Expected project cost is Rs. 35.22 Crores. Basic raw materials are Nylon PA 6 Chips and Spin Finish Oil. Total water consumption for proposed project will be 95 KL/day (5 KL for Domestic, 6 KL for Gardening, 84 KL for Industrial). Unit has proposed to recycle treated water of 47.3 KL/day for cooling purpose, hence fresh water requirement will be 47.7 KL/day which will be sourced from ground water (i.e. Bore well) water supply. Industrial waste water generation will be 47.3 KL/day, which will be treated in proposed effluent treatment plant and treated waste water will be used cooling purpose. Domestic waste water (4.5 KL/day) will be disposed off into

soak pit system. There will be no flue gas generation from manufacturing process or utilities. Unit has proposed one DG set (110 KVA) in which HSD (15 ltrs/hr) will be used as fuel. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be ETP sludge (4 MT/Year), Discarded containers/Bags/Liners (600 Nos./Year) and used oil (0.2 KL /Year). ETP waste will be disposed off at the nearby common TSDF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers/vendors. Used oil will be sold only to the registered recyclers.

Observations & Discussions:

Technical presentation made by the project proponent during the meeting. While discussing about the waste water treatment and management during monsoon season, PP informed that they have proposed to reuse treated waste water (26 KL/day) for cooling make-up instead of gardening/plantation. Committee asked to sell out waste yarn to the authorized actual users only, which was agreed to by the project proponent. After detailed discussion, it was decided to recommend the project to SEIAA, Gujarat for grant of Environmental Clearance.

17	SIA/GJ/IND/59212/2016	**M/s: Mahendra Chemicals** Plot No. B/217-218/2, GIDC Estate, Naroda, Ahmedabad-382330	Screening & Scoping

Project / Activity no.: 5(f)

- This office has received an application vide online proposal no. SIA/GJ/IND/59212/2016 on 30/09/2016 along with additional details sought regarding grant of Environmental Clearance.
- Earlier this proposal was considered for screening and scoping during SEAC meeting held on 23/03/2016.
- Looking to the small scale, location and low pollution potential of the project, after detailed deliberation, the project was categorized as B2 and additional information was sought from the project proponent for appraisal of the project.
- PP has submitted the point wise reply.

Project status: Existing unit.

Project / Activity Details:

The proposed production activity falls in the project/activity 5(f) as per the schedule of the EIA Notificaiton-2006.Total plot area is 1258 sq. m. Green belt area is 250 sq. m. Total cost of project is Rs. 1.0 Crore (Existing) + Rs. 50 Lac (Proposed).Proposed product is as under:

Name of Product	Existing Capacity	Proposed Change	Proposed total capacity
Lidocaine base USP	2.0 MT/Month	-2.0 MT/Month(product merged)	Nil
Lidocaine base / Lidocaine HCl	Nil	15.0 MT/Month	15.0 MT/Month

Water source is GIDC and details of water consumption is as under:

Sr. No	Source	Water Consumption, L/day			Waste Water Generation, L/day		
		Existing	Addition	Proposed Total	Existing	Addition	Proposed Total
1.	Domestic	1500	0	1500	1200	0	1200
2.	Gardening	700	0	700	0	0	0
3.	Process	3000	4500	7500	3000	4500	7500
4.	Boiler	1000	1200	2200	100	150	250
5.	Cooling	2100	2100	4200	200	250	450
	Total	8300	7800	16100	4500	4900	9400

Treated waste water will be disposed off to CETP/MEE.

Details of flue gas emission is as under:

Flue Gas Emission (Existing)				
Sr. No.	Type of Emission	Fuel	APCM	Details of Stack
1.	Thermic Fluid Heater (1 Lac Kcal/hr) & Boiler(200 kg/h)	Natural Gas	NA	12 m
Flue Gas Emission (Proposed)				
1.	Steam Boiler (600 kg /hour)	Natural Gas	NA	12 m
2.	D. G. Set- 125 KVA	HSD (15 Lit/ Hr)	Adequate stack height	9 m

Natural gas consumption will be 1000 SCM/Day. There is no process gas emission.

Details of hazardous waste is as under:

Sr. No	Detail of Hazardous Waste	Category	Quantity		Management of Waste
			Existing	Proposed total	
1.	ETP Sludge	34.3	20 Kg/Month	150 Kg/Month	Collection, Storage, transportation disposal at TSDF approval by board
2.	Used oil/spent oil	5.1	2 Kg/Month	5.0 Kg/Month	Collection, Storage, transportation disposal by selling to registered reprocess or used as lubricant in plant
3.	Discarded container (Beg and drum)	33.3	15 No./Month	1 MT./Month	Collection, Storage, decontamination, transportation disposal by selling to authorised recycler
4.	Distillation residue	--	100 Kg/Month	250 Kg/Month	Collection, Storage, transportation disposal at NECL approved by board

As part of safety measures, it is proposed to provide fire extinguishers in plant, flame proof motors

and flame proof lights in manufacturing plant and ware house. Workers are provided gum boot, hand gloves as personal protective equipment. For noise controls (1)Loading/unloading shall be done from minimum height (2)Proper lubrication and other maintenance shall be undertaken periodically in all the moving parts of machinery (3)Green belt will be developed along the periphery (4)Ear-muffs, Ear Plug will be provided to the workers in the high noise area (5) Noise is controlled by installing machine on vibration damping base and separate isolation of noisy machine.

Observations & Discussions:

Technical presentation was made during the meeting by project proponent. In view of the MoEF&CC's OM vide no. J-13012/12/2013-IA-II (I) dated 24/12/2013, Committee asked PP to prepare EIA-EMP report as per the EIA Notification 2006, which was agreed to by the project proponent. The project proponent presented that they have already started baseline environmental monitoring in the winter 2016-2017 and requested to allow them to use the same for the preparation of the EIA report which was agreed to by the committee. After deliberation on various aspects, following additional TOR was prescribed for the EIA study covering 5 km radius of the project boundary.

1. Copy of plot holding certificate obtained from GIDC, Naroda.
2. Need for the proposed expansion should be justified in detail.
3. Layout plan of the factory premises showing the proposed expansion activities on the same. 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. Demarcation of proposed expansion activities in lay out of the existing premises. Exact details about additional infrastructural facilities, plant machineries etc. required for the proposed expansion.
5. Monthly consumption of each raw material (Product wise).
6. Detailed manufacturing process of each product along with chemical reactions, mass balance and schematic diagram.
7. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the proposed expansion. Copy of permission letter obtained from the GIDC for supply of raw water as per the requirement of the proposed expansion.
8. Water balance (including reuse-recycle, evaporation if any)
9. Explore the possibility of reuse / recycle and other cleaner production options for reduction of wastes generation and to conserve fresh water.
10. Undertaking to install separate reaction vessels for each of the product and not to carry out any washing activity.
11. Stream wise qualitative and quantitative assessment of the wastewater. A detailed treatability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated including performance of CETP, Naroda.
12. Plan for management and disposal of waste streams to be generated from spillage, leakages etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.
13. Feasibility and adequacy of treatment of waste water in ETP including reuse/recycle

proposal for RO permeate in process.

14. Details of possibility of chemical seepage & consequent soil contamination & mitigation measure proposed for the same.
15. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
16. 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.
17. 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.
18. 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.
19. 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.
20. Specific details of (i) Details of the utilities required, (v) Types of fuel to be used and quantity of the each fuel, (vi) Flue gas emission rate from each utility along with stack height, (vii) Air Pollution Control Measures proposed along with its adequacy, (viii) List the sources of fugitive emission from the unit along with its quantification and proposed measures to control it. (All these details should be in tabular format with comparative data of existing and proposed data).
21. Specific details of fugitive emission from the unit 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. Details of leak detection repairing programme (LDAR) for VOCs.
22. Details of measures proposed for noise pollution abatement & its monitoring.
23. 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? (All these details should be in tabular

format with comparative data for existing and proposed activity).

24. Methodology of de-contamination and disposal of discarded containers and its record keeping.
25. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
26. Copy of membership certificate from Common Environmental Infrastructure including the TSDF / Common Hazardous Waste Incineration facility for disposal of hazardous wastes to be generated from the proposed project.
27. 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.
28. 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.
29. 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.
30. 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?
31. Details of the separate isolated storage area for flammable chemicals. Details of flame proof electrical fittings, DCP extinguishers and other safety measures proposed.
32. Specific safety details / provisions for various hazardous chemicals including solvents to be used in the process along with onsite emergency plan.
33. Details of possibilities of occupational health hazards from the proposed manufacturing activities and proposed measures to prevent them.
34. 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.
35. 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.
36. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
37. Environment clearance for the existing unit issued by the concerned authority (reasons, if not obtained
38. Status of the existing Consent to Operate and Authorization accorded by the SPCB. Compliance status of the existing unit with respect to various conditions of CC&A order obtained from the Gujarat Pollution Control Board (GPCB).

39. 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.
40. 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.
41. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
42. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
43. 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 Cement 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 30/11/2019.
- 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.

18	SIA/GJ/IND2/17486/2016	**M/s: Gumandev Chemicals Pvt. Ltd.** Plot No. D-2/Ch-82, GIDC Dahej-II, Vagra, Bharuch	Screening & Scoping

The project proponent did not remain present during the meeting. It was decided to call them in one of the upcoming meetings of SEAC.

19	SIA/GJ/IND2/17380/2016	**M/s: Shree Khedut Sahkari Ginning &** Pressing society Ltd Plot No: 30, Vill: Baben, Tal: Bardoli, Dist:Surat.	Screening & Scoping

The project proponent did not remain present during the meeting. It was decided to call them in one of the upcoming meetings of SEAC.

20	SIA/GJ/IND2/17524/2016	**M/s: Mascot Cement India Ltd.** Survey No. 306, NH-8, Gomta Chokdi, Village Patidad, Ta.: Gondal, Dst.: Rajkot	Screening & Scoping

Project / Activity No.: 3(b)

- M/s: Mascot Cement India Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND/17524/2016 dated 10/10/2016.

Project status: New

Project / Activity Details:

This is a new unit proposes to set up standalone clinker unit for manufacturing of Ordinary Portland Cement (OPC) with the production capacity of 600 MT/Day. The project falls under Category B of project activity 3(b) as per the schedule of EIA Notification 2006. Aerial distance of nearest residential area of vill. Patidad is @ 2.9 km from the proposed site. Total plot area is 27721 sq. m & unit has proposed 6476 sq m area for the green belt development/Tree plantation. Expected project cost is INR. 10 Crores. Basic raw materials are Lime Stone, Coal, Clay, Gypsum and Silica. Water requirement for the proposed project will be 41 KL/day (15 KL for Domestic, 20 KL for Landscaping and 6 KL for dust suppression) and it will be met through their own Bore wells. There will not be any wastewater generation from manufacturing process as well as from any industrial activities. Domestic waste water (13 KL/day) will be disposed off into septic tank/soak pit system. There will be emission of particulate matters from crusher, hammer mill, raw mill, Kiln and from cement mill. The cyclone separators and bag filters will be installed to control dust emissions from particulate matters from crusher, hammer mill, raw mill, kiln, cement mill and packing section. ESP is proposed as APCM with rotary kiln to control dust emissions. No process gaseous emission is envisaged. There are chances of dust generation from material handling & manufacturing process. Various measures are proposed to control fugitive emissions. The solid waste collected from APCM will be recycled in respective sections of the plant. Discarded barrels / containers / bags / liners (1000 no.s/Month) will be either reused or returned back to suppliers. Used oil (100 Lit./Month) will be sold only to the registered recyclers. Cotton rags (50 Kg/Month) will be returned back to raw material suppliers.

Observations & Discussions:

Technical presentation made during the meeting by project proponent. While discussing about the availability of fresh water, PP informed that they will obtain permission from the concern authority for ground water abstraction and domestic waste water will be reused after treatment in STP. Issues regarding air pollution, fugitive emissions and its mitigation measures were discussed in detail. After detailed discussion, the following additional Terms of Reference were prescribed for the EIA study to be done covering 10 Km radial distance from the project boundary.

1. Land possession documents.
2. Project site specific details such as distance of the project site from the nearest (1) Village (2) Water Body : Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) Marine National Park/National Park / Wild Life Sanctuary / Reserve Forest.
3. Water balance diagram. Status of permission from the concern authority for water supply.
4. Detailed report for storm water drainage, management & disposal, measures proposed to avoid contamination of the storm water as well as restricting the contaminated storm water not allowing it to flow out of the premises.
5. Details of all possible sources of air pollution including the process emission as well as fugitive emission along with the mitigation measures and the technical specifications of the proposed air pollution control equipments [designed by credible institutes like NPC, LDCE and other such institutes of repute] proposed to control the air pollution and the capability of

the management to maintain and run the same during the operational phase of the project in the form of an undertaking.

6. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
7. 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.
8. 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.
9. Modelling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modelling 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 modelling should be superimposed on satellite image / geographical area map.
10. 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.
11. Detailed cleaner production measures to reduce emissions if possible in the proposed project & commitment of the management on futuristic development / implementation for the same.
12. Details of all possible sources of noise pollution, its magnitude and mitigation measures proposed to control it.
13. Occupational health impacts on the workers and its mitigation measures. Detailed safety precautions proposed to avoid silica and cement dust hazard along with the personal protective equipment to be provided to the workers.
14. A detailed cement dust and silica dust monitoring plan including the measurement and control. Plan for medical examination of the workers exposed. Report for measurement of cement dust at workers level as per GFR.
15. Type of ventilation proposed in the work area.
16. Details of the safety control measures to be implemented.
17. Source of raw material along with their mode of transport as well as the air pollution mitigation measures proposed during transportation and handling of the various raw

materials.

18. A detailed greenbelt development plan along with the commitment of the management to take up extensive plantation in phased manner.
19. Details of scheme for surface as well as roof top rain water harvesting and ground water recharge.
20. Detailed EMP including the protection and mitigation measures for impact on human health and environment as well as detailed monitoring plan. The EMP should also include the concept of waste minimization, recycle/reuse/recover techniques, energy conservation, natural resource conservation, total capital cost and recurring cost/annum earmarked for environment pollution control measures etc.
21. Undertaking from the project management regarding efficient floor sweeping with vacuum cleaner device for reducing fugitive dust emission.
22. Undertaking from the project management regarding effective implementation of proposed EMS.
23. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
24. 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.
25. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
26. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
27. 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 Cement industry shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 30/11/2019.
- 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.

21	SIA/GJ/IND2/17525/2016	**M/s: Krupa Corporation** Plot No. 150,151, GIDC-Nandesari,	Screening & Scoping

		Dist. Vadodara	

Project / Activity No.: 5(f)

- M/s: Krupa Corporation (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17525/2016 dated 12/10/2016.

Project status: New

Project / Activity Details:

This is an existing unit and now proposed for manufacturing of Synthetic organic chemicals as tabulated below:

Sr. no.	Name of the Products	Existing MT/Month	Additional MT/Month	Total MT/Month
1	Vat Red –B (Red 41)	0.75	6.25	7
2	Vat Pink-R		1	1
3	Vat Brown RRD		2	2
4	Vat Blue 4B	0.75	2	2
	Total		11.25	12

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 1750 sq. m & unit has proposed 170 sq m area for the green belt development/Tree plantation. Expected project cost is INR. 2 Crores. Water requirement for the proposed project will be 52 KL/day (3 KL for Domestic, 1 KL for Gardening, 48 KL for Industrial Purpose) and it will be met through GIDC water supply. Industrial waste water generation will be 22.6 KL/day, which will be treated in proposed effluent treatment plant and treated waste water will be sent to CETP of NIA. Domestic waste water (2.5 KL/day) will be disposed off into septic tank/soak pit system. Agro Briquettes/White Coal to the tune of 0.5 MT/day shall be used in the Boiler (1 TPH). Multi Cyclone dust collector will be provided as APCM for Boiler. HSD to the tune of 20 Lit./day will be used in the stand-by DG set (100 KVA Capacity). Unit has proposed one Spin Flash Dryer (SFD). Water scrubber followed by Alkali scrubber will be provided as APCM for control of process gaseous emission of SO2. Water scrubber followed by Alkali scrubber will be provided as APCM for control of process gaseous emission of HBr. ETP waste (5 MT/Month) will be disposed off at the Common TSDF site. Process waste (1.024 MT/Month) will be disposed off at the CHWIF. Discarded barrels / containers / bags / liners (100 no.s/Month) will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil (10 Lit./ Month) will be sold only to the registered recyclers. Sodium Bromide solution (15%) – 1.4 MT/Month and Aluminium Chloride (20%) – 23 MT/Month will be sold out to actual users. Sodium sulphide / Sodium sulphate solution (12 MT/Month) will be reused within plant premises.

Observations/Discussion:

Technical presentation made during the meeting by project proponent. While discussing about the compliance of the existing project, PP informed that they have obtained CC&A for existing products which is valid up to 06/08/2018 and compliance report is submitted. PP also informed that they have obtained membership certificate from CETP of NECL for proposed additional waste water discharge into CETP. 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 Nandesari.
2. Need for the proposed expansion should be justified in detail.
3. Present land use pattern of the study area shall be given based on satellite imagery.
4. Demarcation of proposed expansion activities in lay out of the existing premises. Exact details about infrastructural facilities, plant machineries etc. required for the proposed project.
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. (Give specific details about source of effluent generation).
7. Chemical name of each proposed products to be manufactured. Details on end use of each product. Ensure that proposed products are not used as a pesticides or specific Intermediates of Pesticides and submit an undertaking in this regard.
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. Quality and quantity of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
12. Stream wise qualitative & quantitative analysis of each waste stream (including process water, cooling tower blow down, boiler blow down, washing effluent etc.) to be generated. Give segregation scheme at source. Characteristics of untreated and treated wastewater. A detailed effluent treat ability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated. The characteristic on which treatability is based shall also be stated.
13. Details of the ETP units including its capacity, size of each unit, retention time and other technical parameters. Details regarding provision of online continuous pH meter, TOC analyser and flow meter at the final outlet of the ETP.
14. Details of CETP- Nandesari including (1) Total capacity of the CETP (2) Actual load at present (Qualitative and Quantitative – per day) (3) CETP Up gradation scheme, if any (4) Last 6 analysis Reports of GPCB for Inlet and outlet of CETP (5) Spare capacity of CETP with treatability and feasibility report. (6) Recommendations and suggestions of the last two Environment Audit reports of CETP- Nandesari and its compliance report.
15. 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.

16. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
17. 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.
18. 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.
19. Modelling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modelling 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 modelling should be superimposed on satellite image / geographical area map.
20. 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.
21. 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.
22. 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.
23. Membership of Common Environmental Infrastructure including the CETP, TSDF / Common Hazardous Waste Incineration Facility (CHWIF), Common MEE (Whichever is applicable) along with an assessment to accommodate the additional quantity of wastes to be generated. Explore the possibilities for co-processing of the Hazardous waste prior to disposal into TSDF/CHWIF.

24. Complete Management plan for By-products/Spent acids to be generated, (if any) from the project including their quantity, quality, characteristics, end use etc. along with the name and address of end consumers to whom the by-product will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-product from the proposed project. Also give characteristics of the by products and feasibility of their actual use in respective products as a raw material.
25. 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.
26. 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/Year earmarked for environment pollution control measures.
27. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
28. 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.
29. 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.
30. MSDS of all the products and raw materials.
31. 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.
32. 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?
33. 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.

34. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
35. 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.
36. 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.
37. (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.
38. 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.
39. 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.
40. Compliance of the MoEF's OM dated 04/08/2009 and 05/10/2011 regarding compliance of TOR prescribed & factual correctness of the data submitted in the EIA report, the names of experts associated with / involved in the preparation of the EIA report and the ownership of the EIA report by the Project proponent.
41. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
42. 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.
43. Copies of Environmental Clearances obtained for the existing plant, its point wise compliance report.
44. Environmental audit reports for last 3 years and compliance of its recommendations/Suggestions. (Include latest audit report and its compliance.)
45. Copy of Consent to Operate (CC&A) obtained along with point wise compliance status of all the conditions stipulated therein.
46. Being an expansion project, compliance of MoEF circulars vide No: J-11011/618/2010-IAII(I) dated 30/05/2012 and J-11013/41/2006-IA-II(I) dated 20/10/2009
47. Copies of XGN generated Inspection reports with analysis reports of the water/Air/Hazardous samples collected by GPCB (Last 2 years). Copies of instructions

issued by GPCB in last 2 years and point wise compliance thereof.

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 30/11/2019.
- 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.

22	SIA/GJ/IND2/17506/2016	**M/s: Reva Enterprise** Plot No C-6, GIDC, Village - Saykha, Ta - Vagra, Bharuch	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: Reva Enterprise (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17506/2016 dated 13/10/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of the products	Quantity MT/Month
1	Crude Optical Whitening Agent	550
2	Crude Optical Whitening Agent - DT	50
3	Optical Whitening Agent - Solid	400
4	Optical Whitening Agent - Liquid	1500
	Total	2500

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

Total plot area is 8362 sq. m & unit has proposed 1366 sq mtr area for the green belt development/Tree plantation. Expected project cost is INR. 9.80 Crores. Water requirement for the proposed project will be 187 KL/day (5 KL for Domestic, & 182 KL for Industrial Purpose) and it will be met through GIDC water supply. The sources of waste water will be from process, utilities and washing activity including RO Reject. Total industrial wastewater generation will be @ 89 kL/day. Out of this, RO reject @ 15 KL/day will be reused for ice making, remaining 74 kL/day will be subjected to evaporation through MEE to achieve Zero Liquid Discharge. MEE condensate will be

reused for industrial purpose. Domestic waste water (4 KL/day) will be disposed off into septic tank/soak pit system. Coal to the tune of 1.5 MT/hr shall be used as fuel for one Steam Boiler and one TFH. Multi Cyclone dust collector followed by Bag Filter shall be provided as APCM for Boiler. Diesel to the tune of 30 Lit./hr shall be used in the stand-by DG set (500 KVA Capacity). Bag filters will be provided as APCM with two Spray dryers (Cap. 1000 Kg/hr each). ETP waste & Evaporation residue (84 MT/Year) will be disposed off at the Common TSDF site. Discarded barrels / containers / bags / liners (1.2 MT/Year) will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil (0.8 KL/Year) will be sold only to the registered recyclers.

Observations / Discussion:

Technical presentation made during the meeting by project proponent. While discussing about the waste water management, Committee noted that PP has proposed Zero Liquid Discharge till there is provision of CETP for the estate. Committee asked to go for ZLD only as there is no existence of CETP at present and put emphasis on complete ZLD with sound environmental management system. After deliberation on various aspects, the TOR proposed by the project proponent were accepted and additional TOR were prescribed for the EIA study to be done covering 10 km radius from the project boundary of the proposed site.

1. Copy of plot holding certificate obtained from GIDC Authority.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. Layout plan of the factory premises. (Show all the production plants including Raw material & Products storage area). 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. Full name and chemical formula of all the raw materials and products. Details on end use of each product.
7. Complete management plan for spent acids / waste liquid streams to be generated, along with the name and address of end consumers to whom the spent acids / waste liquid streams will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said spent acids / waste liquid streams from the proposed project.
8. Action plan to reuse or consume entire quantity of Spent acids/waste streams within premises to convert into valuable products instead of sending such spent acids to outside premises.
9. 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.
10. 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.

11. 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.
12. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
13. Segregation of waste streams and details on specific treatment and disposal of each stream.
14. Action plan for 'Zero' discharge of effluent shall be included. Notarized undertaking for assuring that underground drainage connection will not be taken in the unit.
15. 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.
16. Technical details of proposed MEE including capacity, fuel to be used, adequacy etc. Techno-economical viability of the proposed MEE. Control measures proposed for the MEE in order to avoid/reduce gaseous emission/VOC from evaporation of industrial effluent containing solvents & other chemicals.
17. Technical details of RO/NF system (If any).
18. Undertaking stating that a separate electric meter will be provided for the Effluent Treatment Plants.
19. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
20. Certification of adequacy of proposed ZLD scheme through credible institutes of National repute.
21. To estimate & monitor ground water quality & its contamination status, piezometer wells, one one on up gradient of the groundwater flow and other three on the down gradient side of the ground water flow of the proposed project at different depth based on available ground water depth shall be established and all the parameters mentioned in IS 10:500 for potable water standard shall be monitored.
22. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
23. 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.
24. 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.
25. One season Site-specific micro-meteorological data using temperature, relative humidity,

hourly wind speed and direction and rainfall should be incorporated.

26. Anticipated environmental impacts due to the proposed project/production may be evaluated for significance and based on corresponding likely impacts VECs (Valued Environmental Components) may be identified. Baseline studies may be conducted within the study area of 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.
27. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
28. Modeling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.
29. Base line status of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
30. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution control measures for process gas emission, measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate 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.
31. 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.
32. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, if any.
33. 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.
34. A detailed EMP including the protection and mitigation measures for impact on human health and environment as well as detailed monitoring plan and environmental management

cell proposed for implementation and monitoring of EMP. The EMP should also include the concept of waste-minimization, recycle/reuse/recover techniques, energy conservation, and natural resource conservation. Total capital cost and recurring cost/annum earmarked for environment pollution control measures.

35. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
36. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment 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.
37. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
38. 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.
39. MSDS of all the products and raw materials.
40. 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.
41. 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?
42. 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.
43. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
44. 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.
45. 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.

46. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
47. (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.
48. 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.
49. 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.
50. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
51. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
52. 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 draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 30/11/2019.
- 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.

23	SIA/GJ/IND2/17183/2016	**M/s: Aarti Industries Limited** CH-1+2/B, Dahej GIDC, Ta.: Vagra, Dist.: Bharuch	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: Aarti Industries Limited (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17183/2016 dated 13/10/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of the Products	Quantity MT/Annum	Quantity MT/Month
1	Mono Chloro Benzene **And/or**	42540	3545
2	Para Di Chloro Benzene/ Ortho Di Chloro Benzene/Mono Di Chloro Benzene **And/or**	27432	2286
3	123 Tri Chloro Benzene / 124 Tri Chloro Benzene **And/or**	22524	1877
4	Ortho Chloro Toluene / Para Chloro Toluene **And/or**	47460	3955
5	6Chloro 2Nitro Toluene / 4Chloro 2Nitro Toluene **And/or**	42600	3550
6	2 Chloro4 Nitro Toluene **And/or**	64464	5372
7	30% HCl (Co-Product)	45600	5372

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

Total plot area is 12000 sq. m & unit has proposed 3366 sq m area for the green belt development/Tree plantation. Expected project cost is INR. 40 Crores. Water requirement for the proposed project will be 595 KL/day (10 KL for Domestic, 15 KL for Gardening, 570 KL for ndustrial Purpose) and it will be met through GIDC water supply. Industrial waste water generation will be 295 KL/day, which will be treated in proposed Primary, Secondary & Tertiary treatment plant and treated waste water will be discharge into GIDC drainage pipeline. Domestic waste water (9 KL/day) will be disposed off into septic tank/soak pit system. Natural gas to the tune of 28 MT/day will be used in the Boiler (15 TPH). Diesel to the tune of 450 Lit./hr will be used in the stand-by two DG sets (750 KVA each). Two Stage Water Scrubber followed by Alkali Scrubber will be provided as APCM with Chlorinator to control Cl2 & HCl. ETP waste (2000 MT/Year) will be disposed off at the Common TSDF site. Spent carbon (2 MT/Annum) & Distillation residue (360 MT/Annum) will be disposed off at the CHWIF or sent for co-processing. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers. Used oil (1000 Lit./Annum) will be sold only to the registered recyclers. Spent catalyst (220 MT/Annum) will be sold out to authorized regenerators. 30% HCl will be sent to authorise actual users or neutralized in the premises and send it to ETP.

Observations / Discussion:

Technical presentation made during the meeting by project proponent.

While discussing regarding proposed products, Committee asked to clarify about any other Chlorination products which was mentioned in the product list, PP could not reply satisfactorily. However, they informed that they have removed this generic product title from the proposed list of products and also they will submit the letter in this regard. PP has proposed to neutralise HCl solution with Calcium Carbonate. Committee observed that there will be generation of CO2 gas from the neutralization process. Upon asking, PP informed that they will manufacture Calcium chloride solution from hydrated lime instead of Calcium Carbonate for neutralization of generated HCl. Committee put emphasis on sound management of spent acids and waste water. The committee desired to have MSDS of materials to be handled, information on storage of each hazardous chemical and safety measures thereof. After deliberation on various aspects, the TOR proposed by the project proponent were accepted and additional TOR were prescribed for the EIA study to be done covering 5 km radius from the project boundary of the proposed site.

1. Copy of plot holding certificate obtained from GIDC Authority.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. Layout plan of the factory premises. (Show all the production plants including Raw material & Products storage area). 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. Full name and chemical formula of all the raw materials and products. Details on end use of each product.
7. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
8. Action plan to reuse or consume entire quantity of Spent acids/waste streams within premises to convert into valuable products instead of sending such spent acids to outside premises.
9. 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.
10. 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.
11. 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.
12. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
13. Segregation of waste streams and details on specific treatment and disposal of each

stream.

14. Action plan for 'Zero' discharge of effluent shall be included. Notarized undertaking for assuring that underground drainage connection will not be taken in the unit.
15. 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.
16. Undertaking stating that a separate electric meter will be provided for the ETP system.
17. Copy of permission letter with quantity from the authority of GIDC drainage network, Dahej regarding confirmation for spare capacity available to take additional effluent load in GIDC drainage for final disposal to deep Sea.
18. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
19. 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.
20. 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.
21. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
22. 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.
23. 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.
24. 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.

25. 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.
26. 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.
27. 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.
28. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, if any.
29. 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.
30. 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.
31. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
32. 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.
33. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
34. 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.

35. MSDS of all the products and raw materials.
36. 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.
37. 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?
38. 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.
39. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
40. 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.
41. 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.
42. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
43. (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.
44. 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.
45. 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.
46. Phase wise project implementation schedule with bar chart and time frame, in terms of site

development, infrastructure provision, EMS implementation etc.

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 draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 30/11/2019.
- 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.

24	SIA/GJ/IND2/17559/2016	**M/s: Nirmit Chemicals (Unit-II)** Shed No.A-2/124/16 & 17, GIDC-Nandesari, Dist.: Vadodara	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: Nirmit Chemicals (Unit-II) (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17559/2016 dated 15/10/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of Products	Quantity MT/ Month
1	4-Chloro 2-Amino Phenol (4CAP)/ 2-Chloro 4-Amino Phenol(2CAP)	50
2	4- Chloro 2- Nitro Phenol (4CNP)/ 2- Chloro 4- Nitro Phenol (2CNP)	50
3	5-Chloro 8-Hydroxy Quinoline	50
	Total Manufacturing Capacity	150

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

Total plot area is 3793 sq. m & unit has proposed 375 sq mtr area for the green belt development/ Tree plantation. Expected project cost is INR. 7.75 Crores. Water requirement for the proposed project will be 160 KL/day (5 KL for Domestic, & 155 KL for Industrial Purpose) and it will be met through GIDC water supply. Industrial waste water generation will be 151.55 KL/day, which will be treated in proposed Primary treatment plant including hydro dynamic cavitation process and treated waste water will be sent to CETP-Nandesari for further treatment. Domestic waste water (3 KL/day) will be disposed off into septic tank/soak pit system. CNG to the tune of 100 SCM/day will be used in the Boiler (2 TPH). CNG to the tune of 100 SCM/day will be used in 3 no.s of TFH (2 Lac Kcal/he each). No process gaseous emission is envisaged. ETP waste (820 MT/Year) and Process waste (540 MT/Year) will be disposed off at the Common TSDF site. Iron waste (660 MT/Year) and carbon waste (379 MT/Year) will be disposed off at the Common TSDF site or sent for co-processing. Discarded barrels / containers / bags / liners (12 MT/Year) will be either reused or returned back to suppliers or sold only to the authorized recyclers.

Observations/Discussion:

Technical presentation made during the meeting by project proponent. While discussing about the end-uses of proposed products, PP informed that none of the product will uses as pesticides of pesticide intermediates. Committee observed that the effluent after primary treatment will be sent to CETP-Nandesari. CETP performance was discussed. 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 Nandesari.
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. (Give specific details about source of effluent generation).
6. Chemical name of each proposed products to be manufactured. Details on end use of each product. Ensure that proposed products are not used as a pesticides or specific Intermediates of Pesticides and submit an undertaking in this regard.
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. Quality and quantity of waste water to be generated from the manufacturing process of each

product to be manufactured along with mass balance.

11. Stream wise qualitative & quantitative analysis of each waste stream (including process water, cooling tower blow down, boiler blow down, washing effluent etc.) to be generated. Give segregation scheme at source. Characteristics of untreated and treated wastewater. A detailed effluent treat ability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated. The characteristic on which treatability is based shall also be stated.
12. Details of the ETP units including its capacity, size of each unit, retention time and other technical parameters. Details regarding provision of online continuous pH meter, TOC analyser and flow meter at the final outlet of the ETP.
13. Details of CETP- Nandesari including (1) Total capacity of the CETP (2) Actual load at present (Qualitative and Quantitative – per day) (3) CETP Up gradation scheme, if any (4) Last 6 analysis Reports of GPCB for Inlet and outlet of CETP (5) Spare capacity of CETP with treatability and feasibility report. (6) Recommendations and suggestions of the last two Environment Audit reports of CETP- Nandesari and its compliance report.
14. 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.
15. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
16. 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.
17. 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.
18. Modelling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modelling 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 modelling should be superimposed on satellite image / geographical area map.
19. 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.

20. 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.
21. 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.
22. Membership of Common Environmental Infrastructure including the CETP, TSDF / Common Hazardous Waste Incineration Facility (CHWIF), Common MEE (Whichever is applicable) along with an assessment to accommodate the additional quantity of wastes to be generated. Explore the possibilities for co-processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
23. Complete Management plan for By-products/Spent acids to be generated, (if any) from the project including their quantity, quality, characteristics, end use etc. along with the name and address of end consumers to whom the by-product will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-product from the proposed project. Also give characteristics of the by products and feasibility of their actual use in respective products as a raw material.
24. 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.
25. 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/Year earmarked for environment pollution control measures.
26. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
27. 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.
28. 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.

29. MSDS of all the products and raw materials.
30. 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.
31. 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?
32. 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.
33. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
34. 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.
35. 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.
36. (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.
37. 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.
38. 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.
39. Compliance of the MoEF's OM dated 04/08/2009 and 05/10/2011 regarding compliance of TOR prescribed & factual correctness of the data submitted in the EIA report, the names of experts associated with / involved in the preparation of the EIA report and the ownership of the

EIA report by the Project proponent.

40. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
41. 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 30/11/2019.
- 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.

25	SIA/GJ/IND2/17573/2016	**M/s: K.D. Incorporation** Plot No. 506, V.U. Nagar GIDC Estate, Vallabh Vidhyanagar, Ta. & Dist. Anand.	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: K.D. Incorporation (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17573/2016 dated 17/10/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of the products	Quantity MT/Month
1	Peracetic acid	50
2	Crude Pinene Oxide	200

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

Total plot area is 1050 sq. m & unit has proposed 110 sq m area for the green belt development/ Tree plantation. Expected project cost is INR. 0.6 Crores. Water requirement for the proposed project will be 1.8 KL/day (1 KL for Domestic, 0.5 KL for Gardening, 0.3 KL for Industrial Purpose) and it will be met through GIDC water supply. Industrial waste water generation will be 0.1 KL/day, which will be treated in proposed treatment plant and treated waste water will be reused for washing purpose. Domestic waste water (0.9 KL/day) will be disposed off into septic tank/soak pit system. There will be no any flue gas emission. No process gaseous emission is envisaged. ETP waste (0.5 MT/Year) will be disposed off at the Common TSDF site. Discarded barrels / containers / bags / liners (10 MT/Year) will be either reused or returned back to suppliers or sold only to the

authorized recyclers. Used oil (0.001 MT/Year) will be sold only to the registered recyclers.

Observations/Discussions:

Technical presentation made during the meeting by project proponent. Committee noted that the industrial estate is not a Chemical estate, however there is no air pollution potential and no waste water generation from the manufacturing process. In view of low pollution potential, the project proponent requested for categorizing the project as B2 and to exempt them from carrying out detailed EIA study which was not considered by the committee and the project proponent was asked to include the following TORs for the EIA study to be done covering 5 km radial distance from the boundary of the project.

1. GIDC plot holding certificate.
2. Demarcation of proposed project activities in lay out plan.
3. Exact details about infrastructural facilities, plant machineries etc. required for the existing and proposed project.
4. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
5. Proposed monthly production of each product and product wise monthly consumption of each raw material.
6. Chemical name of each proposed product to be manufactured. Details on end use of each product. Manufacturing process along with chemical reactions, mass balance for each product.
7. Water balance diagram (including reuse-recycle, if any) along with qualitative and quantitative analysis of each waste stream to be generated from the manufacturing process of each product to be manufactured along with mass balance.
8. Stream wise qualitative & quantitative analysis of each waste stream (including process water, cooling tower blow down, boiler blow down, washing effluent etc.) to be generated. Give segregation scheme at source. Characteristics of untreated and treated wastewater. A detailed effluent treat ability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated. The characteristic on which treatability is based shall also be stated.
9. Action plan for zero liquid discharge (ZLD).
10. 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.
11. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
12. 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.
13. 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.

14. 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.
15. 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.
16. 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.
17. 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.
18. Details of measures proposed for noise pollution abatement & its monitoring.
19. 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?
20. Methodology of de-contamination and disposal of discarded containers and its record keeping.
21. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
22. 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.
23. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment.
24. 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 Industrial estate and elsewhere.

25. 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.
26. 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?
27. Details of the separate isolated storage area for chemicals. Details of fire extinguishers, flame proof electrical fittings, DCP extinguishers and other safety measures proposed.
28. Specific safety details / provisions for various hazardous chemicals and detailed fire control plan for flammable substances.
29. Details of possibilities of occupational health hazards from the proposed manufacturing activities and proposed measures to prevent them.
30. 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.
31. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
32. A tabular chart with index for point-wise compliance of above details.

The above mentioned project specific TORs/additional TORs and the model TORs available in the MoEF's sector specific EIA Manual for 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 04/10/2019.
- 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.

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

1. M/s. Gujarat Fluorochemicals Ltd., Plot no. 12/A, GIDC- Dahej, Ta. Vagra, Dist. Bharuch

ADDITIONAL AGENDA

1. Letter of Shri Bharat S. Dave dtd 14/11/2016 regarding illegitimate allotment of quarry permits and operation of lease without obtaining Environmental Clearance regardiing.

The aforementioned letter was received by this office on 16/11/2016 and it was deliberated in the meeting. After referring to the letter of Shri B.S.Dave dated 14/11/2016, committee unanimously decided to inform Shri B.S.Dave with a copy to Commissioner, Geology and mining stating that it is mandatory to obtain Environment Clearance for mining project. It was also mentioned to inform that for river bed mining proposal, it is required by the concerned geologist to submit project details along with details of lease whether it is located in dry river bed and it is not an instream mining. Upon submission of details with validation of concerned district geologist, river bed mining proposal is recommended to SEIAA for grant of environment clearance.

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 Rajesh Shah, Member, SEAC.*	