Minutes of the 291st meeting of the State Level Expert Appraisal Committee held on 18/05/2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar.

The 291st meeting of the State Level Expert Appraisal Committee (SEAC) was held on 18th May, 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. Mayuriben Pandya, Member, SEAC.
5. Shri R. I. Shah, Member, SEAC.
6. Shri V. N. Patel, Member, SEAC.

The agenda of TOR/Scoping/ cases and appraisal cases was taken up. Twelve (12) cases of TOR/Scoping/8(a) and five (5) appraisal cases i.e total 17 cases were taken up. The applicants made presentations on the activities to be carried out along with other details furnished in the Form-1,Form IA, EIA report and other reports.

1.	Shreepad Seasons	T.P. – 9 (Palanpore - Bhesan) , F.P. No. - 69, Sub Plot No - B, O.P. No.- 51, B.No.- 128, Moje: Palanpore, Dist: Surat.	Screening / scoping & appraisal.

Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/53077/2016]
2.	Type of Project	Residential
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Shreepad Seasons.
5.	Name of Developer	Mr. Maheshbhai Maganbhai Jinjala
6.	Estimated Project Cost (Rs. In Crores)	Rs. 80 crores
7.	Whether construction work has been initiated at site? If yes, details thereof	No
8.	Project Details	• Land / Plot Area (m^2) : 7,907.0 • FSI area (m^2): 17,668.20 • Total BUA (m^2):28,800.04

	Permissible	Proposed
FSI Area (m^2)	17,672.14	17,668.20
Ground Coverage (m^2)	2,253.49	1,981.88
Common Plot Area (m^2)	790.73	790.73
Max. building height (m)	65	36.2

<table>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings: 4
• No. of Blocks: 4
• Scope of buildings/blocks: Basement + hollow plinth + 11 floors.
• No.& size of Residential Units: 176 units
• No. & type of Commercial Units: --
• Details of amenities if any: Club house</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>792</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 15
• Source of water: Water supply from Surat Municipal Corporation (SMC).
• Waste water generation quantity (KL/day): 2.1
• Mode of disposal: Into drainage line of Surat Municipal Corporation (SMC).</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Fresh water requirement (KL/day): 115.0
• Source of water: Water supply from Surat Municipal Corporation (SMC).
• Waste water generation quantity (KL/day): 89.0
• Mode of disposal: Disposed in to drainage line of Surat Municipal Corporation (SMC).</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Both drainage and water supply lines are available in the area.</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>2,349.12</td><td>800</td><td>800 m^3 of excavated top soil will be utilized for greenbelt development 1,549.12 m^3 of top soil will be utilized for back filling.</td></tr>
<tr><td>Other excavated earth</td><td>11,087.8</td><td>5,140.57</td><td>5,140.57 m^3 of excavated soil will be utilized for back filling within site while excess soil of 7,496.35 m^3 will be utilized at other project site after obtaining necessary permission if any</td></tr>
<tr><td>Construction debris</td><td>15kg/day</td><td rowspan="3">Nil</td><td rowspan="3">Sold off to recyclers</td></tr>
<tr><td>Steel scrap</td><td>15kg/day</td></tr>
<tr><td>Discarded packing materials</td><td>6kg/day</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>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>200</td><td rowspan="2">Into separate bins to be provided within premises.</td><td rowspan="2">Will be collected through door to door waste collection system of SMC for final disposal at Khajod Disposal Site</td></tr>
<tr><td>Wet waste</td><td>275</td></tr>
</table>

Details of segregation if to be done: Separate bins for dry and wet waste will be provided to each unit.
Capacity and no. of community bins to be placed within premises: 4 nos. of bins having capacity of 50 kg each for dry waste and 5 nos of 60 kg for wet waste will be provided.
Landfill site where waste will be ultimately disposed by local authority: Khajod Disposal Site
</td></tr>
<tr><td>15.</td><td>Parking Details</td><td>
Total parking area requirement for the project as per GDCR: 2,668.62 m^2.
Parking area requirement for residential units as per GDCR: 2,668.62 m^2.
Total number of CPS requirement for the project as per NBC :176
Number of CPS requirement for residential units as per NBC: 176
Total Parking area provided (m^2) & No. of CPS: 5,961.29 m² and 197 CPS
Parking area provided in basement (m^2) & No. of CPS: 3,922.63 m^2 and 122 CPS.
Parking area provided in hollow plinth (m^2) & No. of CPS: 1,594.77 m^2 and 56 CPS.
Parking area provided as open surface (m^2) & No. of CPS: 443.89 m^2 and 19 CPS.
</td></tr>
<tr><td>16.</td><td>Traffic Management</td><td>
Width of adjacent public roads:18 m and 12 m TP road
Number of Entry & Exit provided on approach road/s: Two gates will be provided.
Width of Entry & Exit provided on approach road/s:7.5 m
Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation):4 m
Width of all internal roads: 7.5 m
</td></tr>
<tr><td>17.</td><td>Details of Green Building measures proposed.</td><td>Provision to install aerated coke (foam type) in wash basins, kitchen, low flush water closets in toilet and pressure reducing valves in water pipeline, rain water harvesting ground water recharge, maximum utilization of natural light, roof-top thermal insulation, CFL lighting fixtures in the common areas, appropriate design to shut out excess heat and gain loss, use of solar energy in external lighting (landscape lighting), use of aerated blocks etc.</td></tr>
<tr><td>18.</td><td>Energy</td><td>
Power supply:
</td></tr>
</table>

<table>
<tr><td></td><td>Requirement, Source and Conservation</td><td>Maximum demand:880 KW
Connected load:950 KW
• Source: Torrent Power
• Energy saving measures: Maximum utilization of natural light, roof-top thermal insulation, CFL lighting fixtures in the common areas, appropriate design to shut out excess heat and gain loss, use of solar energy in external lighting (landscape lighting), use of aerated blocks etc.
• DG Sets:
No. and capacity of the DG sets: 2 x 60 KVA
Fuel & its quantity: diesel (10 Liter/h)
Note : - D.G. Sets will be used in case of power failure or fire emergency</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>• During the construction phase: Fire extinguishers at various locations and easily accessible, to keep printed board showing important telephone number of fire, ambulance, hospital etc. training to the workers on safety aspects, first aid box at identified places within premises, doctor & ambulance services, provision of PPEs like helmet, gumboot/safety shoes, safety net, safety goggles etc.
• During the operation phase: Portable & mobile fire extinguishers, hose reel, wet riser, manually operated electric fire alarm system, terrace water tanks of 20 KL capacity, underground water tank of 100 KL, smoke detectors etc.
• Nearest fire station: Bhatar fire station.
Distance from project site: 4 km.</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>A,B,C,D
4 nos of building</td><td>B+H.P.+11</td><td>401.55</td><td>1</td><td>1.8 m</td><td>Less than 15 m</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 15 m
• No. & dimensions of RWH tank(s) :-
• No. and depth of percolations wells :2
• Details on Pre-treatment facilities :only roof top rainwater harvesting is proposed</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) :550
• Area covered by shrubs and bushes (m^2): 300
• Lawn covered area (m^2): 450
• Total Green Area (m^2): 1300
• Green Area % of plot area: 12.62 %
• No. of trees and species to be planted: 300</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan</td><td>Green belt development : 70 Lacs
Drainage and rain water harvesting: 50 lacs
Solar and energy saving: 30 lacs</td></tr>
</table>

	(Rs. in lacs)	Total: 150 Lacs
24.	Proposed dust control measures during the construction phase	Loading & transportation in covered trucks, covered shed provided for cement unloading activity, temporarily wind screen around project site, sprinkling of water on roads and in vicinity of storage area.
25.	Eco friendly building material usage details.	Fly ash brick, aerated blocks, paving blocks, RMC, lead free paints etc.
26.	Basic amenities to be provided to construction workers.	Drinking water & tap water, sanitation facilities, first aid box, free medicines, doctor service, PPEs etc.
27.	Documents related to land possession.	Village form no. 7 & 12 submitted by them shows that the N.A land of the project site for residential use is in the name of applicant Mr. Maheshbhai Maganbhai Jinjala & his family members.

During the meeting, it was presented that the project site is at a distance of about 3.2 km from river Tapi. After discussing the various aspects of the project, it was decided to recommend the project to SEIAA, Gujarat for grant of Environmental Clearance.

2.	Shanti Educational Initiatives Limited	S.No. 256/2, F.P.No.120, O.P.No.120, Makarba, Vejalpur, Ahmedabad	--

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

3.	Commercial building construction project by Mr. Sunnybhai R. Laheri.	T.P.S.No.19 (Parvat Magob), Block No. 68, O.P.No.38, F.P.No.56, Block No.68, Surat	Screening / scoping.

Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New project [SIA/GJ/NCP/52520/2016]
2.	Type of Project	Commercial project
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of Project	“Commercial Building Construction Project”
5.	Name of Developer	Sunnybhai R. Laheri
6.	Estimated Project Cost (Rs. in Crores)	10 Crores.
7.	Whether construction work initiated at site? If yes, details thereof	No

<table>
<tr><td>8.</td><td>Project Details</td><td>• Land/Plot Area (m^2): 6,465
• FSI area (m^2): 26,061.5
• Total BUA (m^2): 40,885.23
<table>
<tr><td></td><td>Permissible</td><td>Proposed</td></tr>
<tr><td>FSI Area (m^2)</td><td>26,506.5</td><td>26,061.5</td></tr>
<tr><td>Ground Coverage (m^2)</td><td>---</td><td>3,276.83</td></tr>
<tr><td>Common Plot Area (m^2)</td><td>646.5</td><td>646.5</td></tr>
<tr><td>Max. building height (m)</td><td>As per rule</td><td>48.71</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 + upper ground floor + 7 floors.
• No. & size of Residential Units: ---
• No. & type of Commercial Units: Total 384 shops.
• Details of amenities if any: None</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>1536 person commercial</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 19
• Source of water: Borewell water
• Waste water generation quantity (KL/day): 3.2
• Mode of disposal: Into 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>• Fresh water requirement (KL/day): 63
• Source of water: Water supply from Surat Municipal Corporation (SMC).
• Waste water generation quantity (KL/day): 57
• 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>Water supply & drainage connection of SMC will be available to the project during the operation phase.</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>1,650</td><td>500

1,150</td><td>It will be reused for tree plantation & development of garden area.
Surplus will be supplied to garden department of SMC.</td></tr>
<tr><td>Other excavated earth</td><td>60,390</td><td>3,000

57,390</td><td>It will be reused in development of internal road.

Surplus will be supplied to SMC for road development.</td></tr>
<tr><td>Construction</td><td>0.5</td><td>0.5</td><td>Used in column, footing</td></tr>
</table></td></tr>
</table>

debris		and foundation
Steel Scrap	0.3	0.3	Used in column, footing and foundation
Discarded packing materials	Cement & Plastic Bags		Cement bag partly reuse in curing purpose & partly sale out in open market while plastic bags will be sold out to the registered recycler or vendor

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste & wet waste	615	Into bins to be provided to each unit.	Final disposal through agency appointed by SMC.

- Details of segregation if to be done: No
- Capacity and no. of community bins to be placed within premises: 20 bins having volume 1.7 m^3
- Authority / agency involved in waste disposal : SMC
- Landfill site where waste will be ultimately disposed by local authority: At the nearest MSW collection point of SMC.

15.	Parking Details	• Total parking area requirement for the project as per GDCR: 7,933.93 m^2 • Parking area requirement for Commercial units as per GDCR: 7,933.93 m^2 • Total number of CPS requirement for the project as per NBC :529 • Number of CPS requirement for commercial units as per NBC: 529 • Total Parking area provided (m^2) & No. of CPS: 16,845.79 & 543 • Parking area provided in basement (m^2) & No. of CPS: 10,791.01 m^2 & 337 CPS • Parking area provided as open surface (m^2) & No. of CPS: 1,188.27 m^2 & 52 CPS. • Parking area provided in hollow plinth (m^2) & No. of CPS: 379.9 & 14 CPS. • Parking area provided as mechanical parking in basement (m^2) & No. of CPS: 4,486.6 m^2 & 140 CPS.
16.	Traffic Management	• Width of adjacent / approach road: 18 m approach road on south side. • No. of Entry and Exit: --- • Width of internal roads: 7.50 m • Minimum width of open path all around the buildings for easy access of fire tender: 6 m
17.	Green building features including measures for conservation of water	Use of Autoclave Aerated blocks & RMC, provision of aerated type water taps, solar based street lights, LED lightings fixtures and low voltage lightings in common areas, maximum use of natural ventilation & lighting, use of energy saving electrical appliances i.e. 5 star rated

<table>
<tr><td></td><td>& energy, use of eco-friendly building materials, etc.</td><td>inverter system etc.,</td></tr>
<tr><td>18.</td><td>Energy requirement, source and conservation</td><td>• Power supply-
Maximum demand 1000 KVA
Connected load:
• Source: DGVCL
• DG Set:
No. of D.G. sets: 2 x 50 KVA
Fuel & it quantity: HSD-50 lit/hour</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>During operation phase: Underground fire water storage tank of 35 KL, overhead water tank of 12 KL, hose reel, wet risers, fire extinguishers - 2 CO_2 type (4.5 kg) & 2 DCP type (5 kg) on each floor, 2 DCP type fire extinguishers of 50 kg capacity near electric panel, fire alarm & manual call points with sounders on each floor, automatic sprinkler system in basement, displaying of evacuation layout plan on each floor etc. will be provided.</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>Maximum Travel distance (m)</th><th>Height (m)</th></tr>
<tr><td>1 Building</td><td>2B+G+UG+7</td><td>2,960.46</td><td>2</td><td>1.6</td><td>24</td><td>48.71</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 30 feet in monsoon
45 feet in summer
• No. & dimensions of RWH tank(s): ---
• No. and depth of percolations wells: 3 nos.
• Details on Pre-treatment facilities: filtration.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2): 530 m^2 on periphery of Plot Boundary.
• Area covered by shrubs and bushes (m^2): ---
• Lawn covered area (m^2): NIL
• Total Green Area (m^2): 530 m^2
• Green Area % of plot area: 8.2 %
• No. of trees to be planted: 60 trees.</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>---</td></tr>
<tr><td>25.</td><td>Details of eco-friendly 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>Facilities to construction workers</td><td>Sanitation & drinking water facilities, welfare facilities as per Gujarat building & other construction workers rules & regulations</td></tr>
<tr><td>27.</td><td>Documents related to land possession</td><td>Village form no. 7 shows that the agricultural land is in the name of land owner. Land owner has made development agreement with the applicant for the proposed project. Copy of application made for</td></tr>
</table>

		obtaining N.A permission has been submitted.

During the meeting, while discussing about the provision of staircases in the proposed commercial building, the project proponent was suggested to provide staircase with less possible turnings and asked to submit the revised plans showing provision of a staircase as discussed during the meeting. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copy of permission from the concerned competent authority for the proposed FSI & ground coverage.
2. Copy of permission from concerned competent authority or authentic supporting documents for commercial use of the project site.
3. Details on provision to be made for minimum fire water storage based on the fire study.
4. 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.
5. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
6. Revised plans showing the provision of staircases with fewer or no turnings as discussed during the meeting.
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. Layout plan showing the entry / exit gates and width of entry / exit to be provided.
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. 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.
11. Distance of the project site from the Khadi in the vicinity and copy of permission from concerned competent authority in this regard.
12. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.

4.	Tapi Enclave	T.P.S.No-25(Singanpore-Tunki), F.P.No-81, O.P.No.47, R.S.No–83/p1+2 , Moje–Singanpore, Dist-Surat.	Screening / scoping & appraisal.

Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/52688/2016]
2.	Type of Project	Residential
3.	Project / Activity No. [8(a) or 8(b)]	8(a)

<table>
<tr><td>4.</td><td>Name of the project</td><td>Tapi Enclave</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>Talshibhai Karsanbhai Dobariya</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>Rs. 78.0 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): 6,915.0
• FSI area (m^2): 15,440.46
• Total BUA (m^2) : 20,409.49
<table>
<tr><td></td><td>Permissible</td><td>Proposed</td></tr>
<tr><td>FSI Area (m^2)</td><td>15,454.56</td><td>15,440.46</td></tr>
<tr><td>Ground Coverage (m^2)</td><td>1,970.31</td><td>1,440.12</td></tr>
<tr><td>Common Plot Area (m^2)</td><td>691.50</td><td>699.00</td></tr>
<tr><td>Max. building height (m)</td><td>--</td><td>37.58</td></tr>
</table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings: 04 Nos. (High Rise)
• No. of Blocks: 05
• Scope of buildings/blocks: 3 buildings – hollow plinth + 1st floor parking + 14 floors. 1 building – hollow plinth + 1st floor parking + 13 floors.
• No. & size of Residential Units: 204 Flats
• No. & type of Commercial Units: --
• Details of amenities if any: --</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>Expected residents: 1020
Expected shop users: --
Expected visitors: 500</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 15.0
• Source of water: Bore well
• Waste water generation quantity (KL/day): 2.40
• 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>• Fresh water requirement (KL/day): 148.0
• Source of water: Water supply from Surat Municipal Corporation (S.M.C)
• Waste water generation quantity (KL/day): 116.50
• Mode of disposal: Drainage line of Surat Municipal Corporation (S.M.C)</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Water supply & drainage line of SMC will be available to the project during operation phase of the project.</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	349.50	349.50	Reuse for developing garden area
Other excavated earth	whatsoever	--	Will be used for back filling & plinth filling.
Construction debris	214	102	Reused as a filler up to plinth level or reused in outer road development
Steel scrap	8	--	Sold to local scrap vendors
Discarded packing materials	5	--	Sold to local vendors

Operation Phase:

Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
Dry waste	367.20	Blue colour bucket	Through door to door waste collection system of S.M.C
Wet waste	244.80	Green colour bucket	Through door to door waste collection system of S.M.C

- Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste.
- Capacity and no. of community bins to be placed within premises: 1 m3 in each building
- Landfill site where waste will be ultimately disposed by local authority: Khajod Landfill site of SMC.

15. Parking Details

- Total parking area requirement for the project as per GDCR: 2,316.09 m^2
- Parking area requirement for residential units as per GDCR: 2,316.09 m^2
- Total number of CPS requirement for the project as per NBC : 102
- Number of CPS requirement for residential units as per NBC: 102
- Total Parking area provided (m^2) & No. of CPS: 5,755.0 m^2 & 216 CPS
- Parking area provided at 1st floor (m^2) & No. of CPS: 2,248.0 m^2 & 71 CPS.
- Parking area provided in hollow plinth (m^2) & No. of CPS: 1,062.0 m^2 & 38 CPS.
- Parking area provided as open surface (m^2) & No. of CPS: 2,445.0 m^2 & 107 CPS.

<table>
<tr><td>16.</td><td>Traffic Management</td><td>• Width of adjacent public roads: 18.0 m wide road in N direction.
• 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
• 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 m</td></tr>
<tr><td>17.</td><td>Details of Green Building measures proposed.</td><td>Use of fly ash based material, flush tank instead of direct flushing in toilets, foam type aerated coke, rain water harvesting, use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles at terrace areas, maximum use of natural light etc.</td></tr>
<tr><td>18.</td><td>Energy Requirement, Source and Conservation</td><td>• Power supply
Maximum demand: 2000 KVA
Source: D.G.V.C.L
• Energy saving measures: use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles at terrace areas, maximum use of natural light etc.
• DG Sets
No. and capacity of the DG sets: 125 KVA x 01
Fuel & its quantity: Low Sulphur High speed Diesel (HSD) & Quantity - 55 L/hr.</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>Fire extinguishers, hose reel, wet riser, automatic sprinkler system (basement), manually operated electric fire alarm system, underground fire water storage tank of 75 KL, terrace water tank of 10 KL for each building, one electric & one diesel pump of capacity 1620 L/min. & one electric pump of capacity 180 L/min. having pressure 3.5 kg/cm^2 at terrace level.</td></tr>
<tr><td>20.</td><td colspan="2">Details on staircase:
<table>
<tr><th>Bldg No.</th><th>Floor No.</th><th>Floor Area (m^2)</th><th>No. of Staircase</th><th>Width of Staircase (m)</th><th>Maximum Travel Distance up to the Staircase (< 30 m)</th></tr>
<tr><td>A</td><td>H.P+14</td><td>302.34</td><td>01</td><td>1.52</td><td>14.66</td></tr>
<tr><td>B</td><td>H.P+14</td><td>302.34</td><td>01</td><td>1.52</td><td>14.66</td></tr>
<tr><td>C</td><td>H.P+14</td><td>302.34</td><td>01</td><td>1.52</td><td>14.66</td></tr>
<tr><td>D-E</td><td>H.P+13</td><td>304.10</td><td>02</td><td>1.52</td><td>14.43</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 20.0 m
• No. & dimensions of RWH tank(s) : 04 nos. of RWH tanks;
size: 4 m x 3 m x 3 m
Size of Bore: 350 mm dia.
Size of pipe: 150 mm dia.
• No. and depth of percolations wells: 04 nos. of percolating wells.
• Details on Pre-treatment facilities: A de-silting chamber will be provided to de-silt and remove floating material through bar screen</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) : 325.0
• Area covered by shrubs and bushes (m^2): --
• Lawn covered area (m^2): 374.0
• Total Green Area (m^2): 699.0
• Green Area % of plot area: 10.10 %
• No. of trees and species to be planted: 55 trees of Asopalav, Coconut palm, Neem, Gulmohar etc.</td></tr>
</table>

23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Capital cost of Rs. 11.0 lacs and recurring cost of Rs. 2.90 lacs has been allocated towards purposes like rain water harvesting & ground water recharge, greenbelt development, air, water / waste water & solid 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.	N.A orders submitted shows that the land admeasuring 1015 m2 of F.P.No. 81 for residential use is in the name of applicant whereas the land admeasuring 5900 m2 of F.P.No. 81 for residential use is in the name of persons other than the applicant/project proponent.

During the meeting, it was observed that the project site is at a distance of 320 m from river Tapi. They have obtained a permission from Airports Authority of India for building height of After discussing various aspects of the project, it was decided to consider the project only after verifying the distance of the project site from river Tapi through site visit by GPCB and after submission of the following:

1. Realistic details on parking area provision for the project based on the actual parking area available at the 1st floor.
2. Land possession documents showing ownership of the entire land of the proposed project by the applicant / project proponent.

5.	Shiv Business Hub	S.No. 515, 516/1, F.P.No.137, T.P.S.No. 111 (Nikol), Moje: Nikol, Asarwa, Ahmedabad.	Screening / scoping.

Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/52777/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Shiv Business Hub
5.	Name of Developer	Shree Umeshbhai Vinubhai as Vinodbhai Patel
6.	Estimated Project Cost (Rs. In Crores)	60
7.	Whether construction work has been initiated at site? If yes, details	No

<table>
<tr><td></td><td>thereof</td><td></td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 5,767.0
• FSI area (m^2): 15,570.85
• Total BUA (m^2): 26,900.65
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>15,570.9</td><td>15,570.85</td></tr><tr><td>Ground Coverage (m^2)</td><td>2,460.08</td><td>2,460.08</td></tr><tr><td>Common Plot Area (m^2)</td><td>576.70</td><td>673.02</td></tr><tr><td>Max. building height (m)</td><td>26.92</td><td>26.92</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings:2
• No. of Blocks:2
• Scope of buildings/blocks: 1 building – 2 level basement + ground floor + 6 floors. 1 building – 2 level basement + ground floor + 7 floors.
• No. & size of Residential Units: Not Applicable
• No. & type of Commercial Units: Total 173. [Shops: 86 units, Show Rooms: 10 units; Offices: 77 units]
• Details of amenities if any: None</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 construction phase</td><td>• Water requirement (KL/day): 21.15
• Source of water: Local water tankers.
• Waste water generation quantity (KL/day):2.52
• Mode of disposal: Soak pit / septic tank system
• Details of reuse of water, if any:- None</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Fresh water requirement (KL/day): 50.18
• Source of water: Water supply from Ahmedabad Municipal Corporation (AMC).
• Waste water generation quantity (KL/day): 38.25
• 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>Water supply & drainage connection of AMC will be available to the project during operation phase of the project.</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>1,153</td><td>1,153</td><td>Will be used for developing garden area.</td></tr><tr><td>Other excavated earth</td><td>17,301</td><td>17,301</td><td>Backfilling the low lying areas</td></tr><tr><td>Construction debris</td><td>500</td><td>500</td><td>For plinth filling & internal road development.</td></tr><tr><td>Steel scrap</td><td>1,500 – 1,800</td><td>-</td><td>Sold to Scrap</td></tr></table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>kg</td><td></td><td>Vendor</td></tr>
<tr><td>Discarded packing materials</td><td>500 kg</td><td>-</td><td>Sold to Scrap 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 waste & wet waste</td><td>177.20</td><td>Into bins to be provided to each unit and consequently into the common bins to be provided in common areas.</td><td>Through agency appointed by AMC.</td></tr>
</table>
• Details of segregation if to be done: No.
• Capacity and no. of community bins to be placed within premises: 31nos. of bins of 80 lit. capacity.
• Landfill site where waste will be ultimately disposed by local authority: at the nearby MSW landfill / dumping site of AMC.
</td></tr>
<tr><td>15.</td><td>Parking Details</td><td>• Total parking area requirement for the project as per GDCR: 7,785.42 m^2
• Parking area requirement for Commercial units as per GDCR: 7,785.42 m^2
• Total number of CPS requirement for the project as per NBC :251
• Number of CPS requirement for commercial units as per NBC: 251
• Total Parking area provided (m^2) & No. of CPS: 8,111.20 & 269
• Parking area provided in basement (m^2) & No. of CPS:-7,082.28 m2 & 221 CPS.
• Parking area provided as open surface (m^2) & No. of CPS: 1,028.92 & 48 CPS.</td></tr>
<tr><td>16.</td><td>Traffic Management</td><td>• Width of adjacent public roads: 60 m & 30 m
• Number of Entry & Exit provided on approach road/s: 2 entry / exit
• Width of Entry & Exit provided on approach road/s: ---
• 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:--</td></tr>
<tr><td>17.</td><td>Details of Green Building measures proposed.</td><td>Solar lights in common sunlit areas, solar street lights, maximum use of CFL/LED lights, use of variable frequency drive motors, rain water harvesting through ground water recharge etc.</td></tr>
<tr><td>18.</td><td>Energy Requirement, Source and Conservation</td><td>• Power supply: Torrent Power Ltd.
Maximum demand:800 kw
Connected load:800 kw
Source: Torrent Power Ltd.
• DG Sets:-</td></tr>
</table>

<table>
<tr><td></td><td></td><td>No. and capacity of the DG sets:- 1x 250 KVA
Fuel & its quantity:- HSD; 100 lit/hr</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>Underground tank (100 KL) & overhead water tank (20 KL) with fire hydrants system, fire water mains with hose pipe at each floor, sprinklers system at basement area and on each floor, fire alarm call point at each floor with sounders capable of being heard all throughout the building, 4.5 kg capacity CO_2 type and 5 kg capacity DCP type fire extinguishers at each floor 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>Maximum Floor area (m^2)</th><th>No. of staircase</th><th>Width of the staircase(m)</th><th>Maximum travel distance (m)</th></tr>
<tr><td>A</td><td>2B+G+6</td><td>1438.53</td><td>4 staircases up to 2nd floor and 2 staircases from 3rd to 6th floors.</td><td>1.50</td><td><29</td></tr>
<tr><td>B</td><td>2B+G+7</td><td>372.94</td><td>1</td><td>1.50</td><td><28</td></tr>
</table></td></tr>
<tr><td>21.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 200 m
• No. & dimensions of RWH tank(s) :3 m x 3 m x 3.0
• No. and depth of percolations wells :2 nos.
• Details on Pre-treatment facilities :Filtration.</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2): 673.02
• Area covered by shrubs and bushes (m^2):---
• Lawn covered area (m^2):---
• Total Green Area (m^2): 673.02
• Green Area % of plot area: 11
• No. of trees and species to be planted:87</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>---</td></tr>
<tr><td>24.</td><td>Proposed dust control measures during the construction phase</td><td>All the loose material either stacked or transported will be provided with suitable covering such as tarpaulin. Water sprinkling will be done at the locations where dust generation is anticipated and on the storage of sand and loose construction materials. Use of Ready Mix Concrete (RMC).</td></tr>
<tr><td>25.</td><td>Eco friendly building material usage details.</td><td>Use of fly ash bricks, fly ash cement (PPC), paving blocks, lead free paints etc.</td></tr>
<tr><td>26.</td><td>Facilities to be provided to the construction workers</td><td>Sanitation facilities, drinking water, regular health check up, shelter etc.</td></tr>
</table>

27.	Documents related to land possession.	N.A order submitted by them shows that the land for commercial use is in the name of applicant Mr. Umeshbhai Vinubhai as Vinodbhai Patel.

During the meeting, it was observed that location of both the ramps of basement is in the margin areas and may obstruct the free movement of fire tender in case of emergency like fire. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Permission from concerned competent authority / authentic supporting documents showing the availability of the proposed FSI to the project.
2. Details on parking area provision for the project, based on the actual parking area requirement for the project as per the NBC norms, along with back up calculation and parking plan. In case of providing mechanical parking, the details of mechanical parking (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) feasibility of providing mechanical parking considering the basement / hollow plinth height etc. should also be provided.
3. Revised layout plan showing provision of entry/ exit & their width and the location of ramps in such a manner that they do not obstruct the free movement of fire tender in case of emergency like fire.
4. Details on provision to be made for minimum fire water storage based on the fire study. Floor wise emergency evacuation plan.
5. 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.
6. 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.
7. 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.
8. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
9. Perspective view of the building(s) to be constructed along with the materials used such as fibers, glass, etc. on the facades or external walls and the impacts thereof on the nearby buildings / residents due to heat island effect and emissions from the air conditioning systems.
10. Details on municipal solid waste & E-waste management & disposal plan.
11. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.

6.	Balvantbhai Chhodavadiya	B.No.10,11, F.P.No.55,56, O.P.No.55,56, T.P.S.No.22 (Sarthana - Valak), Dist; Surat.	---

The project proponent has withdrawn the online application of the proposed project. It was decided to delist the proposal from the list of application pending with the SEAC and to close the file.

7.	Vibrant City	S.No.433, B.No.11, City Survey No.4688, Garden road, Mahuva, Dist: Bhavnagar.	Screening / scoping

Details of the proposed project as presented before the committee is tabulated below:

<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/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 construction phase</td><td>• Water requirement (KL/day): 25.0
• Source of water: Mahuva Nagar Palika water supply
• Waste water generation quantity (KL/day): 3.0
• 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>• Fresh water requirement (KL/day): 199.0
• Source of water: Mahuva Nagar Palika water supply
• Waste water generation quantity (KL/day):160.0
• Mode of disposal: Into drainage line of Mahuva Nagarpalika after reuse of treated sewage within premises. .</td></tr>
</table>

13.	Status of water supply and drainage line	----
14.	Solid waste Management	• 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 site of Mahuva Nagarpalika.
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 :147 • Total Parking area provided (m^2) & No. of CPS: 8,280.93 m^2 & 258 CPS • Parking area provided in basement 1(m^2) & No. of CPS: 3,062.16 m^2 & 95 CPS • Parking area provided in basement 2(m^2) & No. of CPS: 5,218.77 m^2 & 163 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: 6m & 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 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: External fire hydrant system, wet riser system, sprinkler system for offices/ basements & all parking levels and all common areas, portable fire extinguisher etc.

20.	Details on staircase	---
21.	Rain Water Harvesting (RWH)	• Methods of Rainwater Harvesting Surface runoff harvesting Roof top rainwater harvesting
22.	Green area details	• 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
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	---
24.	Dust control measures	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.
25.	Eco friendly building materials	---
26.	Facilities to be provided to the construction workers	Sanitation facilities & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.
27.	Documents related to land possession.	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.

During the meeting, 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.

8.	Matruchhaya Residency	Block No. 538, Moje: Tarva, Dist: Bharuch.	Screening / scoping.

Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/52981/2016]
2.	Type of Project	Residential
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Matruchhya Residency
5.	Name of Developer	Bhavya Enterprise

<table>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>37 crore</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>Construction activity started because previously in Bharuch District R1 zone was applicable and according to R1 zone project was not falling under purview of EIA Notification 2006 and therefore construction activity was started. Then after R2 zone was declared due to which they have got more FSI and fall under the criteria of Environmental Clearance.</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 20,900.0
• FSI area (m^2): 18,266.42
• Total BUA (m^2): 23,096.94

<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area</td><td>20,900.0</td><td>18,266.42</td></tr><tr><td>Ground Coverage</td><td>----</td><td>6,123.40</td></tr><tr><td>Common Plot Area</td><td>----</td><td>2,150</td></tr><tr><td>Max. building height</td><td>---</td><td>27.0</td></tr></table></td></tr>
<tr><td>9.</td><td>Building Details</td><td>• No. of Buildings: 96 tenements & 3 buildings
• No. of Blocks: 96 tenements & 3 blocks
• Scope of buildings/blocks: Tenements – Ground + 1 floor. Buildings - hollow plinth + 8 floors.
• No. & size of Residential Units: 192 Flats and 96 Tenements
• No. & type of Commercial Units: ---
• Details of amenities if any: ---</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>1296</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 20.25
• Source of water: Tanker
• Waste water generation quantity (KL/day): 9.73
• Mode of disposal: Septic Tank & Soak Pit
• Details of reuse of water, if any: 4 KLD for curing</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day): 247.0
• Fresh water requirement (KL/day): 118.0
• Source of water: Water supply from Tarva Gram panchayat.
• Waste water generation quantity (KL/day): 141.0
• Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be completely used for gardening, flushing and car & floor washing purpose within premises.
• In case of STP provision, capacity of STP: Yes, 150 KL/day
• STP Technology: conventional with biological treatment
• Purposes for treated water utilization: Gardening and flushing
• Quantity of treated water to be reused:
1.Gardening:(KL/day):11.0
2. Flushing (KL/day):58.0.0
3. Car & washing purpose:60.0
• Provision of dual plumbing system (Yes/No): yes</td></tr>
</table>

<table>
<tr><td></td><td></td><td>• Quantity and type (treated/untreated)of water to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be completely used for gardening, flushing and car & floor washing purpose within premises.
• Mode of disposal: ---</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:

Soil will be excavated due to levelling and footing only and it will be used back filling & plinth filling. Top soil will be used in Greenbelt development within premises. Construction debris will be used for back filling & plinth filling
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 & wet waste</td><td>800.0</td><td>Into bins to be provided to each unit.</td><td>Bio degradable waste will be disposed into near by bins and non biodegradable waste will be sold to vendors</td></tr>
</table>
• Details of segregation if to be done: Green bins for bio degradable waste & White bins for non biodegradable waste.
• Capacity and no. of community bins to be placed within premises: Total 725 bins of 5 litre to 25 litre capacity.
• Landfill site where waste will be ultimately disposed by local authority: ---</td></tr>
<tr><td>15.</td><td>Parking Details</td><td>• Total parking area requirement for the flats as per GDCR: 2,727.80 m^2
• Number of CPS requirement for the flats as per NBC: 96
• Total Parking area provided (m2) for flats & No. of CPS: 4,917.28 m^2 , CPS - 199
• Parking area provided in hollow plinth (m^2) & No. of ECS: ECS: 2,046.22 m^2 , CPS - 74
• Parking area provided as open surface (m^2) & No. of CPS: 2,870.62 m^2 and 125 CPS.
• Parking space for tenements will be provided within premises of individual tenement.</td></tr>
<tr><td>16.</td><td>Traffic Management</td><td>• Width of adjacent public roads: Proposed 30 m on Southern side
• Number of Entry & Exit provided on approach road/s: 01
• 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): 6.0 m
• Width of all internal roads: 3 m, 4 m, 5.5 m & 6 m.</td></tr>
<tr><td>17.</td><td>Details of Green Building</td><td>Maximum use of natural light through architectural design, use of energy efficient motor and pumps, maximum use of aerated blocks, use of CFL &</td></tr>
</table>

<table>
<tr><td></td><td>measures proposed.</td><td>low voltage lighting, solar lighting in open and landscape areas, rooftop thermal insulation, ground water recharge through rain water harvesting, provision of STP & reuse of treated sewage within premises etc.</td></tr>
<tr><td>18.</td><td>Energy Requirement, Source and Conservation</td><td>• Power supply:
Maximum demand: 1500 KVA
Connected load:----
• Source: Dakshin Gujarat Vij Company Ltd
• Energy saving measures: Maximum use of natural light through architectural design, use of energy efficient motor and pumps, maximum use of aerated blocks, use of CFL & low voltage lighting, solar lighting in open and landscape areas, rooftop thermal insulation
• DG Sets:
No. and capacity of the DG sets: 1 X 125 KVA
Fuel & its quantity: HSD 25 litre/hr</td></tr>
<tr><td>19.</td><td>Fire and Life Safety Measures</td><td>• Fire extinguishers, hose reel, down comer, manually operated electric fire alarm system, terrace tanks of 25 KL on each building, automatic fire detection & alarm system, pump capacity at the terrace tank level with minimum pressure of 2.0 kg/cm^2- 900 lit/min etc.
• Name of the nearest fire station: Bharuch Nagarpalika Fire station
Distance from the project site: About 10.0 Km
Time required by the fire tender to reach the project site: 20 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>Floor Ht. (m)</th><th>No. of staircase</th><th>Width of the staircase (m)</th><th>Travel distance (m)</th></tr>
<tr><td>A</td><td>P + 8</td><td>538.72</td><td>27.0</td><td>4</td><td>1.5</td><td rowspan="3">Max 16 m</td></tr>
<tr><td>B</td><td>P + 8</td><td>420.74</td><td>27.0</td><td>1</td><td>1.5</td></tr>
<tr><td>C</td><td>P + 8</td><td>420.74</td><td>27.0</td><td>1</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 : 6
• Details on Pre-treatment facilities : Desilting cum filter chamber</td></tr>
<tr><td>22.</td><td>Green area details</td><td>• Tree covered area (m^2) : 1000
• Area covered by shrubs, bushes and lawn (m^2): 1150
• Total Green Area (m^2): 2150
• Green Area % of plot area: 10.28
• No. of trees and species to be planted: 500</td></tr>
<tr><td>23.</td><td>Budgetary allocation for Environmental Management Plan
(Rs. in lacs)</td><td>-----</td></tr>
<tr><td>24.</td><td>Proposed dust control measures</td><td>Dust suppression by spraying of water, peripheral barricading the project site, covering the construction material during transportation and storage, compaction of soil during various construction activities</td></tr>
</table>

	during the construction phase	
25.	Eco friendly building material usage details.	Fly ash bricks/fly ash blended concrete blocks, fly ash paving blocks.`
26.	Details on amenities to be provided to construction workers	Welfare facility will be provided as per Gujarat Building and Other Construction Worker Rules and Regulations
27.	Documents related to land possession.	N.A order for residential use for the project site is in the name of applicant Mr. Mahendrasinh C. Solanki.

During the meeting, while asking by the committee, the project proponent replied that they have started construction activity at the project site because the built up area of the project was less than 20,000 m2. Later on due to availability of additional FSI to the project after zone change of the area from R1 to R2, the built up area of the project becomes more than 20,000 m^2 and hence comes under the purview of the EIA Notification, 2006. The project proponent was suggested make provision of utilizing solar energy. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copies of zoning certificates obtained from concerned competent authority, authentic supporting documents showing provisions of availability of FSI to the projects based on the zones.
2. Copy of plans passed by the concerned competent authority for the project for built up area less than 20,000 m^2. Date of starting the construction activity at the project site.
3. Details of the construction work completed in terms of the percentage of the total construction area of the project. Justification for initiating the construction activity for the proposed project and as to why the construction activity started by them should not be considered as violation of the EIA Notification-2006.
4. Recent photographs of the project site showing the date and current status of the project site.
5. Details on plot area of individual type of tenements, ground coverage, open space & parking space available within premises of each individual type of tenements.
6. Status of water supply, drainage connection & municipal solid waste collection facility to the proposed project and copy of concerned authority in this regard.
7. Layout plan showing two separate gates.
8. 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.
9. Details on solar energy utilization for the proposed project.

9.	Prerna Aartika	S.No.- 695/2, O.P. No.- 150/2, F.P. No. 150/2,Taluka- Sanand, District- Ahmedabad	Screening / scoping.

Details of the proposed project as presented before the committee is tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/53003/2016]
2.	Type of Project	Commercial project
3.	Project/Activity	Category 'B', 8(a)

<table>
<tr><td></td><td>No. [8(a)or 8(b)]</td><td></td></tr>
<tr><td>4.</td><td>Name of the project</td><td>“Prerna Aartika”</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>“M/s. Prerna Infrabuild Ltd.”</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. in Crores)</td><td>43 Crores</td></tr>
<tr><td>7.</td><td>Whether construction work has been initiated at site? If yes, details thereof</td><td>No any construction activity has been initiated at site.</td></tr>
<tr><td>8.</td><td>Project Details</td><td>• Land / Plot Area (m^2): 9,534.0
• FSI area (m^2): 21,447.73
• Total BUA (m^2): 36,730.21
<table><tr><td></td><td>Permissible</td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>21,451.50</td><td>21,447.73</td></tr><tr><td>Ground Coverage (m^2)</td><td>5,756.14</td><td>5,756.14</td></tr><tr><td>Common Plot Area (m^2)</td><td>953.40</td><td>1091.62</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: 1
• No. of Blocks: 1
• Scope of buildings/blocks: 2 level basement + ground floor + 4 floors.
• No. & size of Residential Units: ---
• No. & type of Commercial Units: Shops (113), Office (376) and Theatre (4 screens x 120 seats = 480 seats)</td></tr>
<tr><td>10.</td><td>No. of expected residents / users</td><td>Fixed Population considered for the project: 3435
Floating population: 978</td></tr>
<tr><td>11.</td><td>Water & waste water details during construction phase</td><td>• Water requirement (KL/day): 18
• Source of water: Local water tankers
• Waste water generation quantity (KL/day): 2
• Mode of disposal: Septic tank / soak pit system
• Details of reuse of water, if any: None</td></tr>
<tr><td>12.</td><td>Water & waste water details during operation phase</td><td>• Total water requirement (KL/day):106.0
• Fresh water requirement (KL/day): 29.0
• Source of water: Water supply from Sanand Nagarpalika / Ahmedabad Urban Development Authority.
• Waste water generation quantity (KL/day): 83.0
• Mode of disposal: Sewage to be generated during the operation phase of the project will be treated in the proposed onsite STP. Treated sewage will be completely used for flushing purpose within premises.
• In case of STP provision, capacity of STP: STP Capacity – 100 KL/day
• STP Technology: comprising of primary + secondary + tertiary treatment</td></tr>
</table>

<table>
<tr><td></td><td></td><td>facilities.
• Purposes for treated sewage utilization: Treated sewage will be utilized for flushing.
• Quantity of treated water to be reused: Flushing (KL/day): about 83.0
• Provision of dual plumbing system (Yes/No): Yes
• Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated during the operation phase of the project will be treated in the proposed onsite STP. Treated sewage will be completely used for flushing purpose within premises.
• Mode of disposal: As above.</td></tr>
<tr><td>13.</td><td>Status of water supply and drainage line</td><td>Source of water: Sanand Nagarpalika/ AUDA
The domestic wastewater (sewage) will be treated in the proposed onsite STP and treated sewage will be 100% reused in flushing.
In case of emergency, treated sewage will be discharged into proposed Sanand Nagarpalika / AUDA drainage system.</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>4000</td><td>4000</td><td>Will be stored onsite and used for development of greenbelt.</td></tr>
<tr><td>Other excavated earth</td><td>36,000</td><td>36000 m^3 will be reused for re-filling of foundation & plinth, green belt and levelling low lying areas at project site itself.</td><td>Excess (if any) will be sent to another site where need may be exist.</td></tr>
<tr><td>Construction debris</td><td>300</td><td>300</td><td>Will be used for levelling, roads, pavements etc.</td></tr>
<tr><td>Steel scrap</td><td>Whatsoever</td><td>--</td><td>Will be returned to supplier or sold to scarp dealer / end users.</td></tr>
<tr><td>Discarded packing materials</td><td>Whatsoever</td><td>--</td><td>Will be returned to supplier / sold to authorized recycler</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>
</table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Dry waste</td><td>427 kg/day</td><td>Two separate bins (one for dry and one for wet waste) each of 10 L capacity will be provided to each unit. These bins will be emptied in to community bins provided at various locations.</td><td>The said common community bins will be regularly emptied by Sanand Nagarpalika / AUDA</td></tr>
<tr><td>Wet waste</td><td></td><td></td><td></td></tr>
<tr><td>STP Sludge</td><td>What so ever</td><td>Will be properly collected in HDPE bag and stored in a separate designated place.</td><td>Will be used as low grade soil conditioner within the premises.</td></tr>
</table>
• Details of segregation if to be done: Two separate bins (one for dry and one for wet waste) each of 10 L capacity will be provided to each unit.
• Capacity and no. of community bins to be placed within premises:
• 40 community bins of 80 lit capacity will be provided at various locations
• Landfill site where waste will be ultimately disposed by local authority: ---
</td></tr>
<tr><td>15.</td><td>Parking Details</td><td>• Total parking area requirement for the project as per GDCR: 10723.8 m^2
• Parking area requirement for Commercial units as per GDCR: 10723.8 m^2
• Total number of CPS requirement for the project as per NBC : 217 CPS
• Number of CPS requirement for commercial units as per NBC: 217 CPS
• Total Parking area provided (m^2) & No. of CPS: 11,676.1 m^2 & 381 ECS
• Parking area provided in basement (m^2) & No. of CPS: Basement-1: 5095.89 m^2 & 159 CPS and Basement-2: 5180.45 & 162 CPS
• Parking area provided as open surface (m^2) & No. of CPS: Open space margin: 378.89 m^2 & 16 CPS and C.P.: 1021.07 m^2 & 44 CPS.</td></tr>
<tr><td>16.</td><td>Traffic Management</td><td>• Width of adjacent public roads: 40 m wide Viramgam - Sanand highway in South direction of project site and 30 m wide TPS road in East direction of the project site.
• Width of Entry & Exit provided on approach road/s: 9 m & 3 m. Number of Entry & Exit provided on approach road/s: 3 gates including one gate of 9 m width, one 3 m entry / exit & one basement entry.
• 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: Main internal approach road 9 m & 3 m.</td></tr>
<tr><td>17.</td><td>Details of Green Building measures proposed.</td><td>Maximum use of Ready Mix Concrete (RMC), fly ash paver blocks for pavements/walkways, most of the carpentry structures will be made up of processed engineering wood instead of wood, maximum use of Portland Pozzolona Cement (PPC) containing high amount of fly ash, PVC electrical boards, aluminium window frame & marble door frame instead of wood, ground water recharge through rain water harvesting with the help of 3 percolation wells, maximize the use of light colours in the building envelope - to reduce heat absorption and associated cooling requirements, solar lights</td></tr>
</table>

		in common sunlit areas etc.
18.	Energy Requirement, Source and Conservation	• Power supply: M/s. UGVCL. Maximum demand: Estimated requirement During construction phase: 100 kW and During operation phase: 2.5 MW. Connected load: Will be applied once EC will be granted • Source: M/s.UGVCL. • Energy saving measures: Use of solar lighting in common sunlit areas, maximum use of LED lights in each block, use of variable frequency drives motors to optimize power consumption, the individual building block has been oriented so as to have maximum natural daylight as well as ventilation, use of building material having lower U-value and the insulating material having higher R-value to have optimum energy performance, maximize the use of light and silent colours in the building envelope so that UV absorption is reduced and associated cooling requirements are minimized etc. • DG Sets: One DG set will be provided as stand by No. and capacity of the DG sets: One DG set will be provided as stand by Fuel & its quantity: HSD. DG set will be used during emergency only.
19.	Fire and Life Safety Measures	• Nearest fire station is Bodakdev fire station which is approx. 14 km. Time required for a fire tender to reach at the project site is 30 -35 minutes. • During operation phase: 2 underground water storage tanks. One of 1,00,000 liters capacity and the other one of 1,65,000 liters capacity will be provided. Fire extinguishers will be provided • During the construction phase: Fire extinguishers in common areas, personal protective equipments like earplugs, dust masks, safety shoes, helmets, hand gloves, etc will be provided to all workers, all workers will be trained to use welding shields and follow safer practices, provision of first aid facilities & related training to the construction workers, maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition, “H” frame scaffolds & ladders made of mild steel, completely concealed copper wiring, all electrical fittings / equipments used will meet the relevant IS standards etc.
20.	Details on staircase	
21.	Rain Water Harvesting (RWH)	• Level of the Ground water table: depth of water level 40 m as per CGWB report • No. & dimensions of RWH tank(s): 3 RWH structures of 0.25 m dia. will be provided. • No. and depth of percolations wells: 3 RWH structures

No. of floors	Maximum floor area (m^2)	No. of staircase / Lifts	Width of the staircase (m)	Travel distance (m)
2B+G+4	3445.13	8 staircases 8 lifts	1.52 – 2.0	Approx. 20

		• Details on Pre-treatment facilities: Before recharging rain water, suitable arrangements of filtering (preferably sand filtration media) will be provided. Gratings at mouth of each drainpipe will be provided on terraces to trap leaves, debris and floating materials. Filter media will be cleaned before every monsoon season. First rain separator will be provided to flush off first rains. During rainy season, the whole system (roof catchment, pipes, screens, first flush and filters) will be checked before and after each rain and preferably cleaned after every dry period exceeding a month.
22.	Green area details	• Tree covered area (m^2) : 513 • Area covered by shrubs and bushes (m^2):-- • Lawn covered area (m^2): -- • Total Green Area (m^2): 513 • Green Area % of plot area: 5.3% • No. of trees and species to be planted: Local species such as Ashok, Sevan, Jambu, Guava, Kadam etc. will be preferred for plantation.
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Budgetary allocation of Rs. 4.0 lacs & Rs. 15.0 lacs has been proposed for Environmental Management Plan during the construction phase & operation phase respectively.
24.	Dust control measures	Temporary windshield barriers, regular water sprinkling, tarpaulin sheet cover on the material during the transportation, maximum use of Ready Mix Concrete (RMC), uniform piling of sand and proper storage to avoid dusting.
25.	Eco friendly building materials	Maximum use of Ready Mix Concrete (RMC), fly ash paver blocks for pavements/walkways, most of the carpentry structures will be made up of processed engineering wood instead of wood, maximum use of Portland Pozzolona Cement (PPC) containing high amount of fly ash.
26.	Facilities to be provided to the construction workers	Sanitation facilities, drinking water, municipal solid waste collection facility etc.
27.	Documents related to land possession.	Village form no. 7 & 12 and N.A order submitted by them shows that N.A land for commercial use is in the name of land owner Ms. Shradhha Kothari. Registered copy of sale deed between the land owner & Ms. Nalini Shah has been submitted. M/s Prerna Infrabuild has entered into the development agreement with Ms. Nalini Shah for the proposed project and a copy of the same has been submitted.

During the meeting, it was observed that they have submitted details of Environment Management Plan with its budgetary allocation but not considered the financial provision to be made for the proposed onsite STP. Further it was observed that the parking area requirement for the project was calculated considering the population of Sanand taluka. It was presented that CO sensors at all the corners & in centre of the basement and ventilators (natural & mechanical) will be provided in the basement. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Exact details on availability of water supply, drainage connection & municipal solid waste collection

facility during operation phase of the proposed project. Copy of receipt obtained from concerned authority against the charges paid by them or permission / letter of intent from concerned competent authority showing the availability of these facilities to the project.

2. Details on municipal solid waste & E-waste management & disposal plan.
3. Details on parking area provision for the project, based on the actual parking area requirement for the project as per the NBC norms, along with back up calculation and parking plan. 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.
4. Details on operation & maintenance of STP during operation phase of the project along with financial provision made for its installation, operation & maintenance.
5. Details of the D.G. sets including fuel, quantity, stack height, location as well as the acoustic measures proposed to abate noise pollution.
6. 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.
7. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.
8. 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.
9. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.

10.	GMERS Medical College & Hospital	at S.No.14/B, 26, 27, Kharvad Ground, Sipor road, Vadnagar ring road, Vadnagar, Dist: Mehsana.	Screening/ scoping.

The project proponent vide proposal no. SIA/GJ/NCP/11134/2016 dated 11/05/2016 submitted an application for obtaining environmental clearance for medical college & hospital. Built up area of the project will be 1,63,900.22 m^2. Land area of the proposed project is 90,118.0 m^2. As the built up area of the project is >1,50,000 m^2, it falls in the project / activity no. 8(b) as per the schedule annexed with the EIA Notification 2006.

Presentation made before the committee included the details like location of the project site, scope of the project, water & waste water details, power requirement, MSW generation & management, parking area provision, proposed safety measures, details of green belt development, rain water harvesting & ground water recharge etc.

During the meeting, it was presented that they have already started baseline study from March-2016 and requested to allow them to use the same for preparation of the EIA study. The request was considered by the committee. After detailed discussion, the project proponent was asked to prepare EIA report incorporating the following additional Terms of Reference and to carry out the EIA study covering 5 Km radial distance from the project boundary.

1. Notarized undertaking stating that the construction activity for the proposed project will be carried out

only after obtaining prior Environmental Clearance from SEIAA Gujarat.

2. A single layout plan showing location of buildings, roads, D.G.sets, STP, parking provision, green belt (tree covered area), common plot, location of percolation wells etc. with different colour codes.
3. Provision of separate entry & exit and adequate margin all round the periphery for easy unobstructed movement of fire tender without reversing.
4. Implementation schedule of the project along with the bar chart.
5. A map of the study area delineating the major topographical features such as land use, drainage, locations of habitats, environmental sensitive areas, major constructions including roads, railways, pipelines, industries if any in the area are to be mentioned.
6. Land use map of the study area based on high resolution satellite imagery delineating the forest, agricultural land, water bodies, settlements and other cultural features. Details of change / creation in land use / land cover due to the proposed project.
7. Details of site topography along with the contour plan of the project area. Details of change in topography of the area due to the project.
8. Scope of all the buildings to come up in the project. Height of the buildings to come up in the project. Break up of FSI, built up area plot wise, block & building wise plan & area statement.
9. Details about no. of beds in the hospital, fixed population, expected occupancy as well as floating population including visitors considered for the proposed project.
10. Source of water supply during the construction phase along with the expected quantity of the water requirement. Waste water disposal plan during the construction phase.
11. Detailed fresh water consumption based on activity and area of the project as per the NBC norms. Exact source of water supply during operation phase. Permission from the concerned authority for water supply.
12. Domestic waste water disposal plan during operation phase and permission of concerned authority for sewage disposal.
13. Details of the STP with size of each unit, its location on the plan and its adequacy. Measures proposed to prevent odour nuisance due to the STP operation. Provision of dual plumbing, if any, for reuse of treated sewage for purposes like flushing, cooling tower make up etc.
14. Details of water conservation measures including provision of low water consuming devices.
15. Application wise break up of treated sewage utilization. Adequacy of open land area available for utilizing treated sewage for plantation / gardening. Suitability of use of treated sewage on the land with respect to the soil characteristic etc. shall be studied and a report in this regard shall be submitted.
16. Details of storm water management. Detailed plan to manage treated sewage in monsoon season. How it will be ensured that treated sewage won't flow outside the premises linked with storm water during high rainy days.
17. 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.
18. Details of top soil management plan during construction phase. If the topsoil is proposed to be preserved, the details relating to the quantity of topsoil stored, demarcated area on plan where it is stored along with preservation plan is to be given.
19. Engineering controls proposed for dust control including barricading the site during the construction

period.

20. Details on impacts of air emission from the vehicles during the construction and operation phases, emission during loading, unloading, transportation and storage of construction materials etc. and mitigation measures thereof should be incorporated in the EIA report.
21. Details of the D.G. sets including fuel, quantity, stack height, location as well as the acoustic measures proposed to abate noise pollution.
22. Map of the study area clearly delineating the location of monitoring stations for air, water, soil and noise, superimposed with location of habitats are to be shown. Primary data shall be collected for one season except rainy season.
23. Details of base line ambient air quality monitoring data of one season other than monsoon for at least five locations in 5 km study area and impact analysis due to the proposed project. Parameters namely PM_{10}, $PM_{2.5}$, NO_2, SO_x and CO shall be considered. Air quality modelling shall be carried out for prediction of impact of the project on the air quality of the area. The details of the model used and the input parameters used for modeling shall be provided. The air quality contours shall be shown on the location map clearly indicating the location of site, location of sensitive receptors, if any, and habitation. Latest available IMD data shall be utilized.
24. Details of incremental pollution load on the ambient air quality, noise and water quality due to the project.
25. Plan to curb noise likely to be generated from the use of construction equipments like mixers, vibrators etc. Impact of project construction/operation on the noise on account of construction equipment, construction/demolition activities and road traffic is to be studied.
26. Details with respect to the quantity of the generation of the garbage / Municipal Solid waste(biodegradable & recyclable waste), electronic waste and mode of its treatment and disposal. Details of composting facility, if any proposed for composting of bio-degradable waste.
27. Details with respect to category wise generation of the bio-medical waste along with basis / norms considered for quantification.
28. Comprehensive plan for segregation and collection of wastes in different colour coded containers, safe handling, treatment, storage segregation, treatment and disposal of bio-medical waste along with details of facilities to be provided for the same. Standard operating procedures for handling of bio-medical wastes.
29. Provisions to conduct training program followed by refresher trainings at regular intervals for hospital staff for segregation, treatment and disposal of bio-medical wastes etc.
30. Details of authorized municipal solid waste facilities, biomedical waste treatment facilities and hazardous waste disposal facilities in the area should be included. Copy of permission obtained from concerned authority/ies should be submitted. Management and disposal of temporary structures, made during construction phase are to be addressed.
31. Membership of common biomedical waste treatment and disposal facility, if any obtained.
32. 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 project. The backup calculations showing the bifurcation of the built up area according to the activity vis-à-vis parking area required shall be furnished. Mark the area of parking on the drawing

showing the parking. Also details of visitors parking, whether considered in total parking calculations / provisions or not.

33. Base line status of the existing traffic, impact on it due to the project activities (prior to construction, during construction and at full site operation), carrying capacity of the existing roads and details of traffic management in and outside the project during construction and operation phase of the project.
34. Base line ecological status. In case of any scheduled fauna, conservation plan should be provided.
35. Details of existing trees to be protected / preserved / transplanted / removed. Detailed green belt development plan as per the CPCB guidelines, including area of tree plantation, its demarcation on the map, number and types of trees and budget allocation thereof. Also provide the break-up of the greenbelt viz. the tree covered and lawn covered area.
36. Details of use of eco-friendly building material including fly ash bricks, fly ash paving blocks, RMC, lead free paints, use of PPC in concrete etc.
37. Perspective view of the building(s) to be constructed along with the materials used such as fibers, glass, etc. on the facades or external walls and the impacts thereof on the nearby buildings / residents due to heat island effect and emissions from the air conditioning systems.
38. Details of Green Building Concept to be adopted for the project.
39. Details of provisions to make the project energy efficient and adoption of modes of alternative eco friendly sources of energy, solar water heater, solar street lighting, LED lighting. Measures proposed to comply with the ECBC norms for energy conservation.
40. Scheme for rain water harvesting and ground water recharge with proper scientific calculations considering rainfall in the region, catchment area, land / soil characteristics, ground water recharge rate, duration of rain water harvesting etc. Details of provisions of pre-treatment of the rainwater in the case of surface run off is to be harvested. Location of recharge percolation wells on the layout plan.
41. Details of seismic zone of the project and design aspects required to be adhered to as per national standards for buildings to make it earthquake proof.
42. The details of the basic amenities and welfare facilities to be provided to the construction workers to ensure that they do not ruin the existing environment.
43. Details of safety measures proposed for the construction workers including provision of personal protection equipment. Details of registration and provisions to be made by the project proponent to follow Building and other Construction Workers Acts and Rules and undertaking for the same.
44. Plan showing emergency exits as well as location of stair cases, lifts and pathways etc. and compliance to the GDCR and NBC in this regard.
45. Details of 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.
46. Details of first aid / fire fighting and other emergency services to be provided during construction phase and operation phase including the training to be provided to the residential staff of the project as first aid providers, fire fighters etc.

47. Details of disaster management plan during operation phase of the project should also include scenario of natural catastrophe like earth quake, cyclone and floods in addition to other disasters. The plan should include the details of (i) Emergency lighting plan (ii) details of power back up system in the case of emergency (iii) fire fighting arrangements (iv) first aid arrangement (v) Training and Mock drill (vi) Emergency announcement system (vii) Signages (viii) location of emergency stair cases and pathways etc.
48. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay. Details of monitoring / supervision cell to monitor environmental aspects during construction phase as well as operation phase including provision of qualified construction safety officer.
49. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
50. An undertaking by the Project Proponent on the ownership of the EIA report as per the OM of MoEF&CC dated 05/10/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the OM of MoEF&CC dated 04/08/2009.
51. A tabular chart with index for point-wise compliance of above TORs.

The above mentioned TORs shall be considered 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 as well as the generic Terms of Reference mentioned in the EIA Guidance Manual for "Building Construction, Townships & Area Development Projects" prepared by MoEFCC. The project shall be appraised on receipt of the EIA report.

11.	Ganpati Wood Ply Industries	Plot No 6 &7 , Survery No 276, Dharampura Village, Chandana, Kheda.	Appraisal

Project / Activity No.: 5(f)

- M/s: Ganpati Wood Ply Industries (herein after Project Proponent – PP) has submitted application seeking EC in Form I vide their letter dated 04/09/2015.
- Proposal was considered in the SEAC meeting held on 17/11/2015 and after technical presentation, committee sought additional information.
- PP has submitted additional information on 13/05/2016.

Project status: Expansion

Project / Activity Details:

This is existing unit engaged in manufacturing of Ply wood, Block Board & flush door

and now proposes the manufacturing of following Synthetic Organic Chemicals:

Sr. no.	Product Name	Unit	Existing Capacity	Proposed Capacity	Total After Expansion
1.	Ply wood	Sq meter /Month	25000	---	25000
2.	Block board	Sq meter	25000	---	25000

		/Month			
3.	Flush door	Sq meter/Month	25000	---	25000
4	Urea Formaldehyde Resin	MT/Month	---	45	45
5.	Phenol Formaldehyde Resin	MT/Month	---	20	20

The location of the unit is outside the notified area. As per amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014, small units are categorized as Category "B" projects. Small units are defined as with water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989. During presentation, PP informed that water requirement is 7.7 KL/day. Fuel requirement is 0.4 MT/day and Chemicals to be used are not covered in MAH category. Hence, the proposed products of Resins fall under Category B of project activity 5(f) as per the EIA Notification 2006.

Total plot area is 11300 sq. m. & unit has proposed 2650 sq. m area for tree plantation. Expected project cost is Rs. 1 Crores. Total water requirement will be 7.7 KL/day (Domestic: 5.5 KL, Industrial: 1.2 KL, Gardening: 1 KL) and it will be met through Bore well. Industrial waste water generation will be 0.3 KL/day (0.2 from washing, 0.1 KL from cooling bleed off). They have proposed primary treatment plant followed by evaporator (Cap:500 litre per hour) for treatment of industrial effluent. Zero discharge will be maintained. Domestic waste water (4.4 KL/day) will be disposed off in to Soak pit system. Unit has provided one TFH (10 Lac Kcal/hr) and they have proposed Bag filter as APCM. Wood waste (200 Kg/day) is used as fuel. Fuel consumption will be increased up to 400 Kg/day after expansion. Unit has proposed one DG set (125 KVA) as standby facility. ETP sludge & evaporation residue (2 MT/Month), Used Oil (220 Lit./Year), Discarded containers/drum/bags (4.760 MT/Year) and Waste/Residues (0.06 MT/Year) are the hazardous waste to be generated from the proposed production.

Observations & Discussions:

Technical presentation made during the meeting by project proponent. Committee noted that unit is using Wood as fuel for Boiler and asked PP not to use wood as fuel instead agro waste or briquettes or Bio-fuel shall be used. On asking about storage of Formaldehyde and applicability of MAH unit, PP informed that they will store 4.5 MT of Formaldehyde at a time. Looking to the small scale of the project and low pollution potential, after detailed deliberation, the project was categorized as B2. Additional information sought by the committee during meeting on 17/11/2015 was submitted by PP on 13/05/2016. PP made presentation for the additional information. While reviewing details during presentation, committee observed that the nearest village Shetra is located at 0.35 km from the proposed unit and hence decided that proposal cannot be allowed looking to the nearest human habitation within 500 meter. Hence, the project proponent was advised to select another location in any of the suitable chemical estates. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after submission of revised proposal with suitable location.

12	Om Enterprise	Survery No.64 Paiki 4, Kapadia mahollo, Dhatwad Road, At & Po: Devsar, Bilimora, Ta: Gandevi, Dist: Navsari	Appraisal

Project / Activity No.: 5 (f)

- M/s: Om Enterprise (herein after Project Proponent – PP) has submitted application in Form I vide their letter dated 09/09/2015.
- Proposal was appraised in SEAC meeting held on 17/11/2016 and after technical presentation, committee sought additional information.
- PP has submitted additional information on 13/05/2016.

Project status: New

Project / Activity Details:

This unit has proposed to manufacture Synthetic Organic Chemicals as tabulated below:

Sr. no	List of product	Capacity MT/Month
1	Phenol Formaldehyde Resin	20
2	Urea Formaldehyde Resin	20
3	Melamine Formaldehyde Resin	20

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
Total plot area is 2000 sq.m & unit has proposed 660 sq. m area for green belt development/Tree plantation. Expected project cost is Rs.0.25 Crores. Total water consumption for proposed project will be 3.7 KL/D (Domestic: 1.5 KLPD and Industrial 1 KLPD, Gardening: 1.2 KLPD)which will be sourced from Bore well. Generated Industrial waste water (0.30 KL/day)will be evaporated after primary treatment. Capacity of the evaporator will be 50 litre per hour. Domestic waste water (1.5 KL/day) will be disposed off into soak pit system. There will be no flue gas emission from the proposed project as the required steam will be obtained from M/s: Ashish Enterprise located at plot no. 64/2, Kapadia Mohallo, Dhatwad road, Ta.: Gandevi, Dist.: Bilimora. No process gas emission is envisaged. Hazardous waste to be generated from the proposed project will be ETP and evaporation sludge: 0.8 MTPM, Discarded containers/liners/barrels:0.23 MTPM and Used oil: 0.01 MTPM.

Discussions/Observations:

Technical presentation included project details, details of raw materials and its quantity properties of the products etc. Committee observed that the proposed location is outside the Notified area. Looking to the low pollution potential of the project, committee unanimously decided to categorise the project as B2 and the additional information was sought for appraisal of the project. Additional information sought by the committee during SEAC meeting on 17/11/2015 was submitted by PP on 13/05/2016. PP made presentation for the additional information. While reviewing details during presentation, committee observed that the nearest village Devsar is located at 0.35 km from the proposed unit and hence decided that proposal cannot be allowed looking to the nearest human habitation within 500 meter. Hence, the project proponent was advised to select another location in any of the suitable chemical estates. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after submission of revised proposal with suitable location.

13.	Valiant Organics Pvt. Ltd.	Plot No:2906,752,753, 754,755, GIDC-Sarigam, Ta.: Umbergam, Dist.: Valsad	Appraisal
The project proponent on 14/05/2016 informed committee via email that technical directors of the project are not available on 18/05/2016 to attend appraisal of the project and requested to defer the appraisal after 10th June 2016. Committee agreed to the request and unanimously decided to defer the proposal in one of the upcoming SEAC meeting after 10th June 2016.			

14.	SRF Ltd.	Plot no. D2/1, Phase-II, GIDC- Dahej, Suva, Ta.:Vagra, Dist.:Bharuch.	Appraisal

Project / Activity No.: 5(f), 4 (d) & 1(d)

Project status: Expansion

Chronology of EC Process:

- This project proposed by M/s: SRF Ltd. (herein after Project Proponent :PP) has submitted Application vide their letter dated 27/05/2014.
- The project was considered for TOR finalization in the meeting of the SEAC held on 28/08/2014. During meeting held on 28/08/2014, after detailed deliberation on various aspects of the project, TORs were prescribed in addition to the draft TOR proposed, to carry out EIA study covering 10 km radius from the project boundary of the proposed site, which were also communicated to the project proponent in writing vide this office letter dated 14/10/2014.
- EIA Report prepared by M/s: J. M. Infranet Pvt. Ltd., Jaipur (NABET Accredited) was submitted by project proponent vide dated 28/09/2015.
- Project was appraised on 17/11/2015 and additional information was sought.
- PP submitted additional information on 13/05/2016.

Project / Activity Details:

The project falls under project activity 5(f), 4 (d) & 1(d) in the schedule of the EIA Notification 2006. Unit has proposed expansion for manufacturing of Specialty chemicals, Fluoro chemicals, Caustic chlorine plant and thermal power plant within existing premises. Corrected list of products is as under:

Sr No.	Name of Product	Existing Capacity (MT/Annum)	Additional Capacity (MT/Annum)	Proposed Capacity (MT/Annum)
1	Trifluoro Acetic Acid	0	2000	2000
2	Parabromofluorobenzene	0	500	500
3	Specialty Product			
i	Tetrafluorobenzyl Alcohol	10000	15100	25100
ii	Ethyldifluoroacetate			
iii	Ethyltrifluroacetate			
iv	Ethyltrifluoroacetoacetate			
v	Amino crotonate			
vi	Trifluoroacetic anhydride			
vii	Pentafluorobenzoic Acid			
viii	Pyrazole Acid			
ix	Chloro trichloro Methyl - Cyclopentene			

x	2-methyl-4-（1,1,1,2,3,3,3-heptafluoro-2-propyl aniline			
xi	Fluoromethyl ester			
xii	Diphenylphenol			
xiii	Tetrafluoropropene - 1234yf			
xiv	Isobutyl Acetophenone			
xv	2-Bromo-5-fluorobenzotrifluoride			
xvi	2,2-Difluroethylamine			
xvii	2,3-Dichloro-5-trifluoromethyl-pyridine			
xviii	N[1-{6-Chloro-3-pyridinyl)methyl)-2(1H)-pyridinylidene]-2,2,2, trifluoroacetamide			
xix	(1-(3-Chloropyridine-2-yl)-3-((5-(trifluoromethyl)-2H-tetrazol-2-yl)methyl)-1H pyrozol-5-carboxylic acid)			
xx	(N-(4-fluorophenyl)-2-hydroxy-N-isopropyl-acetamide			
4	1,1,2,2-Tetrafluoroethyl Methyl Ether	0	4000	4000
5	Hexafluoropropylene	0	1000	1000
6	Ethyl Difluoroacetoacetate	0	1000	1000
7	Difluoromethanesulphonlychloride	0	1000	1000
8	Triflic Acid	0	1000	1000
9	Trifluoromethanesulfonic Anhydride	0	1000	1000
10	Trimethylsilyl trifluoromethanesulfonate	0	520	520
11	3-Trifluoromethylacetophenone	0	1000	1000
12	2,6-Dichloro-4-(trifluoromethyl) aniline	0	1000	1000
13	Cyanapyrazole	0	2000	2000
14	Trifluoromethylbenzamide	0	2000	2000
15	Trifluoroacetyl chloride	0	1000	1000
16	Sulphur Tetrafluoride	0	500	500
17	2- Trifluoromethyl benzoylchloride	0	1000	1000
18	TrifluoroMethyl-2-EthoxyVinyl Ketone	0	1000	1000
19	2-(2-Methoxy-ethoxymethyl)-6-trifluoromethyl-nicotinic acid ethyl ester	0	2000	2000
20	Mefenamic Acid	0	1000	1000
21	Hexafluoropropylene oxide	0	500	500
22	Pentaflurophenol	0	500	500
23	Monomethylhydrazine	0	4000	4000
24	[3-(4,5-dihydro-1,2-oxazol-3-yl)-4-mesyl-o-tolyl](5-hydroxy-1-methylpyrazol-4-yl)methanone	0	500	500
25	Tri Fluoro acetone	0	500	500
26	Methyl tri fluoro acetate	0	500	500
27	Chlorodifluoroacetic Anhydride	0	100	100
28	Bromopentafluorobenzene	0	500	500
29	4-Chlorobenzotrichloride	0	600	600
30	4-Chlorobenzotrifluoride	0	600	600
31	Methyl Hydroxy Pyrazole	0	100	100
32	6-Fluoro methyl indole	0	100	100
33	Difluoroethoxy ethanol	0	200	200
34	5-Bromo-2-2-difluoro-1-3-benzodioxole	0	1000	1000
35	Difluorobenzodioxole methyl ester	0	20	20
36	2-Fluoro-5-nitrobenzoic acid	0	30	30

37	5-Chloro-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxaldehyde	0	500	500
38	3-Difluoromethyl-5-fluoro-1-methyl-1H-pyrazole-4-carboxaldehyde	0	500	500
39	2,5-Dichloro-4-(1,1,2,3,3,3-hexafluoropropoxy)benzenamine	0	500	500
40	2,4,5-Trifluorophenyl acetic acid	0	50	50
41	3-Aminobenzotrifluoride	0	1000	1000
42	2,4-Dichloro-3,5-dinitrobenzotrifluoride	0	1000	1000
43	3-phenoxy benzaldehyde	0	4000	4000
44	3-phenoxy toluene	0	200	200
45	Methyl-2- Fluoroacrylate	0	700	700
46	Lithium tetrakis (pentafluorophenyl) borate	0	100	100
47	2-fluoro-5-bromobenzonitrile	0	50	50
48	Ethyl-Trifluoropyruvate	0	200	200
49	Isoflurane	0	250	250
50	Desflurane	0	100	100
51	Sevoflurane	0	200	200
52	Trichloroacetyl chloride	0	2000	2000
53	Chlorinated Compound			
i	Trichloroethylene	80000	10000	90000
ii	Perchloroethylene			
iii	Methylene dichloride			
iv	Chloroform			
v	Carbon tetrachloride			
54	Caustic Chlorine Plant			
	Chlorine	60000	56725	72000
	Caustic lye 47.5 %		147485	187200
	Hydrochloric Acid (30-33%)		17018	21600
	Hydrogen		1588	2016
55	Anhydrous Hydrofluoric acid	15000	25000	40000
56	Chlorotrifluoroethane (HCFC 133a)	0	500	500
57	HFC Refrigerant			
i	1,1,1,2 Tetrafluroethane (HFC 134a)	10000	52000	62000
ii	Pentafluoroethane (HFC 125)			
iii	Difluoromethane (HFC - 32)			
iv	1,1 difluoroethane (HFC - 152a)			
v	Refrigerant blend of Difluoromethane (HFC-32) + Pentafluoroethane (HFC-125) (R410a)			
vi	Refrigerant blend of Pentafluoroethane (HFC-125) + 1,1,1-Trifluoroethane (R143a) + 1,1,1,2 Tetrafluroethane (HFC 134a) (R404a)			
vii	Refrigerant blend of Difluoromethane (HFC-32) + Pentafluoroethane (HFC-125) + 1,1,1,2 Tetrafluroethane (HFC 134a) (R407c)			
viii	Blend of 1,1-Difluoroethane (HFC-152a) + 1,1,1,2 Tetrafluroethane (HFC-134a)			
58	Butane (R600a)	0	1000	1000
59	Propane (R290)	0	1000	1000

60	Blend of 1-Chloro-1,1-difluoroethane (R142b) + Chlorodifluoromethane (R22)	0	500	500
61	Blend of 1,1,1,2 Tetrafluroethane (R134a) + Di Methyl Ether (DME)	0	500	500
62	R&D Product	0	2000	2000
63	Hydrofluoricsilic acid (15-40%)	0	24000	24000
64	Sulphuric acid (70-95%)	0	117932	117932
65	Hydrochloric Acid (30 - 33%)	0	912081	912081
66	Hydrofluoric acid (20-70%)	0	34641	34641
67	Anhydrous Hydrochloric Acid	0	1500	1500

Sr. No.	Name of Product	Existing Capacity	Additional Capacity	Proposed Capacity
68	Captive Power Plant	25 MW	50 MW	75 MW

Existing plot area is approx. 911335 sq. m. Unit has proposed 271961 sq. m area for green belt/tree plantation in addition to existing green belt area 118025 sq. m. No additional land is required for the proposed expansion. Estimated project cost will be INR 4800 Crores. Capital Cost for the environment protection measures will be INR 100 Crores and recurring cost will be INR 2.74 Crores.

Details of water consumption is as below:

Sr. No.	Category	Existing Water Consumption (KL/Day)	Additional Water Consumption (KL/Day)	Total Proposed Water Consumption (KL/Day)	Treated water to be reused. (KL/Day)	Total Fresh Water Consumption (KL/Day)
1	Domestic	429	389	818	Assuming 85 % efficiency of UF& RO Treatment for the Utilities Effluent stream, it gives 18460 KLD of treated water which will be reused and 3258 KLD reject.	(1) 18460 KLD of water will be recovered after UF & RO treatment and taken back to the raw water collection tank. (2) Hence, 17933 KLD of fresh water will be consumed for the proposed expansion project.
	Gardening (drip irrigation)	0	215	215		
2	Industrial Use					
	a) UF RO water reused for process	2142	3163	5305		
	b) Cooling Tower	3838	2198	6036		
	c) Washings	71	69	140		
	Ind. Total	6051	5430	11481		
3	CPP USE					
	a) Boiler					
	i) Boiler for process	1985	706	2691		
	ii) CPP	1788	8572	10360		
	iii) DM & RO Reject	883	4710	5593		

	b)	Cooling Tower	1662	3573	5235		
	Sub Total of CPP		6318	17561	23879		
Total			12798	23595	36393	18460	17933

Water requirement after proposed expansion will be increased from 12798 KL/day to 36393 KL/day Unit has proposed to reuse 18460 KL/day of water recovered after UF-RO treatment. Hence, total fresh water requirement will be 17933 KL/day, which will be supplied by the GIDC.

Details of waste water generation is as under:

Sr. No.	Category		Existing Waste Water Generation (KL/Day)	Additional Waste Water Generation (KL/Day)	Total Proposed Waste Water Generation (KL/Day)	Treated water to be reused. (KL/Day)	Total waste water Generation for Discharge (KL/Day)
1	Domestic		340	310	650	650 KLD After its treatment in STP, it will be used for greenbelt development with drip irrigation system.	100 % Domestic effluent will be reused in greenbelt development with drip irrigation system
2	Industrial						
	i)	Process	688	2003	2691	Assuming 85 % efficiency of UF RO Treatment for the Utilities Effluent stream,out of 21718 KLPD, it gives 18460 KLD of treated water which will be reused. 3258 KLPD will be reject water. Out of 3258 KLPD reject, 100 KLD reject will be utilized for Ash quenching & dust suppression. and rest quantity 3158 along with treated waste water of 2614, Total 5772 KLPD will be discharged to GIDC drain.	Hence, 5772 KLD of waste water will be finally discharged to Sea through GIDC Sewer. (It includes the 3158 KLD UF & RO reject & 2614 KLD from Biological Treatment)
	ii)	Cooling Tower	691	955	1646		
	iii)	Washing	71	69	140		
	iv)	Softener /DM	598	-598	0		
	Sub Total		2048	2429	4477		
3	CPP						
	a)	Process Boiler	1985	706	2691		
		CPP Boiler	950	9410	10360		
	b)	Cooling Tower	400	1028	1428		
	c)	DM & RO Reject	923	4670	5593		
	Sub Total		4258	15814	20072		
Total (1+2+3)			6646	18553	25199	19110	5772

Wastewater generation after the expansion will be increased from 6646 KL/day to 25199 KL/day.At present Segregation of High COD High TDS, Low COD Low TDS & Utility Effluent at Source is being carried out. Unit has provided ETP, MEE, Incinerator, RO-UF system and STP for existing effluent treatment.

Unit has proposed segregation of industrial wastewater streams after proposed expansion as below: (1) Low organic with low TDS (2) High organic with high TDS (3) Treatment of utility effluent generated by cooling tower and boiler blow down. Total 1446 KL/day of high COD-high TDS stream will be sent to MEE followed by ATFD (Agitated Thin Film Dryer). Utility effluent (21718 KL/day) will be sent for Ultra filtration

and RO system and treated waste water (Permeate:18460 KL/day) will be reused in horticulture (gardening) and cooling tower make up. Low COD and Low TDS effluent stream will be treated in ETP and treated effluent will be discharge into GIDC drainage line for Sea disposal. Total 5772 KL/day of treated effluent will be discharged to GIDC drain. Domestic waste water (650 KL/day) will be treated in STP and will be reused for gardening.

Flue gas stack detail is as under:

Sr. no.	Stack attached to	Qty.	Capacity	APCM
Existing Stacks				
1	Boiler	1	15 TPH	--
2	Boiler	1	60 TPH	ESP
	Boiler	1	35 TPH	
	Boiler	1	35 TPH	
3	DG Set	2	500 KW	--
4	DG Set	2	840 KW	--
5	TFH	3	20 lacs Kcal	--
6	HAG	1	-	--
7	Fluorospar Drying System	1	-	--
Proposed Stacks				
1	Boiler	2	75 TPH	ESP
2	Boiler	2	100 TPH	ESP
3	DG Set	3	4200 KVA	--
4	Thermic Fluid Heater	20	20 lacs Kcal	--
5	Dust Collectors	10	-	--

Fuel consumption will be as under:

Sr. no.	Type of Fuel	Quantity	
		Existing	After Expansion
1.	Coal	600 MT/day	2400 MT/day
2.	HSD	25 KL/day	210 KL/day
3.	Natural Gas [Alternative fuel instead of coal]	45000 Nm3/day	4800 MT/day
4.	Furnace Oil (LPD)	46.5 KL/day	400 KL/day

Process gaseous Vents after proposed expansion will be 100 Nos. Central suction and absorption system will be provided with different process plants to control H2S, NH3, HCl, SO2, CL2, BR2 and HF. The vents of the reactors will be connected to scrubbers. Total 10 bag filters are proposed with process plants.

Hazardous wastes generation and its management will be as under:

S. No.	Hazardous Waste name Proposed	Proposed Waste Category No	UOM	Waste Generating Step	Total Proposed Hazardous Waste Quantity	Mode of disposal

1	Chemical sludge from waste water treatment	34.3	MTA	ETP Process	6000	Collection, Storage, Transportation, disposal at TSDF / Co-processing.
2	Spent Oil	5.1	MTA	Lubrication of Plant Machinery / Equipment	1800	Collection, Storage, Transportation, sell to registered re-refiners / recycler
3	Discarded containers / barrels / liners used for hazardous wastes/chemicals	33.3	Nos. per Year	Raw Material	1340000	Collection, Storage, Transportation, reuse / sell to authorize recyclers.
			Or MTA (Discarded Containers / barrels)	Raw Material	14740	
			MTA (Discarded liners)	Raw Material	190	Collection, Storage, Transportation, sell to authorize recyclers.
4	Spent Catalyst	28.2	MTA	Process	2400	Collection, Storage, Transportation, sell to authorized recycler/ disposal at TSDF or CHWIF / Co-processing.
5	Spent Carbon	28.2	MTA	Process	1212	Collection, storage, transportation, disposed to CHWIF & or Co-processing.
6	Off- Specification Product	28.2	MTA	Process	600	Collection, Storage, Transportation, sell to authorized recycler/ disposal at TSDF / CHWIF / Co-processing.
7	Process waste sludge/residues containing acid or other toxic metals or organic complexes	26.1	MTA	Process	600	Collection, Storage, Transportation, sell to authorized re-Processor/ disposal at CHWIF / Co-processing.
8	Filters and filter material which have organic liquid in them E.g. Mineral oil,	35.1	MTA	Process	550	Collection, Storage, Transportation, sell to authorized re-Processor/ disposal

	synthetic oil & organic chlorine compounds					at CHWIF / Co-processing.
9	Process Residue & Waste	28.1	MTA	Process	32000	Collection, storage, transportation, disposed to CHWIF/ Co-processing.
10	Spent Organic Solvent	28.5	MTA	Process	90892	Collection, Storage, Transportation, Sell to authorized re-processor & or disposal at CHWIF & or Co-processing & or Sent for Job work to third party for recovery.
11	Chemical sludge from waste water treatment (MEE / ATFD Salt)	34.3	MTA	MEE / ATFD Process	73858	Collection, Storage, Transportation, disposal at TSDF.
12	Inorganic Salt	-	MTA	Process	4447	Collection, Storage, Transportation, disposal at TSDF / Co-processing.
13	CuCl Cake	8.2	MTA	Process	196	Collection, Storage, Transportation, sell to actual users / Co-processing / disposal at TSDF or CHWIF.
14	Ammonium Salt	Sch II - C1	MTA	Process	5811	Collection, storage, transportation, Sell to Actual users / Sent to disposal at TSDF.
15	Potassium Salt	Sch II - C6	MTA	Process	5061	Collection, storage, transportation, Sell to Actual users / Sent to disposal at TSDF.
16	Sodium Salt	Sch II - C7	MTA	Process	4522	Collection, storage, transportation, Sell to Actual users / Sent to disposal at TSDF.
17	Antimony Compound	Sch II - A1	MTA	Process	30	Collection, storage, transportation, disposed to CHWIF.
18	Zinc Compound	Sch II - C14	MTA	Process	787	Collection, storage, transportation, Sell to Actual users / Sent to disposal at TSDF.
19	Brine Sludge	-	MTA	Caustic	5500	Collection, Storage,

				Chlorine Plant		Transportation, disposal at TSDF
20	Fly Ash	-	MTA	Process	108000	Sold to Brick, Tile & Cement Manufacturer as per Fly Ash Notification

Observations/Discussions:

During meeting held on 17/11/2016, Issues raised during the public hearing like accreditation of Consultant involved in preparation of EIA report, Green belt development, Coal handling and air pollution, emergencies due to chemical leakages, employment to the local people, air pollution issues, CSR activities etc. and representations received from the various stake holders were discussed in detail. While discussing about the raw materials and products in context of Ozone Depleting Substances (ODS), PP informed that there is no ODS in their raw material and products. However, committee asked to submit the undertaking in this regard. On asking about the Co-products and its justification regarding quantity more than the products, PP could not reply satisfactorily. Committee noted that, PP has not given name of the products for some items in the list of products. At this, Committee asked to submit complete details of such type of raw materials and products. Committee observed that the quantity of hazardous waste generation from the existing as well as proposed project is huge and asked to submit the complete management of hazardous wastes with specific mode of disposal. PP has not given specific information regarding exploring the possibilities of Air cooled condensers instead of water cooled condensers. Committee felt that PP could reduce remarkable quantity of fresh water requirement by putting air cooled condensers and also by exploring the possibilities in other areas. Committee asked to submit revised water balance with maximum reuse and minimum discharge of waste water in GIDC drainage or ZLD. Unit has submitted Risk assessment report with various maximum credible loss scenarios. Committee noted that Risk matrix was not prepared from which each possible combination of hazard and vulnerability can be identified in terms of different levels of Risk. The baseline environmental quality has been assessed in the winter season (December 2014 to February 2015) in a study area covering 5 km radius around the plant site. The wind direction is predominantly from NE direction. Ambient Air Quality Monitoring (AAQM) was carried out at 6 locations during the study period for PM_{10}, $PM_{2.5}$, SO_2, NOx and CO. It was observed that Project specific parameters CL_2, HCl, Br_2, HF, NH_3, HC, VOC etc. are not covered in baseline study in EIA report although the same was specifically informed in the TOR by the SEAC. On asking about baseline status of VOC in the study area, PP could not reply satisfactorily. At this, Committee desired to have baseline status as per the prescribed TOR within the study area covering 10 km radius from the project boundary. While reviewing the EIA report, it was also observed that details related to reuse / recycle and cleaner production options for reduction of wastes, permission with quantity for additional water supply, existing and proposed treatment scheme for waste water, details of exploring the possibility for Zero liquid discharge, water balance, reuse/recycle system, worst case scenarios of waste water, product wise and stream wise quality and quantity of waste water, baseline study and its impact analysis, process gaseous emission & APCM, details on tail gas and its treatment, fugitive emissions, online monitoring system, hazardous waste management, fly ash handling & management, management of by-products, solvent management, EMP for existing plant and for proposed expansion, Occupational health etc. are not addressed properly in the EIA report. During the presentation, Committee

observed that one Gas pipeline is passing through the premises of the project plant area, which was not shown during their TOR presentation. On asking about the risk assessment, PP informed that they have not considered this pipeline in Risk Assessment report. Committee asked to collect data from the concern authority and incorporate the worst case scenario of this gas pipeline RA report. Committee also asked to submit revised risk assessment report including on-site / off-site emergency plan. After detailed deliberations the Committee sought additional information for further appraisal of the proposal.On 05/05/2016, PP submitted additional information and made presentation before SEAC on 18/05/2016 and details are as under.

1. Detailed explanation about Products and Co-products. How the quantity of Co-products (18,62,380 MTPA) is much higher than the Products (3,46,220 MTPA) ?
   PP mentioned that the Products and Co-products have been re-categorized and details regarding the same is mentioned above in product details.
2. Explanation about the Caustic Chlorine plant at product list sr. no. 67. Give clarification about how the Production of Hydrogen will not increase though the Caustic Chlorine plant capacity will increase from 6000 MTPA to 8000 MTPA.
   PP submitted that the corrected data enclosed in section 2.6.1 Product No. 54 EIA/EMP report and details are as under:

Caustic Chlorine Plant	Existing Capacity (MT/Annum)	Additional Capacity (MT/Annum)	Proposed Capacity (MT/Annum)
Chlorine	60000	56725	72000
Caustic lye 47.5 %		147485	187200
Hydrochloric Acid (30-33%)		17018	21600
Hydrogen		1588	2016

3. Baseline study for project specific parameters like CL2, HCl, Br2, HF, NH3, VOC etc. in the study area, Modelling indicating the likely impact on ambient air quality due to proposed activities and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
   Baseline study for project specific parameters like Cl2, HCl, Br2, HF, NH3, VOC in the study area has been conducted. The results are incorporated in Revised EIA/EMP Report. Results are below permissible limits.
4. Submit the EIA report with complete details for following TORs which were found not addressed properly in the EIA report.
   TOR no. 2, 4, 6, 8, 9, 10, 11, 14, 15, 19, 20, 21, 22, 23, 26, 27, 29, 31, 33, 34, 35, 37, 38, 42, 45, 49, 56.
   PP mentioned that revised EIA report with revised point wise reply of the ToRs are addressed. Ambient air quality monitoring is studied for processed based parameters Chlorene, HCl, Br2, HF, NH3,HC, VOC and CO during period February 2016 to March 2016 and it was found within range of permissible limits of NAAQ standards.

5. Provide the full details of chemicals which fall under the GHG (Green House Gases) at any stage of production.
   IUPAC Name of chemicals which fall under the GHG are Carbon Dioxide, Carbontetrachloride; Chlorodifluoromethane; 1-Chloro-1,1-difluoroethane; 1,1-Difluoroethane; Pentafluoroethane; 1,1,1,2-Tetrafluoroethane; 1,1,1-Trifluoroethane; Difluoromethane; Trichlorofluoromethane; Dimethylether; Methylene chloride . Details of chemicals which fall under the GHG (Green House Gases) are submitted by the PP.
6. Provide the quantity and details of escape of halones from this existing and proposed project in to environment. Provide the brief details about each and every chemicals and its impact pertains to GHG.
   PP during presentation mentioned that Halones are not used and are not produced in any chemical process in existing and proposed project.
7. Explain about the heavy metals in the waste water and its specific treatment. What is the mechanism/technology in ETP to recover the heavy metals? Provide brief details of process/segment/treatment to recover it and also for all the heavy metals.
   PP mentioned that all the heavy metals will be removed by Physio-Chemical Treatment with Hydroxide and Sulphate dosing. The dewatered metal content sludge shall be sent to secured landfill site or shall be sold to actual users / reprocessor by confirming of the heavy metal content. Details about heavy metals in the waste water, its specific treatment, mechanism/technology in ETP to recover the heavy metals is given in ToR 11.
8. Technical details about the treatment to eliminate the fluoride content from effluent.
   PP mentioned that Fluoride content effluent shall be treated with hydrated lime in physio-chemical treatment wherein Hydroxide treatment shall be provided for removal fluoride.For this process hydrated lime dosed for removal of suspended solid and fluoride. In this system calcium shall react with fluorides, hydroxide (OH-). The dewatered calcium fluoride sludge shall be sent to secured landfill site. Details are provided in ToR 11.
9. Worst case scenario for waste water generation along with qualitative & quantitative analysis for each product shall be submitted. Give stream wise quality and quantity with their break up as per proposed segregation scheme.
   Product wise waste water generation quantity and quality identified and segregate as Low TDS with low organic & High TDS with high organic and also segregated Utility Effluent (from DM / Softener reject, cooling Tower and Boiler Blow Down) & domestic effluent is given in ToR 15.
10. Source of each process gaseous emission (Product name and stage/name of the process), its quantification, mass balance, APCM and management of scrubbing media. Technical specifications of all the APCM, details of stack height and diameter etc.
    PP has submitted that process gas emission was identified, quantified in material balance, its pollution control measures, management of scrubbing media and detailed technical specification is submitted.
11. Management plan for all the By-products to be generated, along with the name and address of end consumers to whom the by-products will be sold. Copies of agreement / MoU / letter of intent from them (With quantity), showing their willingness to purchase said by-products from the proposed project. (Give all details in tabular format i.e. Name of Product, Name and quantity (MT/Month) of By-products, Characteristics, name of end users with their details (Name of product in which end users will use), feasibility report for reuse of by-product in particular product at end –users industry, transportation details, quantity in MoU/Agreement letter etc.
    PP submitted details as under:

Name of Consignee / Address	Consignee Address	Purpose for Purchase	Sodium Hypochlorite	Hydrogen bromide Solution (40-50%)	Phosphoric acid (25-75%)	Gypsum
			MTA	MTA	MTA	MTA
Ambuja Cement	ACC Complex, L.B.S. Marg. Thane (West) - 400604	As a Raw Material				241938
Sun Shine chemicals	707, Mauryansh Elanza, Near Parekh's Hospital, Shyamal Cross Road, Setelite, Ahmedabad - 380015	As a Raw Material	800			
Ambe Enterprise	C-1, B-423, GIDC, Ankleshwar-393002	As a Raw Material			1000	
Goraya Straw Board Mills (P) Limited	Kashipur	Use as Raw Material in Paper Manufacturing	1100			
Banwari Paper Mills Limited	U.S Nagar	Use as Raw Material in Paper Manufacturing	1800			
Multiwal Duplex (P) Ltd.	Kashipur	Use as Raw Material in Paper Manufacturing	1100			
Pronric Paper Pvt. Limited	Kashipur	Use as Raw Material in Paper Manufacturing	1400			
Total Quantity			6200	5400	1000	241938

12. Submit the documentary evidence regarding selling/disposal and complete management details of all the by-products, Co-products, Hazardous waste generated in last 3 years.
    PP submitted documentary evidence regarding selling/disposal and management details of by-roducts, Co-products, Hazardous waste generated in last 3 years.
13. Submit the complete management of brine sludge and also submit the details of disposal for last 3 years.
    PP mentioned that no generation of brine sludge is there at present as they do not have installed Caustic Chlorine Plant. PP further stated that Brine sludge management is described in process description of Caustic Chlorine Plant Product No. 54 in Section 2.6.1 TECHNOLOGY AND PROCESS DESCRIPTION in Chapter 2, page No. 38 in EIA / EMP report.
14. Revised Risk assessment report as per ToR no. 42 including rupture of Gas pipeline which is passing through your project premises. Also include Risk Matrix covering possible combination of hazard and vulnerability.
    PP informed that risk assessment has been carried out and details along with safeguards measures has been incorporated in Chapter 7, Section 7.3 along with Annexure 10 and 11 of Final EIA Report.
    The study indicates that possible hazards associated with the plant are confined to
    1. Petroleum product PESO licence premises.
    2. Liquefied petroleum storage (SMPV) PESO area.

3. Non petroleum product but highly flammable class A chemical storage tank farm area.
4. Hydrogen gas cylinder storage area.
5. Ammonia gas cylinder storage area.
6. Bromine storage tank area
7. AHF tank farm area
8. AHCL cylinder storage
9. Oleum and Sulfuric acid storage tank farm area.
10. Drums storage area (Warehouse).
11. Chlorine Gas cylinder
12. Natural Gas Pipe Line

Various hazardous scenarios have been identified for Risk Assessment and the consequences modelled.

15. An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF&CC OM dated 05/10/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the MoEF&CC OM dated 04/08/2009. (Compliance of OM dated 05/10/2011 & 04/08/2009).
    PP mentioned that undertaking by Consultant and Project Proponent for ToRs have been submitted.
16. Full name (Chemical name) of all the raw materials and products at sr. no. 73 to 80.
    PP mentioned that full name of Product is given in Existing and Proposed Product List enclosed in Project Proposal Slide.
17. Complete details with Justification for treated sewage utilization for Ash quenching & dust suppression (500 KL/day) and for green belt development (100 KL/day). Land availability for gardening and plantation with its percolation rate & Soil characteristic. Detail management plan for treated effluent in monsoon season when utilization of treated effluent for gardening & plantation purpose is not feasible.
    PP informed that details with justification treated sewage utilization is discussed in ToR No. 9.

Sr. No.	Particulars	Atomized Drip Irrigation
1	Area of Greenbelt (33 % of total land)	389986 Sq. M
	Nos. of Days (Excluding rainy season)	273 Nos.
Water Consumption		
2	Soil Percolation Rate	1.5 x 10 ^-6 m3/m2/day
	Average Water Requirement Litres per day per sq. m	1.5 litre per Sq. M
	Treated Sewage Water Required	585 KLD

18. A certified report of the status of compliance of the conditions stipulated in the environmental clearance for the existing operation of the project by the Regional Office of the MoEF.
    PP mentioned that Copies of Environmental Clearance, compliance reports and application for compliance from MoEF, Bhopal are provided.
19. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
    PP stated that consultant firm is permitted to carry out EIA and allied activities as per stay order from Honorable High court. Copy of the order is submitted during presentation.

After deliberation committee was not satisfied with reply of additional information sought and asked PP to submit the following details in line with the details sought in previous meeting.

1. Submission of revised Form I incorporating all the corrected details as per final EIA including details of hazardous wastes which are shown as byproducts.
2. Details of possible products (generic) along with raw materials to be covered under the R & D head intended to be produced to the tune of 2000 MTPA.
3. Interpretation of isopleths diagrams showing various levels of concentration after superimposition on the map and its possible impacts on classified receptors like human settlements, GIDC, water bodies, agriculture fields, educational institutes, religious places, historical places, incompatibility details regarding formation of cloud with other industrial unit's emission coming in the study area.
4. To explore alternative of Barium hydroxide to be used for treating acidic solvent which finally increases metal content of the waste water.
5. Details of waste water generating products with high COD considering worst scenario and detail characteristics of evaporation salt and condensate from ATFD and its disposal scheme.
6. To explore maximum reuse and minimum discharge of waste water in GIDC drainage or ZLD.
7. Keeping total quantum of inorganic acids generation after expansion in view, justify handling, storage, utilization, conversion, sale (if any) of entire quantity with adequacy and feasibility.
8. Submit details of fire load and requirement of own fire tender(s) with crew as per prevailing rules/laws.
9. Applicability of Ozone Depletion Substance (ODS) Rules 2000 and if not applicable, submission of an undertaking in context to the products and raw materials for not covered under the said rules.
10. Latest status of Order of Honourable high court regarding NABET Accreditation status.
11. Process emission details of all vents in tabular forms showing source of emission, type of pollutants, rate of emission, height of vents and their air pollution control measures.

15.	Black Rose Industries	P.No.:675 GIDC, Jhagadia, Dist.: Bharuch	Appraisal

Project / Activity No.: 5(f)

- M/s: Black Rose Industries (herein after Project Proponent – PP) has submitted application vide their letter dated 23/04/2015.
- PP did not remain present on SEAC meeting dated 28/07/2015.
- Project was again scheduled in SEAC meeting held on 29/09/2016 and additional information was sought.
- PP submitted additional information on 07/05/2016.

- **Project status:** Expansion

Project / Activity Details:

This is a new unit proposes to manufacture following products.

Sr. no.	Name of the Product	MT/Month		
		Existing	Additional	Total after expansion
1.	Acrylamide Solution	833.33	833.33	1666.66

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

Plot area is approx. 34075 sq.m. Green belt/tree plantation area is 12540 sq. m. Estimated cost of proposed expansion is Rs. 5 Crores. Fresh water requirement of 101 KL/day after the proposed expansion will be supplied by the GIDC. Fresh water requirement after proposed expansion will be increased from 30 KL/day to 101 KL/day (7.5 KL Domestic, 77.69 KL Industrial & 15.81 KL Gardening) which will be supplied by the GIDC. Washing and Boiler water is fully re-cycled. Industrial wastewater generation from existing as well as from the proposed expansion will be NIL. Domestic waste water (7 KL/day) will be disposed off into septic tank/soak pit system.

It is proposed to provide ETP of capacity 5 KL/day, RO system Capacity: 1.2 KL/hr and Multiple Effect Evaporator (Capacity:300 Kgs/hr) for the complete evaporation of the effluent generated in order to achieve zero discharge.

Details of utilities are as under:

Sr. No.	Stack Attached to	Capacity	Type of fuel	Quantity of fuel	Stack Height	Permissible Limit	Air Pollution Control System
Existing							
1.	Small Industrial Boiler- Non IBR	400 kg/hr	HSD	400 Lit/Day	30 m	PM < 150 mg/NM^3 SO_2 < 100 ppm NOx < 50 ppm	Adequate Stack Height with SMF
2.	D. G. Set (Used in case of emergency only)	380 KVA	HSD	100 Lit/Day	6 m	PM < 150 mg/NM^3 SO_2 < 100 ppm NOx < 50 ppm	Adequate Stack Height
Proposed							
1.	Small Industrial Boiler- Non IBR (Stand By)*	400 kg/hr	HSD	400 Lit/Day	30 m	PM < 150 mg/NM^3 SO_2 < 100 ppm NOx < 50 ppm	Adequate Stack Height with SMF
***Common stack will be provided for existing as well as proposed boiler.**							

One Boiler of 400 kg/hr is installed. One additional boiler of 400 kg/hr will be installed as standby facility. One DG set of 380 KVA is installed for use in case of power failure only. No process emission is envisaged. A gas scrubber for Acrylonitrile will be installed for any emergency vent of gas.

details of hazardous waste is as under:

Sr. No.	Type/ Name of hazardous waste	Category	Quantity (MT/Day)			Disposal Method
			Existing	Proposed	Total	
1.	Sludge from ETP	35.3	0.0005	0.0015	0.002	Collection, Storage, Transportation, Disposal to TSDF site
2.	Sludge from MEE	35.3	1.0	(0.965)	0.035	Collection, Storage, Transportation, Disposal to TSDF site
3.	Used Oil	5.1	0.000001	0.00299	0.003	Collection storage transportation sale to the MoEF/ GPCB registered Re-refiners
4.	Discarded drum & Containers	33.1	0.003	0.0025	0.0055	Collection storage transportation decontamination and selling to the approved vendor
5.	Spent Carbon	36.2	0.048	0.147	0.195	Collection storage, transportation, It will be incinerated in common incinerator.
6.	Waste Poly-acrylamide	34.2	0	0.110	0.110	Collection, Storage, Transportation, Disposal to TSDF site
7.	Spent resin from DM Plant	34.2	0	1.37 lit/day	1.37 lit/day	Collection, Storage, Transportation, Disposal to TSDF site .

Observations/Discussions:

Presentation made by the proponent included the general information about the project, plant layout, raw material & resource consumption, manufacturing process, water balance, hazardous waste generation and its disposal etc. During the meeting, safety aspects of Acrylonitrile were discussed in detail. On asking, PP informed that the Acrylonitrile storage tanks are located in downwind direction of the plant. Tank farm is provided with dyke with capacity of 110% of the tank volume and provision of foam monitor is given. Further PP informed that the entire area is fitted with flame proof fittings, sand buckets are provided for covering any spilled acrylonitrile and contain / minimize spread of vapours. Looking to the low pollution potential in terms of air & water and location of the project in GIDC Jhagadia, committee unanimously decided to categorise project under B2 and the additional information was sought. PP submitted additional information on 07/05/2016.PP has submitted plot holding certificate obtained from GIDC,Jhagadia. Regarding need of the proposed project, PP clarified that Current domestic demand of Acrylamide is estimated at 12,000 MT/annum (Based on 50% Solution). Additional supply of 50,000 MT/annum is required to service the Oil exploration industry, taking it to total of 62,000 MT/annum. Currently BRIL is the only producer in country and have an installed capacity of 10,000 MT/annum. This leaves a huge gap of 52,000 MT/annum. BRIL

is the only manufacturer of Acrylamide in India and South Asia region. As mentioned above current demand is 12,000 MT/annum, of which BRIL commands a 50% share. Balance is met through imports from primarily from China. BRIL is committed to replace this too with indigenous product. Further down stream product polyacrylamide is being imported into the country, which can be replaced with indigenous product once acrylamide is available locally.Export demand for Acrylamide solution is pegged at 20,000 MT/annum.Currently BRIL is exporting nearly 30% of it's produce. BRIL due to its unique and first mover advantage is confident of exporting 10,000 MT/annum which would be 50% of enhanced capacity of 20,000 MT/ annum. PP has submitted lay out plan. Minimum 5 m and maximum 9 m road are provided all around the periphery for unobstructed movement of the emergency vehicle/ fire tender. Storage tanks of Raw Material and Finished Products are provided with dyke walls to hold any unforeseen spillage / leakage. Curb wall have also been made all around the production areas which are in turn connected to ETP sump. Spillage from raw material and/or finished product handling is being/will be collected in a sump through a drain and flushed with water and pumped to the ETP for treatment. All flooring in production and plant area are made with impermeable concrete thus elimination any seepage into the ground.Unit has installed RO followed by MEE and all treated waste water is being/shall be recycled and reused in gardening and process. Thus ensuring zero discharge of effluent at all times.Total effluent generation quantity is only 1.5 m^3/day, where as unit has installed effluent treatment plant capable of handling up to 5 m^3/day to take care of any emergency situation. In addition, unit has built a 35 Kl concrete tank within the plant to collect waste water which has adequate capacity to hold up to 23 days of effluent water. A collection tank of 20,000 Lit capacity has been installed to store RO reject water. This is nearly 10-11 days of effluent generation, which shall take care of any breakdown/ non operation of MEE. There is no process emission from the manufacturing process from existing as well as proposed production. To control fugitive emission, Process plant building is open on all sides to provide adequate ventilation in the work areas. To monitor VOC gases – Online Acrylonitrile detectors have been installed at various location, and this helps in detecting any unforeseen / accidental leakage of the gas. In particular, wherever Acrylonitrile is stored / transferred / consumed these areas are kept open to air, i.e. not enclosed by any means which eliminates any build up of high concentration harmful / toxic / hazardous vapors in the work environment. For precautionary measures, a stand by gas scrubber for Acrylonitrile shall be installed for any emergency vent of gas. Third party ambient air monitoring is regularly carried out for the existing unit and same shall be continue after proposed expansion. Adequate sprinkling system and fire fighting arrangements are/will be provided.Storage tanks of raw materials and finished products have been provided with dyke walls to hold any unforeseen spillage/leakage. Unit has already developed road for prevention of dust during vehicular movement. Use of vehicles with PUC is/will be made compulsory for transportation vehicles. Adequate greenbelt area is already developed to minimize the impact of fugitive dust due to vehicular movement. Noise generating equipment like pumps, motors, compressors, blowers, power generator sets/ engines etc. are/shall be mounted on sturdy concrete foundations with proper & suitable rubber padding to reduce vibrations & thereby noise generation.Acoustic laggings, enclosures and silencers are/shall be provided wherever necessary for high noise generating equipment. Acoustic enclosure for D. G. Set and similar provision like noise attenuator wherever suitable/possible. Safety blow off valves, discharge pipes, relief valves, etc. is/will be equipped with silencers. Regular lubrication &

preventive maintenance is being/shall be done to reduce vibration & noise generation. Use of PPEs like ear plugs and ear muffs are/will be made compulsory near the high noise generating machines. All vehicles shall maintain speed limit inside the premises and unusual acceleration of engine & loud horns is being/shall be prohibited. Periodic monitoring of noise levels as per post-project monitoring plan is/shall be done on regular basis. Adequate greenbelt area is developed to minimize the impact of noise. No byproduct is being/shall be generated from the existing as well as proposed expansion project. No Solvent shall be used for the existing as well as proposed expansion project. An effective fire hydrant system designed by a competent third party has been installed at existing premises. The fire hydrant system has a water tank of capacity 305 KL and it is located near GIDC water storage tank. The entire fire hydrant line is pressurized with auto pressure switch at 7 kg/cm^2 at all given times. Three pumps have been installed at existing premises and details of the same are as below: (1) Jockey pump of 11 m^3/hr which maintains pressure at 7 kg/cm^2 continuously by auto switch.(2) Electrical driven pump 137 m^3/hr also in auto mode at 7 kg/cm^2.(3)DG driven pump of 137 m^3/hr and it is emergency pump which can operate in eventuality of power failure. A total 56 nos. of different types of portable fire extinguishers have been provided at existing premises. Industry has installed acrylonitrile gas detectors at critical locations like loading, transfer pump area, near reactors where acrylonitrile is consumed. These detectors are connected to the DCS system for continuous monitoring. Suitable alarm set have been programmed in the DCS system for alerting the plant personnel incase of any leakage. Heat detectors with alarms and having the sprinkler on auto mode shall be done during the expansion of the project. Smoke detectors shall be installed in a closed room / closed working areas. Suitable fire detector alarm system shall also be installed. Distance of the nearest fire brigade i.e. GIDC Jhagadia Fire Station is @ 5.00 km from the project site and it will take 10 min. to reach the project site to take care of any emergencies.

After presentation committee asked PP to submit(1) Compliance report of EC (2) Storage capacity of treated waste water during monsoon (3) Justification for not increasing risk after expansion of the project and adequacy of existing storage tanks for storing raw materials and finished goods.PP submitted the said details to the committee which included EC compliance report for period Oct 2015-March 2015. PP mentioned that a tank of 35 KL for storing treated waste water is provided for monsoon season. He further stated that during initial stage of planning, storage tanks of ACN and Acrylamide were built as per requirement of expanded quantity and hence there is no further requirement of additional storage tank of Acrylonitril or Acrylamide and hence no increase in risk is envisaged.

After deliberations on various aspects, the committee unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance

16.	Ecolec Bioscience	Plot no: 805, GIDC Estate, Sarigam, Ta. Umargaon, Dist. Valsad.	Appraisal

Project / Activity No.: 5(f)

- M/s: Ecolec Bioscience (herein after Project Proponent – PP) has submitted application vide their letter dated 09/09/2015.

- Project was scheduled for screening and scoping on 17/11/2015 and additional TOR were issued on 21/01/2016.
- PP submitted final EIA report on 13/05/2016.

Project status: New

Project / Activity Details:

This is a new unit proposes to manufacture specialty chemicals as tabulated below:

Sr. no.	Product	Product Capacity
1	N-BOC-3-Piperidone	25 MT/Month
2	1,2-Dibromotetrachloroethane	
3	1,4-BENZODIOXANE METHANOL	
4	1,4-Dioxaspiro(4,5)Decan-8-One	
5	1,5-Diphenyl-1,4-pentadien-3-one	
6	1,2,5,6-Di-O-Isopropylidene-D-Mannitol	
7	1-benzyl-3-piperidone	
8	1-Pyrrolidinecarbodithioic acid, ammonium salt	
9	2-(3-Chloropropyl)-2-(4-fluorophenyl)-1,3-dioxolane	
10	2,2,6,6-Tetramethyl-3,5-heptanedione	
11	2,2-Bithiophene	
12	2,3-benzofurane	
13	2,5-Bis(chloromethyl)-p-xylene	
14	2-Acetylcyclohexanone	
15	2-aminopyrazine	
16	2-bromo-p-xylene	
17	2-Iodoethanol, stabilized with copper	
18	2-Methoxyhydroquinone	
19	2-Quinolinecarboxaldehyde	
20	3,3,5,5-Tetramethylcyclohexanone	
21	3,5-Pyrazoledicarboxylic acid monohydrate,	
22	3-hydroxy-1,2,3,4-tetrahydrofuran	
23	4,4'-Di-tert.-butylbiphenyl	
24	4,6-Diamino-2-mercaptopyrimidine, hydrate	
25	4-Biphenylcarbonyl chloride	
26	4-Cyano-4-phenylpiperidine hydrochloride	
27	4-quinoline carboxaldehyde	
28	4-tert.-Butylcalix(4)arene-tetraacetic acid tetraethyl ester	
29	5,6-dimethoxy indanone	
30	burgess regent	
31	alpha methylglutaric acid	
32	Methylthiazolyldiphenyl-tetrazolium bromide	
33	dipropyl pthalate	
34	copolymer methylstyrene-chloroacrylate	

	35	Benzethonium Chloride		
	36	Diphenyl Iodonium Nitarte		
	37	a-Bromo-g-butyrolactone,		
	38	Benzeneseleninic anhydride		
	39	Bis(2-hydroxyethyl)dimethylammonium chloride		
	40	Bis(phenylsulfonyl)Methane		
	41	Bis(Phenylthio)methane		
	42	Calix-4-Arene		
	43	Cinnamyl chloride		
	44	Cyano-4,6-dimethyl-2-hydroxypyridine		
	45	cyclopropylphenylsulphide		
	46	DibenzothiophenE		
	47	Diglycolic anhydride		
	48	Diphenyl ditelluride		
	49	Diphosphorus tetraiodide		
	50	1,1-dimethoxy cyclohexanone		
	51	L-(-)-a-Amino-g-butyrolactone hydrobromide		
	52	l-methionine sulphone methyl ester		
	53	Methyl Glycolate		
	54	methyl-3-hydroxybutanoate		
	55	Methysulfuric acid sodium salt		
	56	N,N-Dimethylphenylenediamine dihydrochloride		
	57	N-Aminorhodanine		
	58	N-boc-3-pyrrolidinone		
	59	N-BOC-trans-4-hydroxy-L-proline methyl ester		
	60	nitro phenylselenocyanate		
	61	Nonyl amine		
	62	N-tertbutoxy carbonylethylenediamine		
	63	Phenyl Selenyl Bromide		
	64	Phenyltrimethylammonium tribromide		
	65	Phthalan 496-14-0		
	66	Potassium selenocyanate		
	67	S(+) -2-OCTANOL		
	68	S,S -2,5-HEXANEDIOL		
	69	Tetrahydrothiopyran-4-one		
	70	Trans-2-Phenylcyclopropane-1-carboxylic acid		
	71	Triisopropanolamine cyclic borate 101-00-8		
	72	Tropinone		
	73	2-amino-5-chlorobenzenesulphonic acid		
	74	4-Methyl-2-pipecolic acid acid HCL		
	75	N-Methylhydrazinecarboximidamide hydroiodide		
	76	Tetraphenylcyclopentadienone		
	77	4,6-dimethylpyrimidine		

78	2-chlro-3,4-dimethoxy benzaldehyde	
79	N,N-dimethyl Sulfomoyl chloride	
80	3-acetamido-6-methoxybenzene sulfonyl chloride	
	Total	25 MT/Month
	By-Products	MT/Month
1	Aluminium Chloride	83
2	Hydrogen Bromide	15
3	Dilute Hydrochloric Acid	13
4	Sodium Acetate	16
5	Sodium Bromide	17
6	Potasium Chloride	21
7	Sodium Iodide	36
8	Sodium Sulphite	25

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006.
Total plot area is 2060 sq. m & unit has proposed 1128 sq m area for the green belt development/Tree plantation. Expected project cost is Rs.5 Crores. Total water consumption for proposed project will be 68.5 KLPD.and will be sourced from GIDC water supply.

Sr. No.	Purpose	Water Consumption	Waste Water Generation
		KL / Day	KL / Day
1.	Process	22.5	22.0
2.	Boiler	20.0	1.5
3	Cooling	20.0	1.5
3.	Washing	2.0	2.0
4.	Scrubber	1.0	1.0
5.	Gardening	1.0	--
Total		**66.5**	**28.0***
6.	Domestic	2.0	1.8
Grand Total		**68.5**	**29.8**

Industrial waste water generation will be 28 KL/day. Waste water will be segregated at source. 25 KL/day of dilute stream waste water will be treated in proposed Primary & Secondary treatment plant and treated waste water will be sent to CETP of Sarigam. Unit has proposed to send 3 KL/day of concentrated stream effluent to CHWIF. Domestic waste water (1.8 KL/day) will be disposed off into soak pit system.
It is proposed to install one Boiler (2 TPH) and one TFH (4 Lac Kcal/hr). Natural gas (75 SCM/hr) will be used as fuel for Boiler & TFH. Unit has proposed one DG set (125 KVA) in which HSD (20 ltrs/hr) will be used as fuel. Alkali Scrubber & Water Scrubber will be provided with Sulphonation/Chlorination /Amination for control of gaseous emissions (SO2, HCl, CL2, NH3). Details of hazardous waste is as under:

CAT. NO.	HAZARDOUS WASTE	TOTAL QUANTITY	MODE OF STORAGE	METHOD OF DISPOSAL
5.1	Used Oil	17 Liters/Month	Collected in barrels & stored in hazardous waste storage area	Will be Sent to GPCB approved recyclers
33.1	Discarded barrels/ containers/ liners	0.42 MT/Month i. e. 250 Nos./Month	Stored in hazardous waste storage area	Will be Sent back to supplier / to GPCB approved recycler
35.3	ETP Sludge	15 MT/Month	Collected in plastic / HDPE bags & stored in hazardous waste storage area	Will be Sent to TSDF site for secured land filling
36.1	Distillation Residue	5 MT/Month	Collection in Barrel & stored in hazardous waste storage area	Will be Sent for co-processing in cement industries or Incineration at CHWIF.
36.1	Process Waste	18 MT/Month	Collected in plastic / HDPE bags & stored in hazardous waste storage area	Will be Sent to TSDF site for secured land filling
29.6	Dilute Hydrochloric Acid	12 MT/Month	Collection in Barrel & stored in hazardous waste storage area	Will be reused in process (Tropinone – 23MT/Month or 2-nitrophenylselenocyanate – 13.215 MT/Month or N-BOC-3-pyrrolidinone - 4.93 MT/Month).
--	Liquor Ammonia	8 MT/Month	Collection in Barrel & stored in hazardous waste storage area	Will be reused in process (Nonyl amine – 6 MT/Month or 1,4-benzodioxane methanol ammonium salt -19.75 MT/Month).
--	Sodium Sulphate/ Sodium Chloride/ Ammonium Chloride	9 MT/Month	--	Will be sent to ETP
28.2	Spent Catalyst	1 MT/Month	Stored in hazardous waste storage area	Will be sent to supplier for regenerator

Observations/Discussion:

During SEAC meeting held on 17/11/2016, After technical presentation, additional TOR issued for preparation of EIA.PP submitted final EIA on 13/05/2016. EIA report is prepared by Aqua-Air Environmental engineers P Limited (NABET accredited).PP has submitted GIDC allotment letter. CEPI area of Vapi is away 11.85 Km from Project Site. Silvassa is away 7.35 Km from Project Site. Daman is away 9.25 Km from Project Site. Maharastra is away 7.29 Km from Project Site. Undertaking stating that no bore well shall be dug within the premises has been submitted by the PP which is annexed as Annexure -9 in EIA Report (Page No.A-23).Productwise effluent quality is studied and included in final EIA report (Page 2-111). 1). Total capacity of the CETP is 12.5 MLD. At present actual load of effluent at CETP is 8.0 MLD. Average COD at Inlet of CETP remains between 800 to 1000 mg/L and at outlet it is mentioned in EIA that remains between 150 to -200 mg/L. Spare capacity of CETP is 4.5 MLD. The site specific data were collected for October 2015 to December 2015. For ambient air quality study, 9 sampling stations were decided. The maximum concentration of SPM 126.6 g/m3, PM10 86.5 g/m3, PM2.5 50.71 g/m3,SO2 25.36 g/m3, maximum concentration of NOx 30.21 g/m3, maximum concentration of O3 10.22 g/m3, maximum concentration of NH3 1.76 µg/m3, maximum concentration of CO 1.22 g/m3, maximum concentration of VOC 1.2 ppm recorded in study area. The minimum concentration of SPM 89.59 g/m3, PM10 59.69 g/m3, PM2.5 34.10 g/m3, SO2 13.98 g/m3, minimum concentration of NOx 18.22 g/m3 , minimum concentration of O3 8.97 g/m3, minimum concentration of NH3 1.22 g/m3, minimum concentration of CO 1.15 g/m3, minimum concentration of VOC 0.3 ppm was recorded in study area. The PM10 and PM2.5 concentrations at all the AAQM locations were primarily caused by local phenomena including industrial & vehicular activities and natural dust getting air borne due to manmade activities and blowing wind. HCl, HC and Cl2 parameters were found to be below detectable limit at all the nine monitoring stations. All the ambient air quality parameters were found within NAAQ standards.PP has obtained water supply permission from GIDC.For dilute stream, pp has submitted stagewise treatment scheme including primary and secondary treatment and wastewater COD is reduced from 5000 mg/litre to 800 mg/litre,BOD is reduced from 2500 mg/litre to 200 mg/litre and are within acceptable norms of CETP. It is mentioned that concentrated waste water stream(COD:85000 mg/litre, TDS:96,200 mg/litre) will be generated from products under Sr. NO: 7,19,26,32,36,51,52,56 and 73 and will be sent for disposal to common hazardous waste incineration facility. For process gas emission co troll following air pollution control measures have been suggested.

SR.NO.	**SOURCE OF AIR POLLUTION**	**APCM**
1.	Sulphonation Vessel	Water + Alkali Scrubber
2.	Chlorination Vessel	Water Scrubber
3.	Amination Vessel	Water Scrubber

It is proposed that PP will ensure that(1) Workers employed shall be medically examined by a qualified medical practitioner/ Factory Medical Officer, in the following manner:(a) Once in a period of 6 months, to ascertain physical fitness of the person to do the particular job;(b) Once in a period of 6 months, to ascertain the health status of all the workers in respect of occupational health hazards to which they are exposed and in cases where in the opinion of the Factory Medical Officer it is necessary to do so at a shorter interval in respect of any workers;(c)In periodic and pre-medical examinations, various parameters will be checked. Viz., Blood profile, Liver profile, Kidney Profile, Chest X-rays, Vision testing (Far & Near vision, color vision and any other ocular defect) ECG and other parameters as will be found necessary as per the opinion of Factory Medical officer. (2) Person shall be employed for the first time with proper medical check up.(3) PP will appoint physician for every month consultant and as & when require.

After presentation, committee asked following additional information.

1. Details of generation, collection, storage, handling and safe transportation methodology for

concentrated waste water stream (3 KLPD) to CHWIF.

2. Identification of hazardous chemicals to be stored in premises and their safe handling methods including instant leak detection technique and its stoppage, prevention and associated mitigation measures.
3. Compatibility study for storing hazardous chemicals considering physical and chemical characteristics and safe handling methodology during usage.
4. Up-gradation of air pollution control measures for sulphonation, chlorination and Amination vessels.
5. Identification and submission of hazardous waste details portrayed as by-products in the product list.
6. Antidotes of hazardous chemicals as per MSDS.

17	Mundra Solar Ltd	180/P in Notified APSEZ area, Mundra, Kutch.	Screening & Scoping

Project / Activity No.: 3(a)

- M/s: Mundra Solar Ltd (herein after Project Proponent – PP) has submitted application vide their letter dated 02/05/2016.
- Project was scheduled for screening and scoping on 18/05/2016.

Project status: New

Observations/Discussions:

During meeting, Project proponent informed committee that they intend to submit revised information and requested to withdraw EC application. A letter in this regard is also submitted by PP. Referring to the submission, committee agreed to the request of Project proponent and unanimously decided to close the proposal. It was further decided to delist proposal from the pending application list of EC. PP was asked to reapply with revised information through online portal for environmental clearance..

18	J S Enterprise	Block No.: 12, 45, 13, 14A,14B, Plot No.10 D type 6 to 14, Jalbhumi Industrial estate, Vill: Atodara, Tal: Olpad, Dist: Surat	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: J S Enterprise (herein after Project Proponent – PP) has submitted application vide their letter dated 26/04/2016.

Project status: New

Project / Activity Details:

This is a new project and following products are proposed to manufacture.

Sr. No.	Name of Product	Capacity (T/Month)
1.	Polyester Resin	60 MT/Month
2.	Sizing Binder	15 MT/Month

Plot area is 1256 sq. meter. Green belt is 286 sq. meter. Water consumption is 2.5 KLPD(Domestic: 1 KLPD, Gardening: 1.5 KLPD). Waste water generation is 0.7 KLPD from domestic use and will be discharged to soak pit. Industrial waste water generation will be Nil. Following utilities will be installed by

the PP.

Sr. No.	STACK ATTACHED TO	HEIGHT & DIAMETER OF STACK	APCS	Fuel	FINAL CONCENTRATION
01.	Thermo Pack (600 U)	Height : 25 m	Cycle Separator	Imported Coal: 1 MT/Day	SPM < 150 MG/NM^3 SO_2 < 100 PPM NO_X < 50 PPM

Details of Hazardous waste is as under.:

Sr. No.	Type of Waste	Total Quantity	Schedule-I	Facility
01.	Used oil	0.060 MT/Year	5.1	Collection, Storage, Transportation, Disposal by selling to Registered Re-refiners, approved by GPCB/CPCB or reused as lubricant for machinery within the factory.
03.	PP Bags	206 Nos./Month	--	Collection, Storage, Transportation sell to recycler or return to manufacture.

Undertaking is submitted by the PP for being a small scale unit under B2 quoting MoEF Notification dated 25 June 2014,S.O. 1599(E) as water consumption is 2.5 KLPD, Fuel is imported coal and consumption 1 MTPD and unit is not covered under MSIHC Rules 1989.

Observations & Discussions:

During presentation, PP showed satellite imagery within 1 km of the proposed project and mentioned that Atodra village is located at 0.64km distance which seems lesser than 500 meter and therefore committee decided that proposal cannot be allowed looking to the nearest human habitation within 500 meter. Hence, the project proponent was advised to select another location in any of the suitable chemical estate. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after submission of revised proposal with suitable location.

19	Kana Aroma Industries	Shed no. C1-41/B/1 & 2, GIDC Nandesari, Vadodara.	Screening & Scoping

Project / Activity No.: **5(f)**

M/s: Kana Aroma Industries (herein after Project Proponent – PP) has submitted application vide their letter dated 09/05/2016.

Project status: New

Project / Activity Details:

This is a new project located in GIDC, Nandesari. Total Cost of Proposed Project is Rs. 6 Crore . Total plot area of the project in m2 1651.1 m2 . Green belt area is 500 sq.meter.The proposed products are as below:

Sr. No.	Name of Product	Proposed Quantity in MT/month
1.	Allyl iso thiocynate	5.0

2.	Benzhydrol	5.0
3.	4-methyl cyclohexanol	5.0
4.	4- methyl cyclohexanone	5.0
5.	Styrene oxide	30.0
6.	Phenyl ethyl chloride	10.0
7.	P- tertiary butyl cyclohexyl acetate	5.0
8.	Phenyl ethyl propionate / acetate	3.0
9.	Phenyl ethyl butyrate	3.0
10.	Phenyl ethyl iso butyrate	3.0
11.	Phenyl ethyl formate	3.0
12.	Phenyl ethyl benzoate	3.0
Sr. No.	Name of Product	Proposed Quantity in MT/month
13.	Phenyl ethyl methyl Ether	5.0
14.	Phenyl ethyl alcohol	30.0
15.	2- methoxy naphthalene	10.0
16.	Allyl caproate	2.0
17.	Benzyl alcohol	25.0
18.	Benzyl acetate	10.0
19.	Amyl salicylate	5.0
20.	Iso amyl salicylate	5.0
21.	Methyl salicylate	5.0
22.	Cinnamaldehyde	10.0
23.	Hexyl salicylate	5.0
24.	Cetyl chloride	5.0
25.	Woody Sol	9.5
	Total	206.5

Source of water supply is GIDC. Water consumption details are as under.

Type	Water Consumption(KLPD)	Waste Water generation(KLPD)
Domestic	2	1.60
Gardening	1	0
Industrial		
Process	7	9.5
Boiler	10	4
Cooling	10	5
Washing	6	6
RO Reject	9.5	9.5
Scrubber		2

Total	45.50	37.60

Domestic waste water will be disposed of to soak pit. Industrial effluent of 36 KLPD will be given treatment in ETP and will be sent to CETP, Nandesari for further treatment and disposal. One Boiler (Cap: 1 TPH) and One TFH (Cap: 7 Lac Kcal/Hr) and D. G. Set (Cap: 50 KVA) will be isntrallled. Fuel used will be Coal : 8 MT/Day and HSD: 15 Lit./Hr. APCM proposed to be installed are multicylcone and bag filters.Details of hazardous waste generated are as under:

Sr. No.	Type/Name of Hazardous waste	Source of generation	Quantity (MT/Annum)	Disposal Method
1	Discarded Barrels	Raw material	11 MT/Yr.	Collection, storage, transportation and disposal to GPCB authorised recyclers.
2	Used oil	D. G.Set.	0.2 KL/Yr.	Collection, storage, transportation and reused within premises for lubrication purposes.
3	Spent catalyst	Process	2 MT/Yr.	Collection, storage, transportation and disposal to suppliers for re-activation.
4	ETP sludge	ETP	120 MT/Yr.	Collection, storage, transportation and disposal to TSDF
5	Distillation residue	Distillation process.	60 MT/Yr.	Collection, storage, transportation and disposal to incineration

Observations/Discussion:

Technical presentation was made during the meeting by project proponent. Safety aspects of hazardous chemicals have been discussed. The committee desired to have MSDS of materials to be handled, information on storage of each hazardous chemical and safety measures thereof. Committee also asked to provide necessary Personal Protective Equipments [PPEs] and requisite first aid measures. Committee suggested reuse/recycle of treated waste water to the maximum extent and minimizing the effluent discharge to the CETP. The project proponent requested to allow them to use the data & baseline environmental monitoring carried out for the period March 2016 to May 2016 for the preparation of the EIA report for M/s: Kana Aroma Industries, Shed no. C1-41/B/1 & 2, GIDC Nandesari, Vadodara. which was agreed to by the committee. After detailed discussion, the following additional Terms of Reference were prescribed for the EIA study to be done covering 5 Km radial distance from the project boundary.

1. Copy of plot holding certificate obtained from GIDC 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. 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).

5. Chemical name of each proposed product to be manufactured. Details on end use of each product.
6. 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.
7. 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.
8. 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.
9. Quality and quantity of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
10. Segregation of waste streams and details on specific treatment and disposal of each stream.
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. 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 provisions to be made for Spray drying of industrial effluent stream. Technical details of Spray drying system including capacity, fuel required for spray drying etc. Techno-economical viability of the spray drying system. Details of Air pollution control system.
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. 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, preventive maintenance, failure / tripping control system, guarantee from the APCM supplier, alternative arrangements in case of the failure of the APCM etc.
23. 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.
24. 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.
25. Membership of Common Environmental Infrastructure including CETP, TSDF, Common Hazardous Waste Incineration Facility (CHWIF). (Whichever is applicable). For hydro dynamic cavitation technology at CETP, Nandesari, submission of details of approval of the technology from the institutes of the national repute (NEERI, IIT,etc.)
26. 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.
27. 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.

28. 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.
29. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
30. 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.
31. 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.
32. MSDS of all the products and raw materials.
33. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.
34. Details of quantity of each hazardous chemical (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?
35. 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.
36. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
37. 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.
38. 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.

39. (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.
40. 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.
41. 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.
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 on the MoEF&CC's website 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.

20	Revival of Mandvi Port, Kachchh-Gujarat(Gujarat Maritime Board)	Mandvi Port, Mandvi, Kutchchh	Screening & Scoping

Project / Activity No.: 7(e)

- M/s: Revival of Mandvi Port, Kachchh-Gujarat(Gujarat Maritime Board)(herein after Project Proponent – PP) has submitted application for environmental clearance on 10/05/2016.
- Proposal was scheduled for screening and scoping in the SEAC meeting on 18/05/2016.

Project status: Existing

Project / Activity Details:

The Mandvi Port is situated on the right bank of river Rukmavti in Gulf of Kachchh. It is operation since British regime. Existing infrastructure is in place to handle barges with the capacity of 1500 MT-2000 MT and country craft operations.It has capacity to handle around 4.38 million MTPA.Mandvi Port is in operation prior to 1963 and handling multi cargo commodities like bauxite, food grains, limestone, fertilizer etc and notified under Mandvi Group of Port Notification. Total Cost of the Project in Rs : 9.15 Crores. Total plot area is 35755 $m^{2.}$ During construction stage 40 people and during operation stage 49 people will be involved. One D.G. set of capacity 75 KVA only used during contingency when PGVCL supply is not available. Proposed activities for which Environmental clearance is sought are :(1)Strengthening of existing wharf (75 meters out of 245 m),(2)Dismantling of Groin (1 No),(3)Extension of Existing Groin - (extension of 100 meter),(4)Back filling in Existing wharf (5)Proper C.C. for

Platform,(6)Paver block pavement within port area and repair work of existing building,(7)Maintenance dredging (around 61000 cum ± 10%) near wharf wall and for inner channel,(8)Providing Cast Iron Bollard for tying the vessels,(9)Providing Rubber tyre fender to mitigate berthing impacts on wharf face.No additional land is required since the proposal is for improvement of the existing facilities at the Port.Source of water consumption is existing Mandvi Nagarpalika Pipeline. Water consumption is 4 KLPD and waste water generation is 0.4 KLPD. Power requirement of the project is (1)1200 KVA power requirement for the proposed project shall be sourced from Electricity Board,(2) 75 KVA D.G.Sets will be installed, for emergency power backup. Only diesel shall be used as a fuel in the yard for operating the D.G. Sets (in case of power failure and other emergencies). Quantity of HSD: 20 lit/hr.Details of hazardous waste generation is as under:

Sr. No.	Description	Waste Category	Quantity	Hazardous Waste Disposal / Management
1.	Used Oil	5.1	250 litre per annum	Collection, Storage, Transportation & Disposal by selling to registered refiners.

Observations/Discussion:

Technical presentation included general information for the Mandvi port, details of cargo handling, water requirement, resource consumption, risk estimation, description of Mandvi Port, advantage of port revival, list of proposed activities last handled traffic, traffic of jetties in 100 km vicinity. PP requested to exempt them from public hearing as they are proposing maintenance dredging and further informed that maintenance dredging of quantity 61000 cum +-10% is proposed to be carried out within the port limit and dredged material will not be disposed outside the port limit anywhere in the Sea and it will be utilized as per the recommendation of NABET accredited consultant. Futher PP mentioned that port cargo handling capapcity of 4.38 million Metric Ton per year shall not be increased. Committee referred amendment in the EIA Notification 2006 dated 01/09/2009 wherein it is mentioned that exemption of public hearing is applicable for maintenance dredging provided that the dredged material shall be disposed within port limit. It was also noted that existing cargo handling capacity is not increasing. After deliberation, Committee agreed to the request of PP regarding exemption of public hearing.

After detailed deliberations on various aspects of the project following TORs were prescribed in addition to the draft TOR proposed, to carry out EIA study covering 10 km radius from the project boundary of the proposed site.

1. Present land use pattern within 10 km radius from the project boundary based on satellite imagery.
2. A map showing distance of the nearest fishing port, fishermen hutments, village, salt pans, mangrove patch, migratory corridors of birds, National Parks/Sanctuaries/Bio sphere Reserves, sand dune areas etc. from the project boundary.
3. Distance of the jetty from the Low Tide Line. Authenticated details on High Tide height, time duration of high tide availability etc.

4. Phase wise project implementation details in terms of site development, infrastructure provision, EMS implementation etc. Phase wise project implementation schedule with bar chart including resources, manpower and time frame etc.
5. Details of the activities to be undertaken in the CRZ area and their impact on marine ecosystems and mitigation measures proposed in this regard.
6. Copy of CRZ map or map prepared by one of the authorized agencies authorized by the MoEF for carrying out the CRZ demarcation, on which the project boundary / facilities are superimposed and clearly indicating the proposed project location.
7. Status of application for CRZ clearance, recommendation from the Gujarat Coastal Zone Management Authority under the CRZ Notification.
8. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the project. Copy of permission obtained from the concerned authority for water supply.
9. Detailed mass balance and water balance (including reuse-recycle, if any).
10. Details of the proposed ETP and stream wise analysis of the waste water likely to be generated as well as the stream wise treatment proposed with ETP adequacy and efficacy report. Details of segregation of the wastewater stream to be carried out and plans for management and disposal of concentrated streams to be generated from spillage, leakages etc. A detailed treatability study for untreated effluent & treated effluent vis-à-vis adequacy of the treatment facilities proposed for the wastewater likely to be generated. The characteristic on which treatability is based shall also be stated.
11. Explore the possibility of reuse / recycle and other cleaner production options for reduction of wastes. Details of water conservation measures including reuse, recycle, use of low water consuming devices. Explore reuse of total treated waste water if possible.
12. Specific measures proposed to conserve water and plans for the future in this regard.
13. Exact cargo handling capacity for the proposed project in addition to the existing project, Scope of the project in terms of types of equipment to be fabricated along with bifurcation of tonnage of each category based on maximum/ peak rated capacity of the project in terms of cargo handling, technology, equipment, manpower, resource use, etc.
14. Finalization of the exact scope of the off shore / waterfront facilities out of various options i.e. access bund / RO-RO ramp / Jetty / Basin and technical details of the same.
15. Details of the berthing facility if any to be provided along with class of vessels envisaged. Ship simulation to be done in respect of stability. Details of handling of each cargo, its impact and management plan.
16. Detailed study for shore protection works. Details of proposed reclamation and / or dredging for protection of the water front and/or maintaining the channel depth. Details regarding dredging depth, dredge material characteristics as well as the dredged quantity, its disposal & and reclamation. The chances of erosion / accretion due to proposed dredging and/or reclamation and mitigation measures should be incorporated.
17. Measures to prevent further deterioration of the estuarine river water quality and coastal ecology due to the proposed project. Cumulative impact taking into consideration other project activities in the vicinity.

18. Whether any blockage of creek is envisaged due to the proposed project and if so, remedial measures. Impact on the natural drainage system if any. It shall be ensured that free flow of water from the catchment area is not hampered due to the proposed project.
19. Hydro-dynamics of estuary / creek from shoreline erosion perspective. The hydro-dynamic studies shall be undertaken for assessing whether the proposed activities shall have any significant impact to the shoreline abutting the project as well as significant impact on the ecologically sensitive areas along the stretch or not.
20. Whether project activities will lead to any shoreline changes. Hydrodynamics of the coast abutting the project site from shoreline erosion perspective. The hydrodynamic studies for assessing whether the proposed activities shall have any significant impact on the shoreline abutting the project along the stretch or not. Details of precautions to be taken to ensure that there will be no adverse impact on the drainage of the area.
21. Comprehensive modeling study of accretion, erosion / deterioration on nearby coastline & elsewhere due to the proposed project and its mitigation measures. Submit details of stability analysis of coast. The study shall be got vetted by CWPRS.
22. Details of the sand dune areas and ecologically sensitive areas in the vicinity.
23. Anticipated environmental impacts and mitigation measures due to the ship traffic including discharges from vessels and cargo operations.
24. Details of existing sea vessel traffic management and predicted increase in vessel traffic due to the proposed project along with its impacts.
25. Details of vessel traffic management system framed for the proposed project considering the guidelines and provisions of Vessel Traffic Management System devised for Gulf of Cambay. Measures proposed to ensure that there will be no any hindrance to the movement of fishing vessels or fishermen.
26. Impact of project construction/operation on the noise and vibration due to construction equipment, cargo handling equipment and road traffic. Mitigation measures for the same.
27. Impact on marine life and fishing activities in the surrounding region.
28. Impacts of the proposed activities on fishing in the surrounding region as well as on livelihood of fishermen, saltpan workers, farmers, villagers etc. How it would be ensured that fishing area will not be affected due to the project activities.
29. Commitment from the management for extensive mangrove plantation as well as mangrove associated species in the area with year wise plan. Explore co-ordination with ecology commission / social forestry division for the same.
30. Details of hazardous characteristics of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impact.
31. Details on quantity of each hazardous chemical to be stored, material of construction of storage tanks, threshold storage quantity as per schedules of Manufacture, Storage & Import of Hazardous Chemicals Rules.
32. Details of hazardous processes and their engineering controls.
33. Details of possibility of occupational health hazard from the proposed manufacturing activities and

proposed measures to prevent it.

34. Measures proposed to arrest the micronized fine particles generated during the painting process. Disposal of waste paint / paint residue.
35. Details for the use of lead free paints in the proposed project. Undertaking for use of only lead free paints in the project.
36. Submit the details of storage yard and dust suppression measures.
37. The details with respect to number of fishermen (including the pagarias) living and / or fishing within the study area along with the exact distance of their habitation from the proposed facilities. Details of fish production in the region in last five years as per the records of fisheries department. Impacts of the proposed activities on the fishery in the region. How, it would be ensured that fishing area will not be affected due to the project activities.
38. 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.
39. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
40. 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.
41. 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 google map / geographical area map.
42. Apart from terrestrial EIA study, Marine EIA study should be conducted through reputed institute in order to assess impacts of the proposed activities on the marine environment as well as fishery and according to the same, mitigation measures shall be planned.
43. Baseline status of flora, fauna and marine biodiversity including that of phytoplankton and zooplankton in the study area shall be elaborated. Impact of the proposed activities on the marine biodiversity shall be elaborated. In case of any scheduled fauna, conservation plan should be provided.
44. Actual field survey shall be carried out for ascertaining base line status of coastal and marine flora, fauna, including that of phytoplankton and zooplankton. Impacts of the proposed activities on the marine flora, fauna; especially on endangered and rare species shall be elaborated.

45. Include coastal geo-morphology in the EIA study report.
46. 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.
47. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution control measures for process gas emission measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate, emission from each utility (vii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (viii) List the sources of fugitive emission along with its quantification and proposed measures to control it. (iv) Air pollution due to the sand /grit blasting operation.
48. Details of mangrove along with its species in the jetty area & fabrication plant area.
49. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
50. Detailed greenbelt 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 nearby area and elsewhere.
51. Copy of membership certificate of Common Environmental Infrastructure like TSDF, if any taken, should be incorporated. Copies of MOU / agreements done with actual consumers regarding utilization of fly ash, bottom ash etc. should also be incorporated.
52. A detailed EMP including the protection and mitigation measures for the impacts on human health and environment as well as detailed environmental monitoring plan with respect to various parameters, environmental management cell proposed for implementation & monitoring of EMP as well as person responsible for the same. The EMP should also include the concept of waste-minimisation, energy conservation, and natural resource conservation. Plan to ensure that the existing environmental condition is not deteriorated due to discharges from the vessels / boats, disposal of sewage, etc.
53. Premises/Factory lay out showing open unobstructed peripheral margin, green belt, separate gates for entry and exit, parking area for tankers / trucks / visitors etc.
54. Detail risk assessment report including prediction of the worst-case scenario and maximum credible accident scenario, catastrophic failure along with damage distances and preparedness plan to combat such situation and risk mitigation measures. This shall also include hazardous area classification & vulnerable zone demarcation. Detailed fire control plan for flammable substances and processes. Environment Management Plan and On-Site / Off-Site emergency plan for proposed plant.
55. Details of management of the solid waste and 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 shall be minimized.
56. Methodology of de-contamination and disposal of discarded containers and its record keeping.
57. Specific safety details /provisions for various solvents to be used in the process including onsite / offsite emergency plan.

58. Detailed odour control and management plan.
59. To explore the use of renewable energy to the maximum extent possible.
60. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
61. Details of likely heat stress to the workers. Radiation heat level in & around the furnace, monitoring and mitigation measures for the same.
62. Specific safety details / precautionary measures proposed for VOC's in the plant / storage yard / warehouse/ including ventilation aligned in the natural wind direction.
63. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers.
64. Details of existing traffic density on main road as well as secondary road in the vicinity, prediction of impact of additional traffic from the project on those roads along with carrying capacity of the said roads.
65. Details of flood data considered to avoid flooding at the proposed site & preventive measures envisaged for the same.
66. Details of monitoring / supervision cell to monitor environmental aspects during construction and operational phases. Appointment of Construction Safety Officer during the construction phase as well as a detailed environment management plan.
67. Details of provisions to make the project energy-efficient through of energy efficient devices and adoption of modes of alternative eco friendly sources of energy, solar water heater, solar lighting etc. Measures proposed to comply with the ECBC norms and other measures proposed for energy conservation.
68. Details of dust suppression measures proposed during the construction period. Noise mitigation measures during construction activity from the proposed activity.
69. Details of the seismic design aspects to be adhered to in the project.
70. Details on use of eco-friendly building materials including fly ash bricks, fly ash paving blocks, RMC etc.
71. Details of disaster management plan / emergency management systems during operational phase of the project should also include scenario of natural catastrophe like earth quake, floods and tsunami in addition to other disasters. The plan should include the details of (i) Emergency evacuation (ii) Emergency lighting system (iii) Details of power back up system in the case of emergency (iv) Fire fighting arrangements (v) First aid arrangement (vi) Training and Mock drill (vii) Emergency announcement or public address system (viii)Signage's including fluorescent pathways/ exit marker signs (ix)Location of emergency pathways and glow light signs. (x) Emergency response procedures.
72. Details of fire fighting system at the jetty as well as fabrication unit including provision for flame detectors, temperature actuated heat detectors, 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. Submit line diagram of the fire hydrant line passing through the plant premises.

Fire control plan for flammable substances and processes based on the flammable area classification.

73. Details of first aid, fire fighting system and other emergency services to be provided during operation phase including the training to be provided to the staff of the project as first aid facility providers, fire fighters etc. Tie up with emergency services like local fire station, provision of emergency van etc. to be made during the operational phase.
74. Details of the D.G. sets with location, fuel consumption & storage and details of the acoustic measures to abate noise pollution.
75. Details of the debris management plan along with the use/disposal of excavated soil during construction phase and top soil conservation plan.
76. The details of the basic amenities and welfare facilities to be provided to the construction workers to ensure that they do not ruin the existing environment.
77. Undertaking from the management regarding maximum employment to the local people.
78. Submit a detailed plan for social corporate responsibilities, with appropriate budgetary provisions.
79. Distance of the nearest mangrove patches from the project site. Details of mangrove along with its species in the jetty area & approach road area.
80. Details of five year greenbelt development program. Commitment from the management for extensive mangrove plantation as well as mangrove associated species in the area with year wise plan.
81. Details of use of eco-friendly building material including fly ash bricks, fly ash paving blocks. Use of RMC in the project.
82. The details of the basic amenities and welfare facilities to be provided to the construction workers to ensure that they do not ruin the existing environment.
83. Details of registration and provisions to be made by the project proponent to follow Building and other Construction Workers Acts and Rules and undertaking for the same.
84. An action plan showing list of socio-economic upliftment activities based on socio-economic profile of the surrounding villages and need base field assessment along with the fund allocation for the five years, shall be incorporated in the EMP.
85. (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.
86. (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.
87. 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.
88. 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.
89. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be

incorporated in the EIA Report.

90. 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 category 7(e), "Ports, Harbours" 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 after receipt of the final EIA report.

FOLLOWING PROPOSAL WAS SCHEDULED IN SEAC MEETING HELD ON 23/03/2016 FOR AMENDMENT IN EC AND ADDITINAL INFORMATION SOUGHT. PP HAS SUBMITTED THE SAID DETAILS ON 07/05/2016 AND DETAIL IS AS UNDER:

1	SIA/GJ/IND2/3570/2014 & SIA/GJ/IND2/3277/2014	M/S. Deepak Nitrite limited M/S. Deepak Phenolics limited *Plot No. 12/B, GIDC Industrial Estate Dahej, Taluka Vagra, District Bharuch, Gujarat*	Amendment in EC

Project / Activity No.: 5(f)

- M/s:Deepak Nitrite limited and M/S. Deepak Phenolics limited herein after Project Proponent – PP) have submitted applications for amendment in Environmental clearance project. EC is originally issued in the name of M/S Deepak Nitrite limited and applied for amendment for bifurcation of existing EC No. SEIAA/EC/5(f), 4(d), 1(d)/120/2014 dated 6th August 2014 into Deepak Nitrite Limited *(DNL)* and Deepak Phenolics Limited *(DPL)* on 13/01/2016
- Proposal was considered for screening and scoping during SEAC meeting held on 23.03.2016.

Project status: EC Amendment

Project / Activity Details:

Project proponent M/S Deepak Nitrite Limited has obtained Environmental Clearance vide No. SEIAA/EC/5(f), 4(d), 1(d)/120/2014 dated 6th August 2014 and now applied for bifurcation of EC into Deepak Nitrite Limited *(DNL)* and Deepak Phenolics Limited *(DPL) stating that there is no change in any of the parameters of original EC due to proposed bifurcation.*

Project proponent has applied for the bifurcation and detail is as under:

S. No.	Name of Final EC Product	EC Received (MT/Month)	Capacity (MT/Month)	
			DNL	DPL
1	Hydrogenation Toludine (Ortho, Para, Meta), Xylidine (2-4,2-6,3-4,2-3), Cyclohexanone, Cumidine, (Para & Ortho)	3400	750	2650
2	Nitration Plant- Any one Product at a time			
	Nitro Toluenes (ONT, PNT, MNT)	2500	2500	-

	Nitrochlorobenzenes (ONCB, PNCB)	2500	2500	-
	O- Nitroxylenes (3 NOX & 4NOX)	2160	2160	-
	M- Nitroxylenes (2, 4 NXL & 2,6 NXL)	2160	2160	-
	Ethyl Hexyl Nitrate (EHN)	1800	1800	-
	Nitrocumenes (PNC)	1800	1800	-
3	Monochlorobenzene (MCB)	1667	1667	-
4	Dichlorobenzene DCB (Byproduct)	187	187	-
5	30% HCl (Byproduct)	1850	1850	-
6	DASDA	1875	1875	-
7	Sodium Sulphate (Byproduct)	2511.30	2511.3	-
8	Various Optical Brightening Agents (OBA) such as DMA-X Conc., UP liq., UP Conc., SRK, BMK, AS liq., HF liq., ABP liq., SI liq., BOP, MST liq., 2B Type etc. on activity basis	3750	3750	-
9	Hydrogen (Byproduct) (Nm3/ hr)	1800	1800	-
10	Power	42 MW	-	42 MW
11	Steam	125 TPH	25 TPH	100 TPH
12	Phenol	16667	-	16667
13	Cumene	25000	-	25000
14	Acetone	10000	-	10000
15	Alpha Methyl Styrene (AMS)	500	-	500
16	Benzene Rich Cut	175	-	175
17	Crude Phenol Column Bottoms	730	-	730

For location and power details, PP has submitted following details:

Item	Details		
	As per EC	DNL	DPL
Location	Plot No.: 12/B of GIDC Dahej Taluka : Vagra; District: Bharuch; State: Gujarat.		
Area	231617.14 m^2	91499.14 m^2	1,40,118 m^2
Power Requirement & Source	Connection load : 9 MW Stand By: 2 D.G Sets of capacity 1500 KVA each	Connection load : 3.5 MW Power supply from grid (Dakshin Gujarat Vij Co. Ltd.) Stand By: 1 D.G Sets of capacity 1500	Connection load : 5.5 MW Power supply from grid (Dakshin Gujarat Vij Co. Ltd.)) Stand By: 1 D.G Sets of capacity 1500 KVA

		KVA each	each Power Plant: DPL- 42 MW CPP

Details of water requirement & Source: The water source is GIDC water supply.

Total Water Requirement	10373 KLD	8325 KLD	2048 KLD
Recovery	-2717 KLD	-2717 KLD	0
Net Water Requirement	7656 KLD	5608 KLD	2048KLD

Water consumption details:

S. No.	Source	Quantity of Water Consumption, KLD		
		EC Received	Deepak Nitrite Ltd	Deepak Phenolics Ltd
1	Process	3672	3495	177
2	Boiler	1464	964	500
3	Cooling & Chilling	4929	3630	1299
4	Washing	145	110	35
5	Domestic	100	88	12
6	Gardening	63	38	25
	Total Water Requirement	10373	8325	2048
7	Recovery	-2717	-2717	0
	Net Water Requirement	7656	5608	2048

Details of waste water generation:

S. No.	Description	Waste water generation in KLD
1	Process	517.9
2	Boiler	670.6
3	Cooling & Chilling	996.5

4	Washing	110
5	Domestic	74.6
6	Total Wastewater Generation	5182.5
	Water to MEE for Recovery	2812.9
7	Total Water to ETP & thereafter to GIDC Drain for disposal to deep sea	2369.6

Details of effluent generation and handling:

Item	Details		
	As per EC	DNL	DPL
Effluent Generation, Treatment and Disposal:			
Total	6131.5 KLD	5182.5 KLD	949 KLD
Recovery from MEE	2812.9 KLD	2812.9 KLD	0
After treatment disposed to drain	3319 KLD	2369.6 KLD	949 KLD
ETP Capacity		750 KLD X 3	1000 KLD
Details of Air Emissions:			
Air emission	Flue Gas Stacks: 11 Nos Process Vents: 9 Nos.	Flue Gas Stacks: 7 Nos. Process Vents: 8 Nos.	Flue Gas Stacks: 4 Nos. Process Vents: 1 Nos.
Hazardous Solid Waste treatment and Disposal	Membership of Certificate of Saurashtra Enviro Projects Pvt. Ltd. (SEPPL), Bhachau is available for hazardous waste disposal.		

Details of fuel consumption and flue gas stacks:

S. No.	Stack Attached to	Type of Fuel used	EC	DNL	DPL

			Received		
1	Boiler for Hydrogenation, Nitration & Chlorination Plant (22TPH)	Indian/ Imported Coal	3806/ 2530	3806/ 2530	-
2	Thermic Fluid Heater for Chlorination Plant	Furnace Oil	14.25	14.25	-
3	Boiler for DASDA Plant (32 TPH)	Indian/ Imported Coal	5536/ 3680	5536/ 3680	-
4	Thermic Fluid Heater for DASDA Plant	Indian Coal	230	230	-
5	Scrubber for FBRS of DASDA Plant	Saw Dust	125	125	-
6	Boiler for OBA Plant (16 TPH)	Indian/ Imported Coal	2768/ 1840	2768/ 1840	-
7	Boiler for ECH Plant (30 TPH)	Indian/ Imported Coal	-	-	-
8	Cogen Plant Boiler (100 TPH)	Indian/ Imported Coal(kg/hr.)	17300/ 11500	-	17300/ 11500
9	DG Set (1 no. of 1500 kVA)	HSD	500 lit/hr.	500 lit/hr.	-
10	Boiler for Phenol & cumene plant (100 TPH)	Indian/ Imported Coal	21000/ 14000	-	21000/ 14000
11	Incinerator for Vent gas	Gas	25 m3/ hr	-	25 m3/ hr
12	Hot Air Generating Unit	Indian/ Imported Coal(kg/hr)	1950/ 1500	1950/ 1500	-
13	DG Set (1 no. of 1500 kVA)	HSD	500 lit/hr.	-	500 lit/hr.

Fuel consumption and APCM details of DNL

S. No.	Stack Attached to	Capacity	Stack Nos.	Type of Fuel used	Fuel consumption (Kg/hr)	Air Pollution Control Measures
1	Boiler for Hydrogenation, Nitration & Chlorination Plant	22 TPH	1	Indian/ Imported Coal	3806/ 2530	Electro Static Precipitator (ESP) & Adequate Stack Height

2	Thermic Fluid Heater for Chlorination Plant		1	Furnace Oil	14.25	Adequate Stack Height
3	Boiler for DASDA Plant	32 TPH	1	Indian/ Imported Coal	5536/ 3680	ESP & Adequate Stack Height
4	Thermic Fluid Heater for DASDA Plant		1	Indian Coal	230	Adequate Stack Height
5	Boiler for OBA Plant	16 TPH	1	Indian/ Imported Coal	2768/ 1840	ESP & Adequate Stack Height
6	Hot Air Generating Unit (OBA Plant)		1	Indian/ Imported Coal	1950/ 1500	ESP with adequate stack height will be provided
7	DG Set (1 no.)	1500 kVA	1	HSD	500 lit/hr	Adequate Stack Height

Fuel consumption and APCM for DPL

S. No.	Stack Attached to	Capacity	Stack Nos.	Type of Fuel used	Fuel consumption (Kg/hr)	Air Pollution Control Measures
1	Cogen Plant Boiler	100 TPH	1	Indian/Imported Coal	17300/11500	ESP & Adequate Stack Height
2	Boiler for phenol & Cumene	100 TPH	1	Indian/Imported Coal	21000/14000	ESP with adequate stack height will be provided
3	Incinerator for 304 Nm3/hr. Vent gas	304 Nm3/hr	1	Gas	25 m3/ hr	Adequate Stack Height will be provided
4	DG Set (1 no.)	1500 KVA	1	HSD	500 lit/hr.	Adequate Stack Height will be provided

Details of process vents for DNL.

Stack Attached to	Nos. of Stack	Stack Height in m	Pollutants Emitted	Air Pollution Control Measure
Hydrogenation Reactor of Hydrogen Plant	1	20	Hydrogen	Vent Scrubbing System for H_2 gas
Nitration Reactor of Nitration Plant	1	16	NOx Vapours <40 mg/ Nm^3	NOx Scrubber with water as scrubbing media
Chlorination Reactor of Chlorination Plant	1	20	HCl Vapours <20 mg/ Nm^3	HCl absorption column with water as scrubbing media
Drowning Reactor of DASDA Plant	1	15	SO_2 Vapours <40 mg/ Nm^3	SO_2 Vent scrubbing system
Oxidation Vats of DASDA Plant	1	20	Air with minor organics	Vent scrubbing system for Oxidation vats
Reactors of OBA Plant	1	20	CO_2 Vapour	CO_2 vent scrubbing system
Process Plant of OBA Plant	1	37	HCl Fumes	Scrubber
Spray Dryer of OBA Plant	1	29	PM, SO_2, NOx	-

Process vent details of DPL:

Stack Attached to	Nos. of Stack	Stack Height in m	Pollutants Emitted	Air Pollution Control Measure
Process Plant	1	30	VOC	Incinerator

Details of Land distribution of DNL:

S. No.	Area	Area in m^2	% of Plot Area
1	Production	3290	3.60
2	Storage		
	Product Storage	3221	3.52

	Raw Material	9748	10.65
	Drum Storage	5373	5.87
3	Boiler	479.2	0.52
4	Substation	177.8	0.19
5	DG Room	117	0.13
6	Security Room	26.5	0.03
7	Cooling Tower	82	0.09
8	Office	527.4	0.58
9	Effluent Treatment Plant	5110	5.58
10	Road & open area	23787.84	26.00
11	Green belt Area	32235.7	35.23
12	Fire water tank	297.5	0.33
13	Raw Water	670	0.73
14	Process water/ DM water	217.3	0.24
15	Chilled water	124.4	0.14
16	Substation/CCR	739.1	0.81
17	Engg Store	710.7	0.78
18	Coal storage	465	0.51
19	N2 storage	500	0.55
20	other	760.9	0.83
21	Garden/Assembly point	2838.8	3.10
	Total	91499.14	100.00

Detail of hazardous waste is as under:

Sr NO	Type of Waste	HW Category	HW Generation (MTPM)			Treatment/Disposal.
			EC received	DNL	DPL	
1	ETP Sludge Salt generation from ECH,OBA and DASDA	34.3	a)395 b)3728	a)135 b)3728	a)260	Collection, storage, transportation and disposal at TSDF site. Salt sale/tsdf site.
2	Process	26.1	a)105	a)105	-	Collection, storage,

	waste waste residue		b)368	b)368		disposal by incineration at approved incinerator site.
3	Spent Catalyst for regeneration	-	4.2	4.2	-	Regenerated and reused or sent to third party for recovering precious metal.
4	Used OIl	5.1	350 litre/month	100 litre/month	250 litre/month	Collection, storage, transportation, disposal by selling to registered reprocessors.
5	Boiler Ash	-	7683(if Indian coal) or 1807(if imported coal)	3650 (Indian Coal)	4033(Indian Coal)	Collection, storage, transportation, disposal by selling to brick manufacturers or cement industry.
6	Spent Cabon	18.2	33.19	27.69	5.5	Collection, storage, transportation, Disposal to TSDF.
7	Iron Sludge	-	2813	2813	-	Sold to approved registered vendors/cement manufacturers
8	Discarded Containers	33.3	2000 Nos/Month	1000 Nos/Month	1000 Nos/Month	Collection, decontamination, storage, transportation, sell to registered vendor

Observations & Discussions:

During SEAC meetihg held on 23/03/2016,, after technical presentation, referring to the EC already granted to Deepak Nitrite Limited and proposal of PP for demerger of the project proponent, Committee noticed that due to bifurcation of the Deepak Nitrite Limited in to Deepak Nitrite Limited and Deepak Phenolics limited, a study on environment impact is required. After deliberation on various aspects, committee sought additional information which was submitted by the PP on 07/05/2016 and details are as under:

1. Environmental study report by accredited consultant covering impacts on water, Air, Soil, Noise, Flora fauna etc. due to bifurcation of products, plants, RM storage facilities, utilities, EMS from Deepak Nitrite Limited into (1)Deepak Nitrite Limited and (2) Deepak Phenolics Limited keeping EIA report submitted earlier in a view, its associated mitigation measures and recommendations.

PP mentioned that the environmental impact assessment was conducted and submitted earlier. Presently in the OBA is being manufactured at existing location with dedicated facility. After

bifurcation of EC and creation of separate company called Deepak Phenolics Limited, separate EMS shall be in place. All the facilities of EMS are dedicated for DNL & DPL. Impacts on water, Air, Soil, Noise, Flora fauna etc. due to proposed bifurcation remains unchanged from original EC. The products, plants, RM storage facilities, utilities of DNL and DPL due to proposed bifurcation remain unchanged from original EC. PP further submitted matix representation considering score and severity criteria for various activities covering Air quality, Noise and odour, water quality, land quality, infrastructure, services, environmental hazards, terrestrial hazards, social economic status, and aquatic ecology. After studying impacts, it is concluded that there is no impact due to bifurcation of the project into Deepak Nitrite Limited and Deepak Phenolics Limited.

2. Land possession documents of Deepak Nitrite Limited and Deepak Phenolics limited obtained from the GIDC.

Land possession documents for Deepak Nitrite Limited are submitted by the PP as Annexure 2. PP further mentioned that DNL has already applied to GIDC with all supporting documents for land bifurcation between Deepak Nitrite Limited and Deepak Phenolics Limited. Numbers of meeting has taken place between GIDC and DNL.The approval for bifurcation of land is awaited.

3. Justification for demerger of Deepak Nitrite Limited into Deepak Nitrite Limited and Deepak Phenolics Limited with submission of all concerned documents.

PP submitted that the proposed petrochemical business requires specialized knowledge in terms of project execution and the process. and hence they have decided to set up a separate wholly owned subsidiary company for better project management and operational efficiency through a specialized dedicated team of experts in this petrochemical line of business. Therefore, a company under the named Deepak Phenolics Limited is set up for managing the petrochemical business as mentioned above under the overall guidance of the principal promoter of the company. Memorandum of Association & Articles of Association of Deepak Phenolics Limited is submitted by the PP.

4. Detailed breakup of hazardous waste generation for DPL and DNL.

Detailed break up of hazardous waste generation and its managements is submitted by PP and is mentioned under project details.

The said reply was considered by the committee in the meeting of the SEAC held on 18/05/2016 and as it was found satisfactory, committee unanimously decided to recommend amendment to SEIAA in Environmental Clearance vide order no. SEIAA/EC/5(f),4(d),1(d)/120/2014 dated 06/08/2014 as stated above.

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

Sr. No.	Name and address of the project.
1.	Residential building construction project by M/s Fortune Royale at R.S. No.. 382/1, Moje: Chala, Tehsil: Vapi, District : Valsad

2.	Building construction project by Mr. Malay B. Patel, S.No.33+34/p, F.P.No.33+34, T.P.S.No.48, Koteshwar, Gandhinagar.
3.	Residential & commercial project by M/s Shashwat Homes LLP., F.P.No.86/1 & 90/4, S.No.19/1/1,19/1/2,19/2,20/1, 37/2,38/1,38/2,38/3,45,46 and 61, T.P.S.No.66/A, Ranip, Ahmedabad.
4.	Building construction project by M/s Avirat Homes, S.No. 443A/1, 444, 445, F.P.No. 41/2, 44, 45, T.P.S.No. 204, Ambli, Ahmedabad
5.	Palak Classic, at S.No.372, F.P.No.62, TPS No.51(Bodakdev Makaraba-Vejalpur) Vejalpur-Jodhpur, Ahmedabad.
6.	Accron Business Hub, O.P.No.71, F.P.No.145/P, T.P.S.No.27 (Bhatar Majura), Moje: Majura, Dist: Surat.

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. Mayuriben Pandya, Member, SEAC.	
5.	Shri R. I. Shah, Member, SEAC.	
6.	Shri V. N. Patel, Member, SEAC.	