

Minutes of the 294th meeting of the State Level Expert Appraisal Committee held on 06/06/2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar.

The 294th meeting of the State Level Expert Appraisal Committee (SEAC) was held on 6th June, 2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar. Following members attended the meeting:

1. *Shri T. P. Singh, Chairman, SEAC.*
2. *Shri V. C. Soni, Vice Chairman, SEAC.*
3. *Shri R. J. Shah, Member, SEAC.*
4. *Dr. V. K. Jain, Member, SEAC.*
5. *Shri V.N. Patel, Member, SEAC.*

The agenda of TOR/Scoping/Category 8 (a) cases, Appraisal & EC amendment cases was taken up. Nine (9) cases of TOR/Scoping/Category 8 (a), one case of TOR amendment and Sixteen (16) cases of Appraisal was taken up. The applicants made presentations on the activities to be carried out along with other details furnished in the Form-1 / Form-1A, EIA report and other reports.

1	SIM Estate	F.P No .196 ,T.P.S.No 16 , Shaherkotda, Maninagar, Ahmedabad	Screening & Scoping
<p>The project was taken up in the meeting of SEAC held on 31/03/2016. During the meeting held on 31/03/2016, it was found that the traffic survey carried out on all the three approach roads shows that the overall Level of Service of the existing road network will be 'D' (fair) for one road & 'E' (poor) for two roads in proposed scenario. The project proponent clarified that all the three roads will be widened as per the new planning of AMC. The project proponent was asked to submit revised traffic survey details taking into consideration the proposed widening of the roads. It was presented that existing structure will be demolished for construction of the proposed commercial buildings. They were suggested to increase the parking area provision by providing 2nd level basement. It was presented that Mechanical extractors for smoke venting permitting 10 air changes per hour in case of a fire or distress call, ventilator openings each having a size of 0.5 m X 0.5 m, use of light colors to paint the basement wall to allow higher illumination etc. will be provided for ventilation as well as lighting arrangement in the basement. CO sensor with an associated alarm system will be provided in the basement parking area. After detailed discussion, it was decided to appraise the project further only after submission of the following:</p> <ol style="list-style-type: none"> 1. Demolition debris management, reuse & disposal plan. 2. Details of the D.G. sets, if to be provided, including fuel, quantity, stack height, location as well as the acoustic measures proposed to abate noise pollution 3. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay. 4. Explore the possibility of increasing the parking area provision for the project by providing 2nd level basement. Revised details on parking area provision based on the actual parking area requirement for 			

the project as per NBC norms & existing GDCR and proposed 2nd level basement with back up calculation showing the norms adopted for the same and parking plans.

5. Revised project plans showing provision of second level basement and revised built up area of the project.
6. Type of activities to be carried out in the commercial units of the proposed project. Undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and any commercial unit shall not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.
7. Details on travel distance of the nearest staircase from the respective farthest corner of the floor as well as between the two staircases in the proposed commercial buildings.
8. Revised details on traffic survey considering the proposed widening of all the three approach main roads.
9. Land possession documents showing the ownership of land by the applicant, list of partners & directors of the company, copy of permission obtained for non agricultural use of the project site for commercial use or a copy of documents showing the correspondences made in this regard and a copy of agreement made between the land owners & developers (if any).

Project proponent submitted the above mentioned details vide their letter dated 29/04/2016.

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

It was presented that approximately 6,000 m³ of construction debris to be generated will be used for leveling, internal roads, pavements, plot filling, plinth filling etc. within premises itself. Details of proposed EMP was presented and budget allocation of Rs. 43 lacs as capital cost & Rs. 6 lacs as recurring cost has been proposed for the EMP. It is proposed to make provision of mechanical parking for 257 CPS in basement in order to increase parking area so as to accommodate total 1670 CPS. It was presented that activities like trading of garments, stationery, textiles & mill machinery parts, electrical parts, sewing activity, motor rewinding activity etc. will be carried out in the proposed commercial project. The project proponent vide letter dated 29/04/2016 committed for not selling / allotting any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. It was presented that maximum travel distance to the nearest staircase in case of all the buildings from the respective farthest corner of the floor will not be more than 29 m. Traffic survey carried out considering the proposed widening of 24 m, 18 m & 12 m wide roads to 30 m, 24 m & 18 m width respectively and it shows that the all the three roads will be occupied by 97%, 91% & 64% respectively of their total carrying capacity after the proposed project comes to its operational phase. It was presented that Shree Industrial Mills Estate (SIM Estate) is an association of persons and the association through its members holds the ownership of the land.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/50464/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)

4.	Name of the project	Sim Estate															
5.	Name of Developer	M/s. Shree Industrial Mills Estate															
6.	Estimated Project Cost (Rs. In Crores)	50 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²) :- 43,959 FSI area (m²): 79,124.96 Total BUA (m²): 1,31,250.43 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>79,126.20</td> <td>79,124.96</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>--</td> <td>21,953.56</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>4,395.90</td> <td>4,396.83</td> </tr> <tr> <td>Max. building height (m)</td> <td>40</td> <td>17.9</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	79,126.20	79,124.96	Ground Coverage (m ²)	--	21,953.56	Common Plot Area (m ²)	4,395.90	4,396.83	Max. building height (m)	40	17.9
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9.	Building Details	<ul style="list-style-type: none"> No. of Buildings:10 No. of Blocks: 10 Scope of buildings/blocks: 9 buildings - Basement + ground floor + 4 floors. 1 building - Basement + ground floor + 3 floors. No. & size of Residential Units: -- No. & type of Commercial Units: 1,670 nos. of shops & offices Details of amenities if any: None 															
10.	No. of expected residents / users	5,820 Persons/Day															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 20.0 Source of water: Local water tanker suppliers Waste water generation quantity (KL/day): 4.0 Mode of disposal: AMC drainage system Details of reuse of water, if any: None 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 306.0 (on 1st day) Fresh water requirement (KL/day): 204.0 Source of water: water supply through AMC. Waste water generation quantity (KL/day): 233.0 Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening & flushing purposes within premises and remaining quantity of treated sewage will be discharged into the drainage line to be provided by AMC. 															

		<ul style="list-style-type: none"> In case of STP provision, capacity of STP: 250 KL/day Purposes for treated water utilization: Flushing & Gardening Quantity of treated water to be reused: <ol style="list-style-type: none"> Gardening (KL/day): 15.0 Flushing (KL/day): 87.0 Provision of dual plumbing system (Yes/No): Yes Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening & flushing purposes within premises and remaining quantity of treated sewage will be discharged into the drainage line to be provided by AMC. Mode of disposal: as above. 																																
13.	Status of water supply and drainage line	Water supply and drainage line are already exist at the project site.																																
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>31,320</td> <td>31,320</td> <td>Development of greenbelt</td> </tr> <tr> <td>Other excavated earth</td> <td>1,25,280</td> <td>1,25,280</td> <td>Leveling low lying areas & development of green belt area, excess quantity of excavated earth will be used at other project sites as per need.</td> </tr> <tr> <td>Construction debris</td> <td>6,000</td> <td>6,000</td> <td>Will be used for levelling, internal roads, pavements, plot filling, plinth filling etc. within premises itself.</td> </tr> <tr> <td>Steel scrap</td> <td>5 MT</td> <td>--</td> <td>To be sold to scarp dealer.</td> </tr> <tr> <td>Discarded packing materials</td> <td>50,000 Bags</td> <td>--</td> <td>To be sold to authorized vendor.</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal/ Reuse</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	31,320	31,320	Development of greenbelt	Other excavated earth	1,25,280	1,25,280	Leveling low lying areas & development of green belt area, excess quantity of excavated earth will be used at other project sites as per need.	Construction debris	6,000	6,000	Will be used for levelling, internal roads, pavements, plot filling, plinth filling etc. within premises itself.	Steel scrap	5 MT	--	To be sold to scarp dealer.	Discarded packing materials	50,000 Bags	--	To be sold to authorized vendor.	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal/ Reuse				
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STP Sludge	70	HDPE Bags	Used as Manure								
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 27,694.17 m² • Parking area requirement for Commercial units as per GDCR: 27,694.17 m² • Total number of CPS requirement for the project as per NBC : 1,219 CPS • Number of CPS requirement for commercial units as per NBC: 1,219 CPS • Total Parking area provided (m²) & No. of ECS: 42,286.56 m² & 1,413 CPS • Parking area provided in basement (m²) & No. of ECS: 34,754.73 m² & 1,086 CPS • Parking area provided as open surface (m²) & No. of ECS: 7,531.8 m² & 327 CPS • Mechanical parking will be provided in basement for 257 CPS. 									
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 24 m, 18 m & 12 m • Number of Entry & Exit provided on approach road/s: Total 5 gates will be provided. • Width of Entry & Exit provided on approach road/s: 9 m (4 nos.) & 6 m (1 no.). • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 4 m • Width of all internal roads: 9 m & 6 m • Four (4) nos. of 6 m wide in - out ramps will be provided for basement. 									
17.	Details of Green Building measures proposed.	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, rain water harvesting by recharging the ground water table through 11 percolation wells, maximize the use of light colours in the building envelope - to reduce heat absorption and associated cooling requirements, solar lights in common sunlit areas, maximum use of LED lights etc.
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 5 MW during Operation Phase Connected load: 5 MW Source: Torrent Power Ltd. • Energy saving by Non-conventional Methods: Maximum use of LED lights • 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, maximum use of natural daylight as well as ventilation through proper orientation of the buildings, 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: No. and capacity of the DG sets: No provision Fuel & its quantity: Not applicable
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • During the operation phase: Fire extinguishers, one CO2 type extinguisher of 4.5 kg and one DCP type extinguisher of 5 kg will be provided on each floor. Fire hydrant system, hose reels, wet risers, 3 nos. of underground water storage tanks having total 400 KL capacity, manually operated electric fire alarm system on each floor with sounders capable of being heard all throughout the building etc. • Nearest fire station located at Panchkuvra is at a distance of approximately 2 km. Time required for the fire tender to reach at the project site is 10 - 15 minutes. • 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:	

	Block	No. of Floors	Floor area of each floor (m ²)	No. of staircase	Width(m)	No. of Lifts	Maximum travel distance (m)
	A	G+4	498.47	1	1.60	2	<30
	B	G+4	871.86	2	1.60	4	<30
	C	G+3	1,208.82	2	1.60	4	<30
	D	G+4	1,497.56	4	1.60	4	<30
	E	G+4	1,032	4	1.60	4	<30
	F	G+4	624.16	2	1.60	2	<30
	G	G+4	1,235.74	4	1.60	4	<30
	H	G+4	1,010.40	4	1.60	4	<30
	I	G+4	938.89	1	1.60	1	<30
	J	G+4	1,395.45	4	1.60	4	<30
21.	Rain Water Harvesting (RWH)		<ul style="list-style-type: none"> • Level of the Ground water table: -- • No. & dimensions of RWH tank(s) : --- • No. and depth of percolations wells : 11 Nos. & 37 m • Details on Pre-treatment facilities : Screen pit before the percolation well 				
22.	Green area details		<ul style="list-style-type: none"> • Tree covered area (m²) : 2,797 • Area covered by shrubs and bushes (m²): 140 • Lawn covered area (m²): 560 • Total Green Area (m²): 3,497 • Green area % of plot area: 8 % • No. of trees and species to be planted: 400 nos. of local flora species i.e. Gulmohar, Asopalav, Neem etc. will be preferred 				
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)		Budget allocation of Rs. 43 lacs as capital cost & Rs. 6 lacs as recurring cost has been proposed for the proposed EMP including waste water management, solid waste management, greenbelt development, rain water harvesting etc.				
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		Sanitation facilities, drinking water, municipal solid waste collection facility etc.				

	construction workers	
27.	Documents related to land possession.	Shree Industrial Mills Estate (SIM Estate) is an association of persons and the association through its members holds the ownership of the land. Copy of Rule cards & statement from Town Planning Scheme department shows the ownership of the land by M/s Shree Industrial Mills Estate through its members.

During the meeting, it was observed that parking area provision for the project is not as per requirement of the NBC norms. The project proponent was suggested to make provision of D.G set/s for the proposed commercial project as backup power arrangement in case of power failure & for utilization during the emergency like fire etc. The project proponent was also agreed to provide D.G set/s. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Details on parking area provision for the proposed commercial project as per requirement of the NBC norms with back up calculation & parking plans.
2. Details of the D.G. sets including its capacity, fuel, quantity, stack height, location as well as the acoustic measures proposed to abate noise pollution.
3. Authenticated document of association of persons for Shree Industrial Mills Estate (SIM Estate).

2	Rajhans Montessa (Sunilbhai Shivilal Jain)	R.S. No. 83/p, O.P. No. 99+100+101+ 102+ 103 +104+ 105+ 106/1 + 106/2 + 106/3 + 106/4, FP No. 113+114+ 115, TPS No. 7, Vill. Vesu, Ta. Majura, Dist. Surat.	Screening & Scoping
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The project taken up in the meeting of SEAC held on 13/04/2016. During the meeting held on 13/04/2016, it was presented that there will be provision of natural lighting & ventilation, LED lighting connected with solar panels, CO sensors, gas detection system with automatic sensors & alarm system associated with mechanical ventilation system, air ventilation at 18 locations with exhaust fans, oxygen level sensors etc. in the basement. They have submitted a notarized undertaking stating that any kind of manufacturing activity will not be allowed in the commercial units of the proposed project and any textile house will not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. It was presented that flame proof electrical fittings will be provided & details of the same were also presented. Traffic survey, carried out on adjacent 60 m wide Surat Dumas road, shows that the Level of Service of the road remains the same as excellent "A" in the existing & the proposed scenario. Copy of permission obtained from Airports Authority of India, for building height of 43.78 m above ground level, has been submitted. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained from Urban Development & Urban Housing Department, Sachivalay, Gandhinagar for the proposed FSI and ground coverage.
2. Realistic details on the parking area provision for the proposed project based on the actual parking area requirement for the project as per the NBC norms.
3. Exact aerial distance of the project site from river Tapi.
4. 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.

5. Design drawing of dual plumbing system to be provided.
6. Details on solar panels to be installed including their number & capacity, type, location & available space etc.
7. Land possession documents showing the ownership of land by the applicant, list of partners & directors of the company, copy of permission obtained for non agricultural use of the project site for commercial use or a copy of documents showing the correspondences made in this regard and a copy of agreement made between the land owners & developers (if any).

Project proponent submitted the above mentioned details to this office on 25/05/2016.

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

It was observed that the details of the parking area provision, submitted by them, was not as per requirement of the NBC norms. They have submitted a copy of application made for obtaining permission for additional FSI and the permission is still awaited. Aerial distance of the project site from river Tapi is 960 m. Mechanical parking to be provided in the lower basement having height of 4.7 m and operational & maintenance aspects were discussed during the meeting. Details of dual plumbing system submitted by them were also discussed during the meeting. 3 nos. of solar panels each having capacity of 1.5 KWH will be installed on terrace floor.

Salient features of the project are as under:

Sr. No	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/51313/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Rajhans Montessa
5.	Name of Developer	Mr. Sunilbhai Shivlal Jain
6.	Estimated Project Cost (Rs. In Crores)	Rs. 70.0 Crore
7.	Whether construction work has been initiated at site? If yes, details thereof	No

8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 9,470.0 • FSI area (m²): 37,870.01 • Total BUA (m²) : 56,876.42 <table border="1" data-bbox="443 331 1361 510"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>17,046.0</td> <td>37,870.01</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>2,841.0</td> <td>4,596.29</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>947.00</td> <td>1,220.00</td> </tr> <tr> <td>Max. building height (m)</td> <td>--</td> <td>43.78</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	17,046.0	37,870.01	Ground Coverage (m ²)	2,841.0	4,596.29	Common Plot Area (m ²)	947.00	1,220.00	Max. building height (m)	--	43.78
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Max. building height (m)	--	43.78															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 01 Nos. • No. of Blocks: 01 Nos. • Scope of buildings/blocks: 2 level basement + ground floor + 12 floors. • No. & size of Residential Units: -- • No. & type of Commercial Units: 140 Nos. of Offices, 10 Nos. of Show Rooms • Details of amenities if any: -- 															
10.	No. of expected residents / users	<p>Expected residents: -- Expected shop users: 470 Expected visitors: 800</p>															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 14.50 • Source of water: Bore well water • Waste water generation quantity (KL/day): 2.10 • Mode of disposal: Into septic tank & soak pit. • Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment. 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 39.0 • Fresh water requirement (KL/day): 28.0 • Source of water: Water supply from Surat Municipal Corporation (S.M.C) • Waste water generation quantity (KL/day): 27.0 • Mode of disposal: Sewage to be generated will be segregated into the black & grey sewage. Grey sewage will be treated in the proposed onsite STP and treated sewage will be used for gardening & flushing purpose. Only remaining quantity of treated grey sewage (if any) along with the untreated black sewage will be discharged into the drainage line of SMC. • In case of STP provision, capacity of STP: Yes. Grey Water Treatment Plant-30 KL/day • STP Technology: -- (Grey Water Treatment Plant) • Purposes for treated water utilization: Treated sewage will be utilized for gardening and toilet flushing • Quantity of treated water to be reused: 1. Gardening (KL/day): 5.0 2. Flushing (KL/day): 6.0 • Provision of dual plumbing system (Yes/No): Yes • Quantity and type (treated/untreated)of water to be discharged: Sewage to be generated will be segregated into the black & grey sewage. Grey sewage will be treated in the proposed onsite STP and treated sewage will be used for gardening & flushing purpose. Only remaining quantity of treated grey sewage (if any) along with the untreated black sewage will be discharged into the drainage line of SMC. • Mode of disposal: As above. 															

13.	Status of water supply and drainage line	Applied to S.M.C for connection of water supply and drainage. SMC water supply and drainage lines are available in the area. .																																										
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>610.0</td> <td>610.0</td> <td>Reuse for developing garden area</td> </tr> <tr> <td>Other excavated earth</td> <td>60,214.00</td> <td>264.75 m³ will be reused for back filling.</td> <td>Remaining quantity will be send to other project site as per suggestions of SMC.</td> </tr> <tr> <td>Construction debris</td> <td>597</td> <td>284 m³ will be reused as a filler up to plinth level.</td> <td>Remaining will be reused for outer road development</td> </tr> <tr> <td>Steel scrap</td> <td>23</td> <td>--</td> <td>Sold to local scrap vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>14</td> <td>--</td> <td>Sold to local vendors</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste</td> <td>56.40</td> <td>Blue colour bucket</td> <td>Through door to door waste collection system of SMC</td> </tr> <tr> <td>Wet waste</td> <td>37.60</td> <td>Green colour bucket</td> <td>Through door to door waste collection system of SMC</td> </tr> <tr> <td>STP Sludge / GWTP Sludge</td> <td>0.3</td> <td>On SDB</td> <td>Reused in gardening as manure within project premises</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: Separate bins will be provided to collect dry and wet waste. • Capacity and no. of community bins to be placed within premises: 2.0 m3 in building • Landfill site where waste will be ultimately disposed by local authority: Khajod Landfill site of SMC. 				Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	610.0	610.0	Reuse for developing garden area	Other excavated earth	60,214.00	264.75 m ³ will be reused for back filling.	Remaining quantity will be send to other project site as per suggestions of SMC.	Construction debris	597	284 m ³ will be reused as a filler up to plinth level.	Remaining will be reused for outer road development	Steel scrap	23	--	Sold to local scrap vendors	Discarded packing materials	14	--	Sold to local vendors	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	56.40	Blue colour bucket	Through door to door waste collection system of SMC	Wet waste	37.60	Green colour bucket	Through door to door waste collection system of SMC	STP Sludge / GWTP Sludge	0.3	On SDB	Reused in gardening as manure within project premises
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15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 11,361.00 m² • Parking area requirement for Commercial units as per GDCR: 11,361.00 m² 																																										

		<ul style="list-style-type: none"> • Total number of CPS requirement for the project as per NBC : 620 • Number of CPS requirement for commercial units as per NBC: 620 • Total Parking area provided (m²) & No. of ECS: 20,710.00 m² & 659 ECS • Parking area provided in basement (m²) & No. of ECS: 19,651.00 m² & 613 ECS • Parking area provided as open surface (m²) & No. of ECS: 1,059.00 m² & 46 ECS. 																
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 60.0 m & 12.0 m wide roads. • Number of Entry & Exit provided on approach road/s: 3 gates will be provided. • Width of Entry & Exit provided on approach road/s: 7.50 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 6 m • Width of all internal roads: 6.0 m & 7.50 m. 																
17.	Details of Green Building measures proposed.	Use of fly ash based material, flush tank instead of direct flushing in toilets, foam type aerated coke, rain water harvesting, use of LED lights for common areas, solar lights for landscape lighting, reflective/ white tiles in common areas, maximum use of natural light, treatment of grey sewage & reuse of treated grey sewage, solar panels on terrace floor etc.																
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply Maximum demand: 1000 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 in common areas, maximum use of natural light, 3 nos. of solar panels each having capacity of 1.5 KWH on terrace floor etc. • DG Sets No. and capacity of the DG sets: 01 x 125 KVA Fuel & its quantity: Low Sulphur High speed Diesel (HSD) & quantity – 55 L/hr. 																
19.	Fire and Life Safety Measures	Fire extinguishers, hose reel, wet riser, yard hydrant, automatic sprinkler system (in passages of all floors & basements), manually operated electric fire alarm system, automatic detection & alarm system, underground fire water storage tank (200 KL x 2 nos), terrace tanks of 20 KL x 2 nos., provision of pump: electric & one Diesel pump of capacity 2850 L/min. & One electric pump of capacity 180 L/min. having pressure 3.5 kg/cm ² at Terrace level etc.																
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1	2 B+ G + 12	Maximum 4,596.29 m ² at ground	4 nos. of staircases will provided	2.00	07	03	<35											

				floor & minimum 2,479.02 m ² at 11 th floor.	from ground floor to 10 th floor and 2 staircases on 11 th & 12 th floors.					
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 20.0 m • No. & dimensions of RWH tank(s) : 05 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: 05 nos. of percolating wells. • Details on Pre-treatment facilities: A de-silting chamber will be provided to de-silt and remove floating material through bar screen. 								
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 409. 0 • Area covered by shrubs and bushes (m²): -- • Lawn covered area (m²): 811.0 • Total Green Area (m²): 1220.0 • Green Area % of plot area: 12.88 % • No. of trees and species to be planted: 69 trees of Gulmohar, Neem tree, Coconut palm, Asopalav, Champa etc. 								
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Capital cost of Rs. 86.75 lacs and recurring cost of Rs. 6.35 lacs has been allocated towards purposes like rain water harvesting & ground water recharge, greenbelt development, environment monitoring & management, waste management, sewage treatment & reuse etc.								
24.	Proposed dust control measures.	Water sprinkling, covered shed for cement unloading activity, tarpaulin cover on excavated earth & construction material etc.								
25.	Use of Eco – friendly building materials.	Use of fly ash bricks & aerated blocks for water partition, paving blocks for parking areas & walk ways, Portland Pozzolona Cement for RCC structure, plaster & flooring etc.								
26.	Details on amenities to be provided to construction workers.	Drinking water & tap water, sanitation facilities, domestic waste water collection facility, lunch space, first aid box, free medicines, doctor service, PPEs etc.								

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

1. Copy of permission obtained from Urban Development & Urban Housing Department for the proposed FSI and ground coverage.
2. Realistic details on the parking area provision for the proposed project based on the actual parking

area requirement for the project as per the NBC norms.

3. Land possession documents showing the ownership of land by the applicant / project proponent.

3	R.K.County (Tapasbhai Atulkumar Patel)	Survey No :238/1,238/2,238/4, 238/7,239/2,239/3, 239/6, Zadeshwar, Bharuch	Screening & Scoping
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The project was taken up in the meeting of SEAC held on 27/01/2016. During the meeting held on 27/01/2016, after detailed discussion it was decided to appraise the project further only after submission of the following:

1. Project plans showing plot area statement, building wise & floor wise built up area table, FSI area table, floor area table etc.
2. Exact source of water supply and permission of the concerned authority for supplying water to the proposed project.
3. Complete management plan of the treated sewage including application wise reuse, mode of disposal, final disposal point & permission of the concerned authority for sewage disposal, treated sewage management plan during the monsoon season etc.
4. Permission of the concerned local authority for municipal solid waste disposal and details of the municipal solid waste dumping / disposal site.
5. Details on approach road to the project site with supporting maps / documents.
6. Land possession documents showing ownership of the applicant, copy of permission obtained for non agricultural use of the project site or a copy of documents showing the correspondences made in this regard and copy of agreement made between the land owners & developers (if any).

Project proponent submitted the above mentioned project plans along with the details sought during the meeting of SEAC held on 27/01/2016 vide their letter dated 12/04/2016.

The project proponent along with their expert / consultant attended the meeting and during the meeting the project was appraised based on the additional details submitted as well as facts presented before the committee.

It was presented that water supply & drainage connection will be provided by Bharuch Ankleshwar Urban Development Authority (BAUDA) and a copy of receipt obtained from BAUDA against the development charges paid by them has been submitted. Municipal solid waste dumping site is at village Mandwa which is at about 5 km distance from the project site. They have submitted a plan showing the entry to the project site from the adjacent plot through 12 m wide road and a copy of agreement, registered with the Sub-Registrar Bharuch, made with the adjacent land owner for permanent use of the road has also been submitted. A copy of order obtained from BAUDA for amalgamation of all the block numbers including block no. 238/4 has been submitted which shows that the N.A land measuring 31,541.0 m² for residential use is in the name of applicant Mr. Tapas Atulkumar Patel & others.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [Proposal No. SIA/GJ/NCP/3175/2015]
2.	Type of Project	Residential Project
3.	Project / Activity	8 (a)

	No. [8(a) or 8(b)]																
4.	Name of the project	R. K. County															
5.	Name of Developer	Tapasbhai Atulkumar Patel															
6.	Estimated Project Cost (Rs. In Crores)	130 Crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 31,541 • FSI area (m²):71,128.82 • Total BUA (m²):1,08,739.7 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>72,544.3</td> <td>71,128.82</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>14,193.45</td> <td>11,739.79</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>3,154.1</td> <td>5,249.0</td> </tr> <tr> <td>Max. building height (m)</td> <td>40</td> <td>25</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	72,544.3	71,128.82	Ground Coverage (m ²)	14,193.45	11,739.79	Common Plot Area (m ²)	3,154.1	5,249.0	Max. building height (m)	40	25
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Max. building height (m)	40	25															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 23 • No. of Blocks: 23 • Scope of buildings/blocks: Residential. Basement + hollow plinth + 7 floors. • No. & size of Residential Units: 917 Flats (672 flats of 2 BHK and 245 flats of 1 BHK.) • No. & type of Commercial Units: No • Details of amenities if any: One Society Offices 															
10.	No. of expected residents / users	4126 occupants and 200 visitors															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 21.75 • Source of water: Tankers • Waste water generation quantity (KL/day): 5.73 • Mode of disposal: septic tank • Details of reuse of water, if any: No 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 583.63 • Fresh water requirement (KL/day): 372.34 • Source of water: Water supply from Bharuch Ahkleshwar Urban Development Authority. • Waste water generation quantity (KL/day):448.0 • Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be reused for gardening & flushing purpose within premises and remaining will be discharged into the underground drainage line of BAUDA. 															

		<ul style="list-style-type: none"> In case of STP provision, capacity of STP: Yes, 450 KL/day STP Technology: Biological Treatment Purposes for treated water utilization: Gardening & flushing. Quantity of treated water to be reused: <ol style="list-style-type: none"> Gardening (KL/day):23.62 Flushing (KL/day):187.67 Provision of dual plumbing system (Yes/No): yes Quantity and type (treated/untreated)of sewage to be discharged: Treated sewage will be reused for gardening & flushing purpose within premises and balance quantity of treated sewage will be discharged into underground drainage line of BAUDA. Mode of disposal: Municipal Sewer line 																																								
13.	Status of water supply and drainage line	Available at 0.7km from the site																																								
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15.	Parking Details	• Total parking area requirement for the project as per GDCR:10,669.32 m ²																																								

		<ul style="list-style-type: none"> • Parking area requirement for residential units as per GDCR:10,669.32 m² • Total number of CPS requirement for the project as per NBC :571 • Number of CPS requirement for residential units as per NBC: 571 • Total Parking area provided (m²) & No. of CPS: 28,642.41& 1,001 CPS • Parking area provided in basement (m²) & No. of CPS: 13,322 & 416 CPS • Parking area provided in hollow plinth (m²) & No. of CPS:10,240.41 & 365 CPS • Parking area provided as open surface (m²) & No. of CPS: 5080 & 220 CPS.
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 12 m wide road • Number of Entry & Exit provided on approach road/s: One gate will be provided. • Width of Entry & Exit provided on approach road/s: 7.5 m • 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: 7.5 m and 4.0 m
17.	Details of Green Building measures proposed.	Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, maximum use of RMC & aerated blocks, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas- 22 numbers of solar lighting, roof-top thermal insulation, rain water harvesting & ground water recharge through 8 nos. of percolating wells etc.
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 5000 KVA Connected load: 5250 KVA • Source: DGVCL • % of saving with calculations: ~30% by use of LED and star rated energy efficient electronic consumer durables • Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area • DG Sets: No. and capacity of the DG sets:1 × 62.5 KVA Fuel & its quantity: HSD, 12 litre/hr
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • During Construction Phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor & ambulance service. • During operation phase (Commercial): Fire extinguishers, hose reel, manually operated electric fire alarm system, down comer, automatic sprinkler system in basement, underground static water storage tank-300 KL capacity, terrace tank -115 KL capacity (total capacity), pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm² at terrace level etc.

20.	Details on staircase					
	Type of Block	No. of Floor	Maximum Floor area (m ²)	Stair case width (m)	Number of stair cases	Travel Distance (m)
	8 buildings	B+HP +7	520.80	1.6 & 1.2	2	17
	4 buildings	B+HP +7	345.54	1.6	1	19
	1 building	B+HP +7	319.82	2.1	1	18
	6 buildings	B+HP +7	311.89	2.1	1	18
4 buildings	B+HP +7	345.54	1.6	1	19	
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 15m • No. & dimensions of RWH tank(s) : 8 Nos and 2.0m X 2.0 m X 3.0 m • No. and depth of percolations wells :8 nos and 10 m • Details on Pre-treatment facilities : oil and grease removal and filter 				
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) :2,000.0 • Area covered by shrubs and bushes (m²): 1,500.0 • Lawn covered area (m²):1,749.0 • Total Green Area (m²):5,249.0 • Green Area % of plot area: 16.6 % • No. of trees and species to be planted: 471 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar 				
23.	Dust control measures	Spraying of water, peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.				
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Allocation of Rs. 97 lacs & Rs. 11 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.				
25.	Details of eco friendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.				
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.				
27.	Documents related to land possession	Copy of index of sub registrar's office submitted by them for all the survey numbers except S.No. 238/4 shows that the N.A land for residential use is in the name of applicant. A copy of order obtained from BAUDA for amalgamation of all the block numbers including block no. 238/4 has been submitted which shows that the N.A land admeasuring 31,541.0 m ² for residential use is in the name of applicant Mr. Tapas Atulkumar Patel & others.				

During the meeting, it was observed that the project proponent has proposed to treat only grey sewage to be generated during the operation phase of the project. The project proponent was asked to treat 100% sewage to be generated during the operation phase of the project, to reuse treated sewage for gardening, flushing, washing etc. within premises at the maximum extent possible and to discharge only remaining quantity of treated sewage into the drainage line of BAUDA. After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.

4	Sankalp In	S.No.722+799,F.P.No.67+82,T.P.S.No.216, Shilaj, Ahmedabad.	Screening & Scoping
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The project was taken up in the meeting of SEAC held on 31/03/2016. During the meeting held on 31/03/2016, it was presented that provision of adequate air changes per hour so as to avoid build up of CO (Carbon Monoxide) and car park exhaust system equipped with CO sensor, to ensure operation of exhaust fan as per CO concentration levels will be provided in basement. It is proposed to provide basements with 3.8 m height (basement level 1) and 4.25 m height (basement level 2) to accommodate mechanical parking. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Project plan showing building wise & floor wise built up area, FSI area & floor area tables, unobstructed peripheral margin for easy access of fire tenders as well as plot area statement.
2. Calculation and provision of minimum fire water requirement based on fire study as well as the availability of external fire fighting facility. Plans showing location of automatic sprinklers to be provided.
3. Details of the exits and staircases on each floor for evacuation from the top level to the street level along with the distances between two such staircases in each building in compliance to the GDCR and NBC in this regard.
4. 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. Details with respect to compensation of the total energy requirement of the project with the proposed energy conservation measures.
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. Details of monitoring / supervision cell to monitor environmental aspects during construction phase as well as operation phase including provision of qualified construction safety officer.
6. Detailed fresh water consumption based on activity and area of the project as per the NBC norms.
7. Status of permission from Central Ground Water Authority in case of ground water abstraction for the proposed project.
8. In case of ground water abstraction, details on ground water quality in the area, ground water table, classification of the area with reference to the availability of ground water etc. should also be submitted.

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

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

It was presented that the nearest fire station of Bodakdev is at a distance of 5 km from the project site and it is proposed to provide 200 KL capacity underground static fire water storage tank for the proposed

project. It was presented that 2 nos. of staircases will be provided at ground to 3rd floor of the hotel wing and 3 nos. of staircases on 4th to 10th floor in hotel wing. It was presented that 3 nos. of staircases will be provided in commercial wing building starting from the ground floor to 13th floor. Details of Environment Management Plan has been submitted by them were discussed during the meeting and it was presented that Rs. 1 crore is allotted for proposed EMP including installation & operation of STP, tree plantation etc. From the total water requirement of 294 KL/day, fresh water requirement of 109 KL/day will be obtained through water supply from Ahmedabad Urban Development Authority (AUDA) and remaining water requirement of 185 KL/day will be met through treated sewage. Total sewage generation will be 185 KL/day + 20 KL/day of R.O. reject. The R.O. reject will be directly discharged into the drainage line of AUDA. The project proponent vide their letter dated 05/05/2016 undertaken that by the time their units get occupied, the drainage line & water supply line of AUDA will be available to the project and hence they do not require to use ground water for the project during operation phase. During the construction phase water requirement will be met through local water tankers. It was observed during the meeting that project plans submitted along with the above mentioned details show that the built up area of the project will be 38,591.10 m² and FSI area will be 22,403.88 m² instead of originally proposed 36,929.55 m² & 21,910.84 m² respectively. The scope of the proposed hotel wing will be ground floor + 10 floors instead of ground floor + 9 floors as proposed earlier.

Salient features of the project are as under:

Sr. No.	Particulars	Details															
1.	Proposal is for	New Project															
2.	Type of Project	Hotel & Commercial project.															
3.	Project / Activity No. [8(a) or 8(b)]	8 (b)															
4.	Name of the project	Sankalp In															
5.	Name of Developer	Sankalp Recreation Pvt. Ltd.															
6.	Estimated Project Cost (Rs. In Crores)	Rs.70 crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 7935.00 m² • FSI area (m²): 22,403.88 m² • Total BUA (m²): 38,591.10 m² <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area</td> <td>23805 m²</td> <td>22,403.88 m²</td> </tr> <tr> <td>Ground Coverage</td> <td>---</td> <td>2755.70 m²</td> </tr> <tr> <td>Common Plot Area</td> <td>793.50 m²</td> <td>1207.65 m²</td> </tr> <tr> <td>Max. building height</td> <td>45.0 m</td> <td>45.0 m</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area	23805 m ²	22,403.88 m ²	Ground Coverage	---	2755.70 m ²	Common Plot Area	793.50 m ²	1207.65 m ²	Max. building height	45.0 m	45.0 m
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Max. building height	45.0 m	45.0 m															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 1 • No. of Blocks: 2 • Scope of buildings/blocks: Commercial building - 2 level basement + 															

294th meeting of SEAC-Gujarat, Dated 06.06.2016

		<p>ground floor + 1st to 3rd floors + service floor + 4th to 12th floors. Hotel building – 2 level basement + ground floor + 10 floors.</p> <ul style="list-style-type: none"> No. & size of Residential Units: N.A. No. & type of Commercial Units: 1 – Banquette Hall (1000 cap.) 1 - Restaurant cum coffee shop, 28 – Offices, 162 – Hotel rooms 																								
10.	No. of expected residents / users	300 fixed + 600 variables																								
11.	Water & waste water details during construction phase	<p>Water requirement (KL/day): 19.6 Source of water: Local water tankers. Waste water generation quantity (KL/day): 3.2 Mode of disposal: Into septic tank and soak pit Details of reuse of water, if any: ----</p>																								
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 294.0 Fresh water requirement (KL/day): 109.0 Source of water: Water supply from Ahmedabad Urban Development Authority (AUDA) Waste water generation quantity (KL/day): 185.0 + 20 KL/day R.O reject. Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP and treated sewage will be completely reused for flushing, HVAC make up & plantation purpose within premises. Only R.O reject 20 KL/day will be discharged into the drainage line of AUDA. In case of STP provision, capacity of STP: Yes, 200 KL/day STP Technology: MBR technology. Purposes for treated sewage utilization: Flushing, HVAC make up & gardening. Quantity of treated sewage to be reused: 1. Flushing (KL/day): 119.0 2. HVAC make up (KL/day): 60.0 3. Gardening (KL/day): 6.0 Provision of dual plumbing system (Yes/No): Yes Quantity and type (treated/untreated) of water to be discharged: Sewage to be generated will be treated in the proposed onsite STP and treated sewage will be completely reused for flushing, HVAC make up & plantation purpose within premises. Only R.O reject 20 KL/day will be discharged into the drainage line of AUDA. Mode of disposal: As above 																								
13.	Status of water supply and drainage line	Water supply & drainage connection of AUDA will be available during the operation phase of the project.																								
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>600</td> <td>600</td> <td>Reuse for greenbelt development.</td> </tr> <tr> <td>Other excavated earth</td> <td>12,400</td> <td>12,400</td> <td>Reuse for leveling low lying areas & plinth filling.</td> </tr> <tr> <td>Construction debris</td> <td>200 m³</td> <td>50 m³</td> <td>Plinth filling & pavement sub base.</td> </tr> <tr> <td>Steel scrap</td> <td>8 m³</td> <td>----</td> <td>Sale to scrap dealers.</td> </tr> <tr> <td>Discarded packing</td> <td>5 m³</td> <td>---</td> <td>Sale to vendors.</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	600	600	Reuse for greenbelt development.	Other excavated earth	12,400	12,400	Reuse for leveling low lying areas & plinth filling.	Construction debris	200 m ³	50 m ³	Plinth filling & pavement sub base.	Steel scrap	8 m ³	----	Sale to scrap dealers.	Discarded packing	5 m ³	---	Sale to vendors.
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STP Sludge	1 kg		Used as manure after necessary treatment.														
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 7,765.35 m² • Parking area requirement for Commercial units as per GDCR: 2,980.24 m² • Parking area requirement as per GDCR for Hotel: 4,785.11 m² • Total number of CPS requirement for the project as per NBC : 351 • Number of CPS requirement for commercial units as per NBC: 120 • Number of CPS requirement as per NBC for Hotel, banquet hall, restaurant : 231 • Total Parking area provided (m²) & No. of ECS: 11,015.73 m² & 365 ECS • Parking area provided in basement (m²) & No. of ECS: 9,267.73 m² & 289 ECS • Parking area provided as opensurface(m²) & No.of ECS: 1748 m² & 76,ECS 															
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 30 m & 18 m. • Number of Entry & Exit provided on approach road/s: 4 gates will be provided including two entries for commercial units & hotel, one entry for banquet hall and one entry to basement. • Width of Entry & Exit provided on approach road/s: 9.0 m & 6 m. • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): • Width of all internal roads: 6 m. 															
17.	Details of Green Building measures proposed.	Fly as bricks & aerated blocks in wall partition, paving blocks in parking areas, RMC flooring & foundation, lead free paints for wall & ceiling etc.															
18.	Energy Requirement,	<ul style="list-style-type: none"> • Power supply: Maximum demand: 1 MW 															

	Source and Conservation	<p>Connected load: 1 MW</p> <ul style="list-style-type: none"> Source: Torrent Power Ltd. DG Sets: 250 KVA – in case of emergency only <p>No. and capacity of the DG sets: 1 x 250 KVA</p> <p>Fuel & its quantity: HSD/LDO - 270 lit/hr</p>				
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> During Construction Phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor & ambulance service. During the operation phase: Fire extinguishers, hose reel, wet riser, yard hydrant, automatic sprinkler system, manually operated electric fire alarm system, automatic detection & alarm system, Pump near underground static fire water storage tank of 200 KL, one diesel pump of capacity-2 850 l/min and One electric pump of capacity-180 l/min. The nearest fire station: Bodakdev fire station <p>Distance from the project site: 5 km</p> <p>Travel time: 10 minutes.</p>				
20.	Details on staircase					
	Type & no. of buildings	No. of floors	Floor area (m ²)	No. of staircase	Width of the staircase (m)	Travel distance (m)
	1	2B+G+13	Max. 752.30	3	2.0	<30 m
	1	2B+G+10	Max. 1383.84	2 staircases at ground floor, 1 st , 2 nd to 3 rd floor & 3 staircases at 4 th to 10 th floor.	2.0	<30 m
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> Level of the Ground water table: ----- No. & dimensions of RWH tank(s) : No. and depth of percolations wells : 2 nos. of percolation wells Details on Pre-treatment facilities : Filtration. 				
22.	Green area details	<ul style="list-style-type: none"> Tree covered area (m²) : @ 452.32 m² Area covered by shrubs and bushes (m²): Lawn covered area (m²): 882.18 m² Total Green Area (m²): 1334.50 m² Green Area % of plot area: No. of trees and species to be planted: 120 trees Asopalav etc. 				
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Rs. 1 crore is allotted for proposed EMP including installation & operation of STP, tree plantation etc.				
24.	Dust control measures	Downwash of trucks (especially wheels) prior to departure from site, covering of loose construction material with tarpaulin, use of Ready Mix Concrete to minimize handling of construction material, barricading the				

		project site, water sprinkling on roads etc.
25.	Details of eco friendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.
27.	Documents related to land possession	For S.No.722, village form no. 7 submitted by them shows that the N.A land for residential use is in the name of M/s Sanklap In. In case of S.No. 799, village form no. 6 (Hak patrak) submitted by them shows that the N.A land is in the name of M/s Sankalp In.

During the meeting, the project proponent was asked to submit revised Form – I & IA for the proposed increase in built up area, FSI area & number of floor in hotel wing. Further it was observed that the details of energy conservation measures submitted by them does not include any proposal of solar or wind energy utilization. It was also noticed that parking area provision for commercial units was not as per the requirement of the NBC norms. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Revised Form – I & IA for the proposed changes in terms of increase in built up area, FSI area & number of floor in hotel wing.
2. Revised details on parking area provision for the commercial units as per requirement of the NBC norms.
3. Details on use of renewable sources of energy like solar energy, wind energy etc. for the proposed project.
4. Plans showing provision of 3 staircases in commercial wing starting from ground floor to 13th floor.

5	Laxmi Film Laboratory & Studios Pvt. Ltd.	S.No.380/A/2,Vill:Bapod, Vadodara	Screening & Scoping
<p>The project was taken up in the meeting of SEAC held on 28/10/2015. During the meeting of SEAC held on 28/10/2015, while asking by the committee, it was replied that existing construction area of the project is 2,500 m² and they have not started any kind of construction work for the proposed expansion. They have submitted a copy of certificate obtained from a structural engineer for the proposed expansion. Project proponent was suggested to use drip irrigation system for landscape & greenbelt development to which the project proponent was also agreed to. Further they were suggested to segregate the municipal solid waste at the point of its generation and to install organic waste convertor during the operation phase of the project. After detailed discussion, it was decided to further appraise the project only after submission of the following:</p> <ol style="list-style-type: none"> 1. A copy of permission obtained / letter of intent from Vadodara Mahanagar Seva Sadan for provision of water supply (as per the requirement of the project after the expansion), drainage connection & municipal solid waste collection facility. 			

2. Complete municipal solid waste & STP sludge management plan during the operation phase including its segregation, collection, storage & final disposal. Explore the possibility of providing organic waste convertor during the operation phase of the project and details of OWC including its type, capacity, location on layout plan etc.
3. Details on maximum water & parking requirement, maximum waste generation etc. considering the peak load of the project during the operation phase and details on arrangements to be made for the same.
4. Details on provision of safety aspects and common faculties during the operation phase of the proposed project.
5. Undertaking stating that drip irrigation system will be provided for development of landscape & greenbelt.

Project proponent vide their letter dated 09/05/2016 submitted the above mentioned details & undertaking.

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

It was presented that water requirement for the project will be met through ground water and permission from Central Ground Water Authority (CGWA) will be obtained. Total water requirement for the project during operation phase of the project will be 505.0 KL/day, from which fresh water requirement of 174 KL/day will be obtained through ground water and remaining water requirement of 331.0 KL/day will be met through treated sewage. Sewage to be generated will be treated in the proposed onsite STP and treated sewage will be used for gardening/ landscaping (112 KL/day) and flushing purpose (219.0 KL/day). Remaining quantity of treated sewage about 62.0 KL/day will be send to the fishpond within premises. It is proposed to provide a storage tank of 3 days storage capacity for storing the treated sewage during high rainy days when utilization of treated sewage for gardening & landscape development is not possible. Municipal solid waste to be generated will be segregated into biodegradable (compostable) and recyclable (non-compostable) waste. Bio-degradable waste will be treated in the proposed onsite Organic Waste Convertor (OWC) and resultant manure will be used for greenbelt development & landscaping. STP sludge will be used as manure / soil conditioner within premises. Recyclable (non-compostable) waste will be sold to recyclers / vendors. Parking requirement for the project is 852 CPS and it is proposed to provide total parking space of 20,756.0 m² [2,789.2 m² in basement + 17,200 m² as open surface parking + 766.8 m² in hollow plinth] which is equivalent to 862 CPS. Fire extinguishers CO2 type (4.5 kg) & DCP type (5 kg), hose reels, down comers, terrace tank of 25 KL capacity, pump of 900 LPM etc. will be provided for residential units. Fire extinguishers CO2 type (4.5 kg) & DCP type (5 kg), hose reels, wet riser, yard hydrant, automatic sprinkler system in entire building, manually operated electric fire alarm system, automatic detection & alarm system, one electric & one diesel pump of 1620 lit/minute capacity and one electric pump of 180 lit./minute capacity will be provided for hotel building, multiplex & party plot. Underground water storage tanks of 1400 KL capacity will be provided from which minimum 100 KL will be kept reserved for fire fighting. Overhead tanks of 25 KL capacity on each block will be provided. Common amenities like drinking water & sanitation facility as per the NBC norms, 115 nos. of community bins of 80 lit capacity for collection of solid waste, adequate parking space, a D.G set of 500 KVA, 50% of the street lights will be provided by solar power, well planned internal roads etc. will be provided.

Salient features of the project are as under:

Sr. No.	Particulars	Details															
1.	Proposal is for	New Project / Expansion															
2.	Type of Project	Residential / Commercial															
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)															
4.	Name of the project	Laxmi Film Laboratory & Studios Pvt. Ltd.															
5.	Name of Developer	Laxmi Film Laboratory & Studios Pvt. Ltd.															
6.	Estimated Project Cost (Rs. In Crores)	33 Crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No construction work has been initiated at site.															
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²): 84,000 FSI area (m²): 25,034.76 Total BUA (m²): 30,540.5 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area</td> <td>74,827.6</td> <td>25,034.76</td> </tr> <tr> <td>Ground Coverage</td> <td>16,836.21</td> <td>8,609.92</td> </tr> <tr> <td>Common Plot Area</td> <td>4,676.72</td> <td>8,399.99</td> </tr> <tr> <td>Max. building height</td> <td>45</td> <td>17.8</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area	74,827.6	25,034.76	Ground Coverage	16,836.21	8,609.92	Common Plot Area	4,676.72	8,399.99	Max. building height	45	17.8
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9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 7 (4 residential+1 multiplex + 1 hotel + 1party plot & associated facilities) No. of Blocks: 7 (4 residential + 1 multiplex + 1 hotel + 1party plot & associated facilities) Scope of buildings/blocks: Residential buildings – Hollow plinth + 5 floors. Multiplex – Basement + ground floor + 3 floors, hotel – ground floor + 2 floors, Party plot (dining area, grooming rooms, banquette hall) – ground floor + 1 floor and Water park & theme park No. & size of Residential Units: 120 flats - 35 to 36 sq.m. No. & type of Commercial Units: Multiplex: 1 No., Hotel: 1 No., Partyplot: 1 No., Water park and Theme park: 1 No. Details of amenities if any: None. 															
10.	No. of expected residents / users	Fixed population: 2183 Persons per day Floating population: 14469 Persons per day (maximum)															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 27.5 Source of water: Local water tanker suppliers Waste water generation quantity (KL/day): 6.8 Mode of disposal: Septic tank / soak pit system Details of reuse of water, if any: None 															
12.	Water & waste water details	<ul style="list-style-type: none"> Total water requirement (KL/day): 505.0 Fresh water requirement (KL/day): 174.0 															

	during operation phase	<ul style="list-style-type: none"> • Source of water: Ground water. • Waste water generation quantity (KL/day): 393 • Mode of disposal: The sewage to be generated will be treated in the proposed onsite Sewage Treatment Plant and will be reused for flushing and gardening within the premises. • In case of STP provision, capacity of STP: 400 KL • STP Technology: Conventional comprising of Primary, Secondary and Tertiary Treatment • Purposes for treated water utilization: Gardening & Flushing • Quantity of treated water to be reused: 1. Gardening (KL/day): 112.0 2. Flushing (KL/day): 219.0 • Provision of dual plumbing system (Yes/No): Yes • Quantity and type (treated/untreated) of water to be discharged: Treated sewage will be used for gardening & flushing purposes within premises at the maximum extent possible and remaining quantity of treated sewage will be send to the fish pond within premises. It is proposed to provide a storage tank of 3 days storage capacity for storing the treated sewage during high rainy days when utilization of treated sewage for gardening & landscape development is not possible. • Mode of disposal: As above. 																																
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Wet waste														
STP Sludge	110													
		<ul style="list-style-type: none"> • Details of segregation if to be done: Municipal solid waste to be generated will be segregated into biodegradable (compostable) and recyclable (non-compostable) waste. Bio-degradable waste will be treated in the proposed onsite Organic Waste Converter (OWC) and resultant manure will be used for greenbelt development & landscaping. STP sludge will be used as manure / soil conditioner within premises. Recyclable (non-compostable) waste will be sold to recyclers / vendors. • Capacity and no. of community bins to be placed within premises: 115 Nos. – each of 80 litre capacity will be provided. • Landfill site where waste will be ultimately disposed by local authority: As above. 												
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 6,722.3 sq.m. • Parking area requirement for residential units as per GDCR: 788.2 sq.m. • Parking area requirement for Commercial units as per GDCR: 5,934.1 sq.m. • Total number of CPS requirement for the project as per NBC : 852 CPS • Number of CPS requirement for residential units as per NBC: 60 CPS • Number of CPS requirement for commercial units as per NBC: 792 CPS • Total Parking area provided (m²) & No. of CPS: 20,756 sq.m. (862 CPS) • Parking area provided in basement (m²) & No. of CPS: 2,789.2 sq.m. (87 CPS) • Parking area provided in hollow plinth (m²) & No. of CPS: 766.8 sq.m. (27 CPS) • Parking area provided as open surface (m²) & No. of CPS: 17,200 sq.m. (748 CPS) 												
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 45 m wide T.P. road in West direction of the project site. • Number of Entry & Exit provided on approach road/s: Two gates will be provided. • Width of Entry & Exit provided on approach road/s: 12 m & 7.5 m. • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m to 7.5 m. • Width of all internal roads: 12m & 7.5 m. 												
17.	Details of Green Building measures proposed.	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, rainwater harvesting by recharging the ground water table with provision for percolation wells, PVC electrical boards, aluminium window frame & marble door frame instead of wood etc.
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: 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: Madhya Gujarat Vij Co. Ltd. • Energy saving measures: 50% of the total number of street lights will be solar street lights, 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. • DG Sets: No. and capacity of the DG sets: 1 x 500 kVA Fuel & its quantity: HSD: 250 litre/hour
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • Nearest fire station is at Waghodiya which is approx. at 4 km distance. Time required for the fire tender to reach at the project site is 5-10 minutes. • During operation phase: Fire extinguishers CO2 type (4.5 kg) & DCP type (5 kg), hose reels, down comers, terrace tank of 25 KL capacity, pump of 900 LPM etc. will be provided for residential units. Fire extinguishers CO2 type (4.5 kg) & DCP type (5 kg), hose reels, wet riser, yard hydrant, automatic sprinkler system in entire building, manually operated electric fire alarm system, automatic detection & alarm system, one electric & one diesel pump of 1620 lit/minute capacity and one electric pump of 180 lit./minute capacity will be provided for hotel building, multiplex & party plot. Underground water storage tanks of 1400 KL capacity from which minimum 100 KL will be kept reserved for fire fighting. Overhead tanks of 25 KL capacity on each block will be provided. • Mechanical extractors for smoke venting permitting 30 air changes per hour in basement, ventilator openings (05 m x 0.5 m), CO sensors with associated alarm system, illumination of basement & ramps to the extent of 30 Lux. • 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 practice,

		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	<table border="1"> <thead> <tr> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Floor area</th> <th>No. of staircase</th> <th>Width of the staircase</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>GF+3</td> <td>Maximum 2,532.11</td> <td>2</td> <td>1.5</td> <td>35</td> </tr> <tr> <td>B</td> <td>GF+2</td> <td>Maximum 2,403.33</td> <td>2</td> <td>1.5</td> <td>35</td> </tr> <tr> <td>C</td> <td>GF+1</td> <td>Maximum 2,399.93</td> <td>2</td> <td>1.5</td> <td>32</td> </tr> <tr> <td>D1 & D2</td> <td>GF+5</td> <td>393.96</td> <td>1</td> <td>1.2</td> <td>12</td> </tr> <tr> <td>E1 & E2</td> <td>GF+5</td> <td>151.48</td> <td>1</td> <td>1.2</td> <td>27</td> </tr> </tbody> </table>	Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)	A	GF+3	Maximum 2,532.11	2	1.5	35	B	GF+2	Maximum 2,403.33	2	1.5	35	C	GF+1	Maximum 2,399.93	2	1.5	32	D1 & D2	GF+5	393.96	1	1.2	12	E1 & E2	GF+5	151.48	1	1.2	27
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> No. & dimensions of RWH tank(s): --- No. and depth of percolations wells: 21 nos., 40 m. Details on Pre-treatment facilities : 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 practice, 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. 																																				
22.	Green area details	<ul style="list-style-type: none"> Tree covered area (m²) : 13,350 Area covered by shrubs and bushes (m²): Nil Lawn covered area (m²): 11,850 Total Green Area (m²): 25,200 Green Area % of plot area: 30% No. of trees and species to be planted: 1335 trees of Neem, Asopalav, Gulmohar, Jamun etc. 																																				
23.	Budgetary allocation for Environmental Management Plan (Rs. in Lacs)	Budgetary allocation of Rs. 209.8 lacs has been proposed for Sewage Treatment Plant, recycling of water, provision of 115 bins, VMSS charges, development of greenbelt, rain water harvesting & ground water recharge along with associated pre-treatment facilities etc.																																				
24.	Proposed dust control measures during the construction phase	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 material usage details	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.	Basic amenities to be provided to construction workers	Sanitation facilities, drinking water, municipal solid waste collection facility etc.
27.	Documents related to land possession.	N.A order dated 25/10/1967 submitted by them shows that the land is in the name M/s Laxmi Film Laboratory & Studios Pvt. Ltd. Copy of permission obtained from Collector Office-Vadodara for the proposed renovation / expansion has also been submitted.

During the meeting, the committee noticed that the area falls in semi critical category from the ground water availability point of view as per the assessment of Central Ground Water Authority (CGWA) and hence the project proponent was asked to submit the ground water recharge scheme to compensate total ground water abstraction quantity. Further the details on provision of common facilities during the operation phase of the proposed project were not found satisfactory. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Plan for rain water harvesting and ground water recharge revealing that quantity of ground water extraction would be compensated by equivalent or more quantity of rain water recharged, 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.
2. Permission from Central Ground Water Authority for ground water abstraction for the proposed project.
3. Details on provisions of common facilities, building wise, during the operation phase of the proposed project.
4. Noise profile details of the project considering the scenario/events generating maximum noise, its impact on the surrounding environment and mitigation measures adopted for the same.

6	Antica Greenwoods	R.S.No.57,72,73,76,81,83,84,88,86,87,91,92,94,41/A, 39,35,22/2,21,665/P/1, Ankodiya, Vadodara	Screening & Scoping
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The project was earlier taken up in the meeting of SEAC held on 27/01/2016. During the meeting held on 27/01/2016, it was found that the construction activity for the proposed project has already been started without obtaining prior Environmental Clearance. While asking by the committee, it was replied that earlier they have planned for the building construction project with built up area of 19,392.0 m² with the land area available to them. Afterwards, some of their final plot numbers were allotted to them adjacent to their land area and some new plots were purchased by them in the vicinity. Because of the availability of the additional land area, they are now planning for development of the building construction project with built up area more than 20,000 m² i.e 35,845.0 m².

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

1. Project plans approved by concerned authority for built up area of 19,392.0 m² and a copy of Rajachitthi obtained for the same.

2. Date of starting the construction activity at the project site. Details of the construction work completed in terms of the percentage of the total construction area of the project.
3. Detailed 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. Copy of permission obtained from the CGWA for ground water abstraction for the proposed project.

Project proponent submitted above mentioned details vide their letter dated 04/03/2016. They have also submitted revised Form – I & Form – IA for the increased built up area of the project i.e 54,056.6 m² vide online proposal no. SIA/GJ/NCP50247/2016 on 04/03/2016.

Project proponent along with their expert consultant attended the meeting of SEAC held on 31/03/2016 and the project was considered based on the details submitted as well as facts presented before the committee

Project plans passed for built up area of 19,391.99 m² on land area of 68,259.0 m², in the year 2012 were submitted. It was presented that project planning was started in 2011. The Town Planning could not be finalized in 2012 due to stay on the T.P. area by honorable High Court of Gujarat and hence the project boundary was also not final in 2012. So they have planned for the project with built up area of 19,391.99 m², got the plans approved in June 2012 and started construction activity based on the plans approved. Afterwards, when a stay which was on the T.P. scheme of the area was vacated through honorable High Court of Gujarat vide order dated 17/09/2014, the boundary of the project could be finalized through allocation of some of their F.P.numbers adjacent to their project site and by purchasing some new land portions. Now as per the availability of additional land area from 68,259.0 m² to 1,08,726.0 m², they now proposing the expansion of the project from built up area of 19,391.99 m² to 54,056.6 m².

Traffic study carried out on Ankodia road in both the directions, which shows that the Level of Service of the road will be same as “B” i.e very good in the existing & the proposed scenarios. Energy conservation measures like maximum use of natural ventilation & lighting, solar water heaters for all the bungalows, timer based street lights, 5 star rated electrical appliances, reflective coating on roof, optimal use of shading etc. will be implemented. It was presented that from the total 97 existing trees, 27 trees will be cut.

During the meeting held on 31/03/2016, the project proponent was suggested to carry out massive tree plantation within premises. They were asked to stop construction activity at the project site and to continue with the same only after obtaining Environmental Clearance from SEIAA Gujarat. After detailed discussion, it was decided to appraise the project further only after satisfactory submission of the following:

1. Notarized undertaking stating that the construction activity is completely stopped at the project site which will be restated only after obtaining Environmental Clearance from SEIAA Gujarat.
2. Photographs showing the current status of the project site.
3. Copy of order dated 17/09/2014y honorable High Court of Gujarat vacating stay order on the T.P.Scheme of the area.

4. Exact source of water supply during the operation phase of the project and permission from the concerned authority for water supply.
5. Explore possibilities to get surface water supply instead of depending upon the ground water to meet with the project water requirements.
6. In case of ground water withdrawal for the proposed project, detailed study on geo-hydrology of the area. Impact of proposed ground water extraction on the ground water table & ground water quality of the area, its impact on other competitive users & borewells in the surrounding area. Permission obtained from the Central Ground Water Authority for extraction of ground water.
7. In case of ground water withdrawal, plan for rain water harvesting and ground water recharge revealing that quantity of ground water extraction would be compensated by equivalent or more quantity of rain water recharged, 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.
8. 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. Design drawing of dual plumbing system.
9. Complete treated sewage management plan including, activity wise break up of its reuse / recycle, mode of disposal, feasibility of using treated sewage for horticulture development considering the soil quality, management plan for treated sewage during monsoon season etc.
10. Details on parking area to provided for the proposed project including the details of plot size of individual type of bungalow, ground coverage, open area, gardening area & parking area available within premises of individual bungalow along with the parking plan showing parking area designated at other places within the project boundary including visitors parking.
11. Permission from the concerned authority for cutting the trees.
12. 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.
13. 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.

Project proponent submitted the above mentioned details to this office on 11/0/5/2016.

Project proponent along with their expert / consultant attended the meeting and the project was appraised based on the details submitted as well as facts presented before the committee:

Salient features of the project are as under:

Sr. No.	Particulars	Details
1	Proposal is for	Expansion of Construction Project "Antica Greenwoods"

2	Type of Project	Residential Bungalow scheme
3	Project/Activity No. (8(a) or 8(b))	8(a)
4	Name of the Project	Antica Greenwoods
5	Name of Developer	Neptune Realty Pvt. Ltd.
6	Estimated Project Cost (Rs. in Crores)	Approx. 123 Crores
7	Whether Construction work has been initiated at Site? If yes, details thereof	Construction work of the proposed expansion has not been initiated.
8	Project Details	<ul style="list-style-type: none"> • Plot Area (m²): 1,08,726.0 • Built up Area (m²): 54,056.6 • FSI area (m²): 53,712.45
9	Building Details	Total 89 bungalows of ground floor+1 floor and a club house.
10	No. of expected Residents/Users	Residential - approx. 712 occupants Club House - approx. 230 users.
11	Water and Waste Water details during Construction Phase	<ul style="list-style-type: none"> • Water requirement (KL/day)– 35.0 • Source of water – Borewell water. • Waste water generation (KL/day)– 3.6 • Mode of disposal – Into septic tank & soak pit.
12	Water and Waste Water details during Operation Phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 352.0 • Fresh water requirement (KL/day): 260.0 (166 KL/day for horticulture development.) • Source of water: Borewell water. • Waste water generation quantity (KL/day): 96.0 • Mode of disposal: Sewage to be generated will be treated in the proposed STP of 100 KL/day capacity. Treated sewage will be completely reused for flushing, washing & horticulture development within premises. During monsoon season, the treated sewage will be stored in the proposed onsite storage tank of 2 days storage capacity, when treated sewage utilization for horticulture development is not possible. • In case of STP provision, capacity of STP: 100.0 • Purposes for treated sewage utilization: Flushing, washing & horticulture development. • Quantity of treated water to be reused: Treated sewage 21.0 KL/day will be reused for flushing, 7.0 KL/day for washing and 64.0 KL/day will be reused for horticulture development.

		<ul style="list-style-type: none"> • Provision of dual plumbing system (Yes/No): yes. • Quantity and type (treated/untreated) of sewage to be discharged: Treated sewage will be completely reused for flushing, washing & horticulture development within premises. During monsoon season, when treated sewage utilization for horticulture development is not possible, the treated sewage will be stored in the proposed onsite storage tank of 2 days storage capacity, in case if drainage facility is not available to the project on completion of the construction phase. • Mode of disposal: As above. 																								
13	Status of Water Supply and Drainage Line	Water requirement will be met through borewell water. Sewage to be generated will be treated in the proposed onsite STP & treated sewage will be completely reused for flushing, washing & horticulture development within premises.																								
14	Solid Waste Management	<p>Construction Phase</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal/ Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>1,000</td> <td>1,000</td> <td>Reuse in landscaping area</td> </tr> <tr> <td>Excavated earth</td> <td>13,850</td> <td>13,850</td> <td>Will be reused for backfilling, development of internal road & other paved areas.</td> </tr> <tr> <td>Construction debris</td> <td>Whatsoever</td> <td>Whatsoever</td> <td>Will be reused for backfilling, development of internal road & other paved areas & remaining will be handed over to VUDA/ VMC.</td> </tr> </tbody> </table> <p>Operation Phase</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Organic & Inorganic waste</td> <td>360</td> <td>Into bins to be provided to each unit</td> <td>Disposal at the nearest sanitary waste landfill / disposal site</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Capacity and no. of community bins to be placed within premises: 50 bins of 40 kg capacity. • Details of segregation if to be done: No. • Landfill site where waste will be ultimately disposed by local authority: Disposal at the nearest sanitary waste landfill / disposal site. 		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal/ Reuse	Top Soil	1,000	1,000	Reuse in landscaping area	Excavated earth	13,850	13,850	Will be reused for backfilling, development of internal road & other paved areas.	Construction debris	Whatsoever	Whatsoever	Will be reused for backfilling, development of internal road & other paved areas & remaining will be handed over to VUDA/ VMC.	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Organic & Inorganic waste	360	Into bins to be provided to each unit	Disposal at the nearest sanitary waste landfill / disposal site
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15	Parking Details	<ul style="list-style-type: none"> • Total parking space of 7,168.49 m² as open surface parking equivalent to 311 CPS will be provided within premises of each individual bungalow (minimum 64.11 m² to maximum 125.45 m²). • Open surface parking space for 50 CPS will be provided as visitors parking near club house. i.e 1,150.0 m². 																								
16	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m, 12 m & 24 m. • Number of Entry & Exit provided on approach road/s: Total 2 gates will 																								

		<p>be provided.</p> <ul style="list-style-type: none"> • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 6 m • Width of Entry & Exit provided on approach road/s: 7.5 m & 9 m.
17	Details of Green Building Measures Proposed	Maximum use of natural lighting through architectural design, use of low water consuming fixtures with flow rates, solar water heaters for all bungalows, use of energy efficient appliances, use of compact fluorescent lamps and low voltage lighting, use of energy efficient T5 tubes and PL lamps for interior lighting, timers shall be provided for corridors/ car park lighting etc.
18	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Construction phase: Source: MGVCL Requirement: 30 kW • Operation Phase Source: MGVCL Requirement: 1056 KVA • Energy conservation measures: Sound design of buildings for maximum natural ventilation and illumination, solar water heaters for all bungalows, large windows for maximum light, windows with single layered insulated glass of 4 – 5 mm with external shading, all streetlights on timers calibrated to seasons, reflective coating on roofs, solar street lights etc. • DG Sets: No. and capacity of the DG sets: 1 × 630 KVA Fuel & its quantity: diesel (126 Liter/h) Note : - D.G. Set will be used in case of power failure or fire Emergency.
19	Fire and Life Safety Measures	The nearest fire station at Vadiwadi is approximately at a distance of 6 km from the project site and travel time for a fire tender to reach the project site is approximately 5 – 10 minutes.
20	Details of Staircase: One staircase of 1.5 m width will be provided in each individual bungalow & the club house.	
21	Rain Water Harvesting	<ul style="list-style-type: none"> • Total ground water recharge of 46,093.3 KL/annum will be achieved through 23 nos. of percolation wells within premises considering the total ground water abstraction of 45,764 KL/year. The quantity of water requirement per day based on 100% occupancy will be 260 KL/day during non monsoon days and 94 KL/day during monsoon season. Assuming 9 months of non-monsoon season and 3 months of monsoon season, the withdrawal will be $(94 \times 365) + (166 \times 69^*) = 45,764$ KL/year. * 365 days – 90 days = 275 days/4 (watering once in four days @ 5lit/sq.m.)
22	Green Area Details	<ul style="list-style-type: none"> • Area covered by trees (m²): 4,040.0 • Area covered by shrubs and bushes (m²): Included in lawn covered area. • Lawn covered area (m²): 1,500.0 • Total Green Area (m²): 5,540.0 • Green Area % of plot area: 17.91 %

		<ul style="list-style-type: none"> No. of trees and species to be planted: about 700 nos. of trees will be planted. 																																											
23	Dust Control Measures	Water sprinkling, covered transportation, covered storage facility for construction material, peripheral barricading etc.																																											
24	Budgetary Allocation for Environmental Management Plan (Rs. in Lacs)	<p>Construction Phase</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>EMP Aspect</th> <th>Approx. Cost in Lakhs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Barricades/dust barriers all round the site</td> <td>5.5</td> </tr> <tr> <td>2</td> <td>Sprinkling of water</td> <td>3.5</td> </tr> <tr> <td>3</td> <td>Labor Management - first aid centre, safety measures, sanitation, amenities (through Construction Contractors)</td> <td>30.0</td> </tr> <tr> <td>4</td> <td>Environmental Monitoring - Air, Water, Noise</td> <td>1.0</td> </tr> </tbody> </table> <p>Operation Phase</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>EMP Measures</th> <th>Capital cost (in Lakhs)</th> <th>Operation cost (in Lakhs/annum)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>STP</td> <td>75</td> <td>8.0</td> </tr> <tr> <td>2</td> <td>Greenbelt and landscape</td> <td>32.0</td> <td>15.0</td> </tr> <tr> <td>3</td> <td>Storm Water Drain and Rainwater Harvesting</td> <td>8.0</td> <td>0.8</td> </tr> <tr> <td>4</td> <td>Energy conservation measures</td> <td>40.0</td> <td>4.0</td> </tr> <tr> <td>5</td> <td>Environmental Monitoring</td> <td>-</td> <td>2.0</td> </tr> <tr> <td>6</td> <td>Solid Waste Management</td> <td>3.5</td> <td>1.8</td> </tr> </tbody> </table>	Sr. No.	EMP Aspect	Approx. Cost in Lakhs	1	Barricades/dust barriers all round the site	5.5	2	Sprinkling of water	3.5	3	Labor Management - first aid centre, safety measures, sanitation, amenities (through Construction Contractors)	30.0	4	Environmental Monitoring - Air, Water, Noise	1.0	Sr. No.	EMP Measures	Capital cost (in Lakhs)	Operation cost (in Lakhs/annum)	1	STP	75	8.0	2	Greenbelt and landscape	32.0	15.0	3	Storm Water Drain and Rainwater Harvesting	8.0	0.8	4	Energy conservation measures	40.0	4.0	5	Environmental Monitoring	-	2.0	6	Solid Waste Management	3.5	1.8
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5	Environmental Monitoring	-	2.0																																										
6	Solid Waste Management	3.5	1.8																																										
25	Details of Eco-friendly Building Material	Use of PPC throughout the project, use of fly ash upto 30 % in all vitrified/cemented materials (paver blocks, tiles, RCC gratings and precast material etc.) as per MoEF Notification on reuse of fly ash, lead free paints & enamels, RMC for all major castings etc.																																											
26	Amenities to be provided to the construction workers.	Clean drinking water, labour colony with toilet & bathing facilities, rest shelter with dining space & shelves, first aid room etc.																																											
27	Documents related to land possession.	Copy of village form no. 7 & N.A permission submitted for all the survey numbers show that the land for residential use is in the name of directors of the company. Copy of Articles of Association of M/s Neptune Realty Pvt. Ltd., registered with Company Registrar, has also been submitted.																																											

During the meeting, the project proponent was suggested to plant trees with canopy within premises and to maximize the solar energy utilization for the proposed project. The project proponent was agreed to

provide solar street lights. The proposed ground water recharge scheme was discussed during the meeting and as the area falls in semi critical category from the ground water availability point of view as per the assessment of Central Ground Water Authority (CGWA), the committee was of the view that the ground water recharge scheme to compensate total ground water abstraction quantity should be submitted. After discussing the matter, it was decided to consider the project only after submission of the following:

1. Plan for rain water harvesting and ground water recharge revealing that quantity of ground water extraction including water requirement for gardening/ horticulture throughout the year would be compensated by equivalent or more quantity of rain water recharged, 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 case of surface run off is to be harvested. Location of recharge percolation wells on the layout plan.
2. Permission from Central Ground Water Authority for ground water abstraction for the proposed project.

7	Sky City	F.P.No.21, Block No. 215, 251,305,306, O.P. No.21, Draft T.P.S.No.1, Shela, Ahmedabad	Screening & Scoping
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Terms of Reference were prescribed for the project during the meeting of SEAC held on 30/06/2015 for the EIA study to be done covering 5 km radius from the boundary of the project site.

Project proponent submitted the EIA report prepared by EQMS India Pvt. Ltd. vide their letter dated 16/05/2016.

The project has been accorded Environmental Clearance under the provisions EIA Notification-1994 by Ministry of Environment & Forest vide order no. J.12011/22/2005/IA/(CIE) dated 05/12/2005 for construction of 3034 nos. of residential units including bungalows, raw houses and apartments with 40,90,000 sq.ft. (3,80,111 sq.m.)built up area. The EC was issued to M/s Sahara India Commercial Corporation Ltd. Now the project proponent in the name of Safal Goyal Realty LLP has applied for expansion & modification of the project along with Form-I & Form – IA vide their letter dated 09/03/2015.

Project proponent along with their expert / consultant attended the meeting and the project was appraised based on the EIA report submitted.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	Expansion and Modification of project
2.	Type of Project	Residential & Commercial Project
3.	Project / Activity No. [8(a) or 8(b)]	8 (b)
4.	Name of the project	Sky City
5.	Name of Developer	Safal Goyal Realty LLP
6.	Estimated	1350 Crores

	Project Cost (Rs. In Crores)																
7.	Whether construction work has been initiated at site? If yes, details thereof	Yes															
8.	Project Details	<p>Land / Plot Area (m²): 4,21,683 Developable area (m²): 3,36,911 FSI area (m²): 5,30,552.25 Total BUA (m²): 8,83,216.87</p> <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>5,30,631.78</td> <td>5,30,552.25</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>NA</td> <td>1,00,034.09</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>33,691.1</td> <td>33,695.47</td> </tr> <tr> <td>Max. building height (m)</td> <td>NA</td> <td>70</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	5,30,631.78	5,30,552.25	Ground Coverage (m ²)	NA	1,00,034.09	Common Plot Area (m ²)	33,691.1	33,695.47	Max. building height (m)	NA	70
	Permissible	Proposed															
FSI Area (m ²)	5,30,631.78	5,30,552.25															
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Common Plot Area (m ²)	33,691.1	33,695.47															
Max. building height (m)	NA	70															
9.	Building Details	<p>No. of Buildings: 672 bungalows , 26 blocks , 9 Community halls and Temple No. of Blocks: 672 bungalows , 26 blocks , 9 Community halls and Temple Scope of buildings/blocks: 672 bungalows – basement + ground floor + 2 floors. 13 buildings - 2 level basement + hollow plinth + 21 floors. 1 building – 2 level basement + hollow plinth + 17 floors. 1 building - 2 level basement + ground floor (S.P. & H.P.) + 17 floors. 6 buildings – basement + hollow plinth + 12 floors. 1 building – 2 level basement + ground floor + 4 floors. 4 buildings – basement + hollow plinth + 11 floors. 4 community halls – ground floor + 1 floor. 5 community halls – ground floor only. No. & type of Commercial Units: 72 units + 2 miniplex with capacity of 90 seats each. Details of amenities if any: 9 community halls and temple.</p>															
10.	No. of expected residents / users	18,231 occupants and 750 visitors															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 43.5 • Source of water: local water tankers • Waste water generation quantity (KL/day): 10.8 • Mode of disposal: Into septic tank. • Details of reuse of water, if any: No 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 2,684.25 • Fresh water requirement (KL/day): 1,737.02 • Source of water: water supply from AUDA • Waste water generation quantity (KL/day): 1,938.14 • Mode of disposal: Sewage to be generated will be treated in the 															

		<p>proposed onsite STP. Treated sewage will be used for horticulture development, flushing, cooling water make up within premises and remaining quantity of treated sewage will be used for development of nearby AUDA garden. In case of high rainy days, when treated sewage utilization for horticulture development within premises & for development of AUDA garden will not be possible, the treated sewage will be discharged into the drainage line of AUDA.</p> <ul style="list-style-type: none"> • In case of STP provision, capacity of STP: Yes • STP Technology: STP with primary, secondary (MBBR reactor) & tertiary treatment facilities. • Purposes for treated sewage utilization: Horticulture development, flushing, cooling water make up within premises and for development of nearby AUDA garden. • Quantity of treated water to be reused: 1. Horticulture (KL/day): 151.62 2. Flushing (KL/day): 685.61 3. Cooling water make up (KL/day): 110.0 4. Development of nearby AUDA Garden (KL/day): 990.91 • Provision of dual plumbing system (Yes/No): yes • Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for horticulture development, flushing, cooling water make up within premises and remaining quantity of treated sewage will be used for development of nearby AUDA garden. In case of high rainy days, when treated sewage utilization for horticulture development within premises & for development of AUDA garden will not be possible, the treated sewage will be discharged into the drainage line of AUDA. • Mode of disposal: As above. 																				
13.	Status of water supply and drainage line	Water supply & drainage lines of AUDA are available at 600 m from the project site.																				
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>64,500</td> <td>64,500</td> <td>Development of landscape area</td> </tr> <tr> <td>Other excavated earth</td> <td>3,65,500</td> <td>2,15,000 m³ will be used for back filling and raising plinth level</td> <td>Balance earth will be used at other projects as per requirement.</td> </tr> <tr> <td>Construction debris</td> <td>7000</td> <td>3,600 m³ will be used for development of internal road.</td> <td>Balance debris will be handed over to AUDA</td> </tr> <tr> <td>Steel scrap</td> <td>80</td> <td>0</td> <td>Sold to vendors</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	64,500	64,500	Development of landscape area	Other excavated earth	3,65,500	2,15,000 m ³ will be used for back filling and raising plinth level	Balance earth will be used at other projects as per requirement.	Construction debris	7000	3,600 m ³ will be used for development of internal road.	Balance debris will be handed over to AUDA	Steel scrap	80	0	Sold to vendors
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Steel scrap	80	0	Sold to vendors																			

		Discarded packing materials	40	0	Sold to vendors																
		<p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste</td> <td>4367.04</td> <td>White bin to each unit</td> <td>Sold to vendors</td> </tr> <tr> <td>Wet waste</td> <td>6550.56</td> <td>Green bin to each unit</td> <td>Municipal bins</td> </tr> <tr> <td>STP Sludge</td> <td>100</td> <td>Green Bins</td> <td>Municipal bins</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: yes • Capacity and no. of community bins to be placed within premises: 15 kg and 60 number of community bins to be placed in common area s. • Landfill site where waste will be ultimately disposed by local authority: will be finally disposed at the nearby waste collection point of AUDA. 				Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	4367.04	White bin to each unit	Sold to vendors	Wet waste	6550.56	Green bin to each unit	Municipal bins	STP Sludge	100	Green Bins	Municipal bins
Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse																		
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Wet waste	6550.56	Green bin to each unit	Municipal bins																		
STP Sludge	100	Green Bins	Municipal bins																		
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR:377 Car and 75,448.37 m² • Parking area requirement for residential units as per GDCR:377 car and 71,793.89 m² • Parking area requirement for Commercial units as per GDCR:3654.48 m² • Total number of CPS requirement for the project as per NBC :3560 • Number of CPS requirement for residential units as per NBC: 3413 • Number of CPS requirement for commercial units as per NBC:119 • Number of CPS requirement as per NBC for multiplex : 28 • Total Parking area provided (m²) & No. of ECS:1,64,876.35 & 5469 ECS • Parking area provided in basement (m²) & No. of ECS:1,21,740.07 & 3804 ECS • Parking area provided in hollow plinth (m²) & No. of ECS:27,025.28 & 965 ECS • Parking area provided as open surface (m²) & No. of ECS:16,111 & 700 ECS • Parking area provided (at any other place-specify) (m²) & No. of ECS: Not Provided. 																			
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 24, 30 and 36 m wide roads • Number of Entry & Exit provided on approach road/s: Nine gates will be provided. • Width of Entry & Exit provided on approach road/s: 7.5, 12, 18 and 30 m (Entry and Exist) • Minimum width of open path all around the buildings for easy access 																			

		of fire tender (excluding the width for the plantation): 3 m • Width of all internal roads: 7.5, 12, 18 and 30 m																																										
17.	Details of Green Building measures proposed.	Maximum use of natural lighting through architectural design, energy efficient motors & pumps, maximum use of aerated block, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas, roof-top thermal insulation																																										
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> Power supply: Maximum demand: 20,000 KVA Connected load: 21,500 KVA Source: UGVCL % of saving with calculations: ~30% by use of CFL/LED lights, solar street lights and star rated energy efficient electronic consumer durables Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area DG Sets: No. and capacity of the DG sets:6 X 125 KVA Fuel & its quantity: HSD, 175 litre/hr 																																										
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> During Construction Phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor & ambulance service. During operation phase (Commercial): Fire extinguishers, hose reel, yard hydrant, wet riser, automatic detection & alarm system, manually operated electric fire alarm system, down comer, automatic sprinkler system in basement & multiplex, underground static water storage tank-500 KL capacity, terrace tank -260 KL capacity (total capacity), pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm² at terrace level etc. 																																										
20.	Details on staircase																																											
	<table border="1"> <thead> <tr> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Floor area m²</th> <th>No. of staircase in each building</th> <th>Width of the staircase (m)</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>6 buildings</td> <td>2B+HP + 21</td> <td>1,091.47</td> <td>2</td> <td>2.15</td> <td>25</td> </tr> <tr> <td>1 building</td> <td>2B+HP + 21</td> <td>545.80</td> <td>2</td> <td>2.15</td> <td>18</td> </tr> <tr> <td>6 buildings</td> <td>2B+HP + 21</td> <td>832.61</td> <td>2</td> <td>2.15</td> <td>23</td> </tr> <tr> <td>1 building</td> <td>2B+HP + 17</td> <td>691.76</td> <td>2</td> <td>2.15</td> <td>21</td> </tr> <tr> <td>1 building</td> <td>2B+G+17</td> <td>691.76</td> <td>2</td> <td>2.15</td> <td>21</td> </tr> <tr> <td>1 building</td> <td>2B+G + 4</td> <td>1,288.35</td> <td>2</td> <td>2</td> <td>26</td> </tr> </tbody> </table>	Type & no. of buildings	No. of floors	Floor area m ²	No. of staircase in each building	Width of the staircase (m)	Travel distance (m)	6 buildings	2B+HP + 21	1,091.47	2	2.15	25	1 building	2B+HP + 21	545.80	2	2.15	18	6 buildings	2B+HP + 21	832.61	2	2.15	23	1 building	2B+HP + 17	691.76	2	2.15	21	1 building	2B+G+17	691.76	2	2.15	21	1 building	2B+G + 4	1,288.35	2	2	26	
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	4 buildings	B+HP + 12	381.23	1	2.04	19
	1 building	B+HP + 12	324.85	1	2.04	17
	1 building	B+HP + 12	404.0	1	2.04	20
	2 buildings	B+H.P.+11	381.23	1	2.04	19
	2 buildings	B+H.P.+11	362.46	1	2.04	18
One staircase of 1.5 m width will be provided in each individual bungalow & community hall.						
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 21m • No. & dimensions of RWH tank(s) : 85 No and 2.5m X 2.0 m X 3.0 m • No. and depth of percolations wells : 85 nos. • Details on Pre-treatment facilities : oil and grease removal and filter 				
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) :12,000 • Area covered by shrubs and bushes (m²):8,000 • Lawn covered area (m²):13,695.47 • Total Green Area (m²):33,695.47 • Green Area % of plot area: 10% • No. of trees and species to be planted: 6738 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, Desi Badam and Gulmohar. 				
23.	Dust control measures	Spraying of water, peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.				
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Allocation of Rs.630.0 lacs & Rs.56.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.				
25.	Details of eco-friendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.				
26.	Amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.				
27.	Documents related to land possession.	Village form no. 7 for all the block numbers submitted by them shows that the N.A land is in the name of M/s Safal Goyal Realty LLP.				
28.	Details of EIA report	<ul style="list-style-type: none"> • EIA report prepared by M/s EQMS India Pvt. Ltd. • Study period: Post monsoon 2015 (October – December 2015) • Study area: 5 km radial area from the boundary of the project site. • Environmental attributes considered for EIA study: Air, water, noise, 				

		<p>soil, Bio-ecology study, socio-economic study, traffic etc.</p> <ul style="list-style-type: none"> • Observations: Baseline ambient air quality in terms of PM₁₀, PM_{2.5}, SO_x & NO_x was well within the NAAQM standards. Noise level during day time at 1 out of total 8 sampling locations and during night time at 2 sampling locations were found slightly higher than the standards prescribed by CPCB. Noise levels at all the other sampling locations were found well within the Noise Level Standards prescribed by CPCB.
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During the meeting, while discussing about the availability of water supply & drainage connection, the project proponent mentioned that the construction phase of the project will take approximately 5 – 6 years to complete and by the time the water supply & drainage connection of AUDA will be available to the project. Copies of receipt obtained from AUDA against the charges paid as betterment deposit, FSI fee, solid waste management, drainage charges etc. has been submitted. While asking by the committee, it was presented that all the old buildings will be demolished and new buildings of 21, 12 & 11 stories will be structurally designed accordingly from the foundation itself. Construction & Demolition waste will be completely used within premises for back filling. It was found that Parking area provision for commercial units is not as per the NBC norms. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Copy of permission obtained from Airports Authority of India for the proposed building height in the project.
2. Details on renewable energy utilization like solar energy, wind energy etc. for the proposed project.
3. Details on capacity of STP/s proposed for the project.
4. Revised details on parking area provision for the project considering the actual parking requirement for the commercial units as per the NBC norms and parking requirement for community halls.
5. An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF&CC OM dated 05/10/2011.

8	Clantha Research Ltd.	Surevy No. 366/1, F.P. No. 28/1, T.P.No. 86, Sarkhej, Ahmedabad.	Screening & Scoping
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The project was earlier taken up in the meeting of SEAC held on 17/02/2016. During the meeting held on 17/02/2016, list & quantity of 42 chemicals, related to clinical research, to be stored within premises has been presented, which shows that only 3 of them have threshold storage quantities as per MSIHC Rules 1989. These three chemicals are Ammonia solution (to be stored 6 litres against the threshold quantity of 50 T), Trifluoro Acetic acid LR (to be stored 0.2 litres against the threshold quantity of 1 kg) and Sodium Chloride (to be stored 2 kg against the threshold quantity of 25 T). After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Project plans showing the built up area, FSI area, Floor area & plot area statement of the project.
2. Copy of necessary permission obtained from concerned competent authority for setting up of the proposed clinical research project.
3. Details on the type of activities to be carried out in the proposed commercial building.
4. Complete storage details of the chemicals including the storage area, MOC of storage containers,

hazards associated & mitigation measures etc.

5. Details on the treatment scheme proposed considering the quality of sewage / waste water to be generated from the proposed clinical research activities.
6. Status of availability of water supply, drainage connection and municipal solid waste collection facility in the area along with the supporting documents.
7. Details on provision to be made for ventilation, natural lighting and CO sensors in basement.
8. Details of mechanical parking to be provided (also including the details like 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.
9. Copy of opinion / NOC obtained from Fire & Emergency Department of AMC and plans showing installation of automatic sprinklers.

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

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

It was presented that approval from Drug Controller General of India, Ministry of Health & Family Welfare, New Delhi is necessary for initiating operation of clinical research. The proposed building is corporate house for employees along with research activity to conduct Bioavailability (BA) – Bioequivalence (BE) studies, clinical trials (Phase II to IV), Dermatology studies, Pharmacokinetics & statistics, quality assurance etc. storage details of the chemicals including the storage area, MOC of storage containers, hazards associated & mitigation measures etc. Details on storage of chemicals including the storage area, MOC of storage containers, hazards associated & mitigation measures etc. were also presented & discussed during the meeting. It was presented that the project site falls under the limits of Ahmedabad Municipal Corporation and water supply as well as drainage connection will be available to the project at the time of getting B.U permission. It is proposed to provide natural light & ventilation through open ducts, LED lights throughout the basement & approach ramps, mechanical ventilation system in such way to provide 6 air changes per hour, CO sensors associated with mechanical ventilation system with automatic adjustable speed level as per the CO concentration level, combination of duct & ductless jet nozzle fan system to push & pull the air in the car-park from the intake point to the discharge point, interlocked intake & exhaust air fans to operate as an integral car-park mechanical ventilation system etc. in basement. Details of mechanical parking to be provided were also discussed during the meeting.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/37336/2015]
2.	Type of Project	Commercial Project
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)
4.	Name of the project	Commercial Project
5.	Name of	Cliantha Research Limited

	Developer																
6.	Estimated Project Cost (Rs. In Crores)	50 Crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 4,510.98 • FSI area (m²): 15,011.72 • Total BUA (m²):24,725.92 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>16,239.52</td> <td>15,011.72</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>NA</td> <td>2,162.61</td> </tr> <tr> <td>Common Plot Area(m²)</td> <td>451.10</td> <td>451.10</td> </tr> <tr> <td>Max. building height(m)</td> <td>NA</td> <td>45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	16,239.52	15,011.72	Ground Coverage (m ²)	NA	2,162.61	Common Plot Area(m ²)	451.10	451.10	Max. building height(m)	NA	45
	Permissible	Proposed															
FSI Area (m ²)	16,239.52	15,011.72															
Ground Coverage (m ²)	NA	2,162.61															
Common Plot Area(m ²)	451.10	451.10															
Max. building height(m)	NA	45															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings:1 • No. of Blocks:1 • Scope of buildings/blocks: 2 level basement + ground floor + 8 floors. • No.& size of Residential Units: NA • No. & type of Commercial Units: 300 Beds • Details of amenities if any: No 															
10.	No. of expected residents / users	1508 occupants and 50 visitors															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 21.75 • Source of water: Tankers • Waste water generation quantity (KL/day): 5.73 • Mode of disposal: septic tank • Details of reuse of water, if any: No 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Total water requirement (KL/day): 282.88 • Fresh water requirement (KL/day):171.36 • Source of water: water supply from AMC • Waste water generation quantity (KL/day):112.2 • Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP and treated sewage will be completely used for gardening, flushing and HVAC cooling purpose within premises. • In case of STP provision, capacity of STP:125 KL/day • STP Technology: Biological • Purposes for treated water utilization: Gardening, Flushing and cooling water make up • Quantity of treated water to be reused:1.Gardening (KL/day): 2.02 2. Flushing (KL/day):3.5 															

		3. Cooling (KL/day):106.0			
		<ul style="list-style-type: none"> • Provision of dual plumbing system (Yes/No): Yes • Quantity and type (treated/untreated)of water to be discharged: Treated sewage will be completely reused. • Mode of disposal: as above. 			
13.	Status of water supply and drainage line	Available at 0.6 km from the site			
14.	Solid waste Management	Construction Phase:			
			Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse
		Top Soil	1950	1950	Development of landscape area
		Other excavated earth	37050	17,550 m ³ will be used for back filling and raising plinth level.	Balance earth will be used at other projects as per requirement.
		Construction debris	200	90 m ³ will be used for development of internal road	Balance debris will be handed over to local authority or fill in low laying area
		Steel scrap	10	0	Sold to vendors
		Discarded packing materials	18	0	Sold to vendors
		Operation Phase:			
		Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
		Dry waste	178.96	White bins	Sold to vendors
		Wet waste	268.44	Green Bins	Municipal bins
		STP Sludge	10	Green Bins	soil conditioner.
		Biomedical waste	150	Different colour coded containers/bags as per the Biomedical Waste (Management & Handling) Rules 1998.	(CBWTF) for its disposal.
		<ul style="list-style-type: none"> • Details of segregation if to be done: yes • Capacity and no. of community bins to be placed within premises: 15 kg 			

		<p>and 16 number of community bins to be placed in common areas.</p> <ul style="list-style-type: none"> • Landfill site where waste will be ultimately disposed by local authority: at the nearest MSW collection point of AMC.
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 7,505.86 m² • Parking area requirement for Commercial units as per GDCR:7,505.86 m² • Total number of CPS requirement for the project as per NBC :396 • Number of CPS requirement for commercial units as per NBC:245 • Number of CPS requirement as per NBC for 300 Beds : 150 • Total Parking area provided (m²) & No. of CPS: 12,748.74 & 403 CPS • Parking area provided in basement (m²) & No. of CPS: 6,109.87 & 190 CPS • Parking area provided as open surface (m²) & No. of CPS:529 &23 CPS • Parking area provided (at any other place-specify) (m²) & No. of CPS: Mechanical 6,109.87 &190 CPS.
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 30 m wide road • Number of Entry & Exit provided on approach road/s: Two 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): 5.0 m • Width of all internal roads: minimum 6 m
17.	Details of Green Building measures proposed.	<p>Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, maximum use of RMC & aerated blocks, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas- 10 numbers of solar lighting, roof-top thermal insulation, water meters, rain water harvesting & ground water recharge through 2 nos. of percolating wells, provision of onsite STP & reuse of treated sewage etc.</p>
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 1334.05 KVA Connected load: 2828.5 KVA Source: Torrent Power Limited. • % of saving with calculations: ~40% by use of LED lights & solar street lights and star rated energy efficient electronic consumer durables • Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area • DG Sets: No. and capacity of the DG sets: 2 x 1010 KVA Fuel & its quantity: HSD, 450 litre/hr
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • During Construction Phase: Provision of Personal Protective Equipment's (PPEs) to the construction workers and its usage shall be ensured and supervised, training to all workers on construction safety aspects, first aid room with first aid kit, doctor & ambulance service. • During operation phase (Commercial): Fire extinguishers, hose reel, manually operated electric fire alarm system, wet riser, automatic sprinkler

		system, underground static water storage tank-200 KL capacity, terrace tank -40 KL capacity (total capacity), pump near underground static water storage tank (fire pump) with minimum Pressure of 3.5 kg/cm ² at terrace level, one electric and one diesel pump of capacity 2 280 lit/min and one electric pump of capacity 180 lit/min.												
20.	Details on staircase													
	<table border="1"> <thead> <tr> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Floor area m²</th> <th>No. of staircase</th> <th>Width of the staircase (m)</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>One</td> <td>G + 8</td> <td>2050.39</td> <td>3</td> <td>2.1</td> <td>28</td> </tr> </tbody> </table>	Type & no. of buildings	No. of floors	Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)	One	G + 8	2050.39	3	2.1	28	
Type & no. of buildings	No. of floors	Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)									
One	G + 8	2050.39	3	2.1	28									
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 19 m • No. & dimensions of RWH tank(s) : 2 No and 2.5m X 2.0 m X 3.0 m • No. and depth of percolations wells : 2 no and 16 m • Details on Pre-treatment facilities : oil and grease removal and filter 												
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) :200 • Area covered by shrubs and bushes (m²):100 • Lawn covered area (m²):151.10 • Total Green Area (m²):451.10 • Green Area % of plot area: 10% • No. of trees and species to be planted: 70 number of trees and Limbdo, KaadoSiris, Jambu, Asopalav, DesiBadam and Gulmohar 												
23.	Dust control measures	Spraying of water, Peripheral barricading, covered shed for cement loading area, covering the excavated earth with tarpaulin sheet etc.												
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Allocation of Rs. 39 lacs & Rs.10 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.												
25.	Details of ecofriendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.												
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.												
27.	Documents related to land possession	Copy of index from subregistrar's office submitted by them shows that the N.A land for commercial use has been purchased by M/s Cliantha Research Limited through its director.												

During the meeting, it was observed that they have proposed to install STP for domestic waste water to be generated during the operation phase of the project but the details of management, treatment & disposal plan of effluent to be generated from the proposed clinical research activities as well as hazardous solid waste was not submitted by them. After detailed discussion, it was decided to consider

the project only after submission of the following:

1. Permission from Drug Controller General of India, Ministry of Health & Family Welfare, New Delhi for the proposed project.
2. Complete management plan including collection, storage, treatment & disposal of effluent & hazardous solid waste (category wise) to be generated from the proposed clinical research activities.
3. Notarized undertaking stating that the radioactive substances & pathogens will not be used in the project for the proposed clinical research activities.

9	Manilal Jesangbhai Patel	Block No. 142/1 + 3, Zadeshwar, Bharuch.	Screening & Scoping
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The project was earlier taken up in the meeting of SEAC held on 27/01/2016. During the meeting held on 27/01/2016, after detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Permission from concerned authority for water supply & drainage connection to the project.
2. Status of water supply & drainage line of Zadeshwar Gram Panchayat in the area with supporting documents. Details on STP, pumping station and final disposal point of sewage by Zadeshwar Gram Panchayat.
3. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay.

Project proponent submitted the above mentioned details vide their letter dated 08/04/2016.

The project proponent along with their expert / consultant attended the meeting for appraisal of the project and during the meeting the project was appraised based on the details submitted by them as well as facts presented before the committee.

They have submitted a copy of letter obtained from Zadeshwar Grampanchayat for providing water supply & drainage connection. It was presented that they will provide their own STP of 150 KL/day capacity for treatment of sewage (111.44 KL/day) to be generated during the operation phase of the project. From the total water requirement of 198.0 KL/day, fresh water requirement of 91.94 KL/day will be obtained from water supply of Zadeshwar Grampanchayat and water requirement of 47.26 KL/day for flushing, 4.80 KL/day for gardening and 54.0 KL/day for car & floor washing will be met through treated sewage. Details of Environment Management plan has been submitted and budget allocation of Rs. 62 lacs as capital cost for D.G set room & stack height, STP along with its O & M & fixtures, provision of municipal solid waste collection bins, rain water harvesting, green belt development, environment monitoring etc. and Rs. 9.6 lacs as recurring cost has been proposed.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/3069/2015]
2.	Type of Project	Residential cum Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Proposed Residential cum Commercial Project

5.	Name of Developer	Mr. Manilal Jesangbhai Patel															
6.	Estimated Project Cost (Rs. In Crores)	36 crore															
7.	Whether construction work has been initiated at site? If yes, details thereof	No construction activity started															
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²) : 9,500 FSI area (m²): 19,732.77 Total BUA (m²): 29,298.80 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>20,900.0</td> <td>19,732.77</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>---</td> <td>4,322.85</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>917.25</td> <td>960.08</td> </tr> <tr> <td>Max. building height (m)</td> <td></td> <td>18</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	20,900.0	19,732.77	Ground Coverage (m ²)	---	4,322.85	Common Plot Area (m ²)	917.25	960.08	Max. building height (m)		18
	Permissible	Proposed															
FSI Area (m ²)	20,900.0	19,732.77															
Ground Coverage (m ²)	---	4,322.85															
Common Plot Area (m ²)	917.25	960.08															
Max. building height (m)		18															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 9 No. of blocks: 11 Scope of building/blocks: 2 buildings – basement + ground floor (parking & shops) + higher ground floor + 4 floors. 7 buildings - basement + hollow plinth + higher ground floor + 4 floors No. & size of Residential Units: 224 Flats No. & type of Commercial Units: 18 Shops Details of amenities if any: - ---- 															
10.	No. of expected residents / users	5,856															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 20.25 Source of water: Local water tankers Waste water generation quantity (KL/day): 10.53 Mode of disposal: into septic tank & soak pit. Details of reuse of water, if any: 4 KL/day for curing 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 198.0 Fresh water requirement (KL/day): 91.94 Source of water: Water supply from Zadeshwar Grampanchayat. Waste water generation quantity (KL/day):111.44 Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be completely reused for gardening, flushing, car washing & floor washing purposes within premises. In case of STP provision, capacity of STP: Yes, 150 KL/day STP Technology: STP comprising of primary, secondary (MBBR) & tertiary treatment (dual media filter) facility. Purposes for treated water utilization: Gardening & flushing. Quantity of treated water to be reused: 															

		<p>1. Gardening (KL/day): 4.80 2. Flushing (KL/day): 47.26 3. Car & floor washing (KL/day): 54.0</p> <ul style="list-style-type: none"> • Provision of dual plumbing system (Yes/No): yes • Quantity and type (treated/untreated) of sewage to be discharged: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be completely reused for gardening, flushing, car washing & floor washing purposes within premises. • Mode of disposal: As above. 																																
13.	Status of water supply and drainage line	Zadeshwar Gram Panchayat drainage line and water supply line is available at site																																
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>600</td> <td>600</td> <td>Greenbelt development</td> </tr> <tr> <td>Other excavated earth</td> <td>11,400</td> <td>5,160 m³ will be reused for back filling, internal road & paved area development.</td> <td>will be used for back filling for the other projects in the vicinity as well as road Development outside the premises.</td> </tr> <tr> <td>Construction debris</td> <td>250</td> <td>250</td> <td>Back filling and internal road development</td> </tr> <tr> <td>Steel scrap</td> <td>7</td> <td>---</td> <td>Sold to vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>4</td> <td>----</td> <td>Sold to vendors</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste Wet waste Total</td> <td>615</td> <td>Into bins to be provided to each unit.</td> <td>Bio degradable waste will be disposed into nearby bins and non biodegradable waste will be sold to vendors</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: Green bin for bio degradable waste & White bin for non-biodegradable waste. • Capacity and no. of community bins to be placed within premises: Total 550 bins provided with 5 litre to 25 litre capacity • Landfill site where waste will be ultimately disposed by local authority: Nearby MSW collection point of Zadeshwar Gram Panchayat. 		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	600	600	Greenbelt development	Other excavated earth	11,400	5,160 m ³ will be reused for back filling, internal road & paved area development.	will be used for back filling for the other projects in the vicinity as well as road Development outside the premises.	Construction debris	250	250	Back filling and internal road development	Steel scrap	7	---	Sold to vendors	Discarded packing materials	4	----	Sold to vendors	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste Wet waste Total	615	Into bins to be provided to each unit.	Bio degradable waste will be disposed into nearby bins and non biodegradable waste will be sold to vendors
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Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse																															
Dry waste Wet waste Total	615	Into bins to be provided to each unit.	Bio degradable waste will be disposed into nearby bins and non biodegradable waste will be sold to vendors																															
15.	Parking Details	• Total parking area requirement for the project as per GDCR: 4,111,.42 m ²																																

		<ul style="list-style-type: none"> • Parking area requirement for residential units as per GDCR: 3,836.65 m² • Parking area requirement for Commercial units as per GDCR: 274.77 m² • Total number of CPS requirement for the project as per NBC:143 CPS • Number of CPS requirement for residential units as per NBC: 137 • Number of CPS requirement for commercial units as per NBC: 6 CPS • Total Parking area provided (m²) & No. of CPS: Area – 7,821.48 m² , CPS -260 • Parking area provided in basement (m²) & No. of CPS: Area – 4,321.48 m² , CPS - 135 • Parking area provided in hollow plinth (m²) & No. of CPS: CPS: Area – 3,500.0 m² , CPS – 125 				
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 15 m on Western side • Number of Entry & Exit provided on approach road/s: 03 • Width of Entry & Exit provided on approach road/s: 9.0 m and 6.0 m • Minimum width of open path all around the buildings for easy access of fire tender(excluding the width for the plantation): 3 m • Width of all internal roads: 6.0 m & 9.0 m 				
17.	Details of Green Building measures proposed.	Water efficient taps, flow control devices, use of RMC concrete & aerated blocks, maximum use of natural light through architectural design, energy efficient motors & pumps, use of CFL lighting fixtures & low voltage lighting, solar lighting in open & landscape areas, roof top thermal insulation etc.				
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 1500 KVA Connected load:---- • Source: Daxin Gujarat Vij Company Ltd • Energy saving measures: Maximum use of natural light through architectural design, energy efficient motors & pumps, use of CFL lighting fixtures & low voltage lighting, solar lighting in open & landscape areas, roof top thermal insulation etc. • DG Sets: No. and capacity of the DG sets: 1 X 125 KVA Fuel & its quantity: HSD 25 litre/hr 				
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • Fire extinguishers, hose reel, down comer, automatic sprinkler system (in basement), manually operated electric fire alarm system, terrace tank of 25 KL capacity etc. • Name of the nearest fire station: Bharuch Distance from the project site: About 4.2 Km Time required by the fire tender to reach the project site: 25 minutes 				
20.	Details on staircase					
	Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)
	A, K	B +P + UG +4	461.88	1	1.2	Max 24 m

	B,C,D,H, I,J	B +P + UG +4	298.12	1	1.2	
	E, G	B +P + UG +4	415.96	1	1.2	
	F	B +P + UG +4	290.26	1	1.2	
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: ---- • No. & dimensions of RWH tank(s) : ---- • No. and depth of percolations wells : 3 nos. • Details on Pre-treatment facilities : Desilting cum filter chamber. 				
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 225 • Area covered by shrubs, bushes and lawn (m²): 735.08 • Total Green Area (m²): 960.08 • Green Area % of plot area: 10 • No. of trees and species to be planted: 225 				
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Environment Management plan with budget allocation of Rs. 62 lacs as capital cost for D.G set room & stack height, STP along with its O & M & fixtures, provision of municipal solid waste collection bins, rain water harvesting, green belt development, environment monitoring etc. and Rs. 9.6 lacs as recurring cost has been proposed.				
24.	Proposed dust control measures during the construction phase	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				
25.	Eco friendly building material usage details.	Fly ash bricks/fly ash blended concrete blocks, fly ash paving blocks.				
26.	Basic amenities to be provided to construction workers	Sanitation facilities, drinking water, welfare facility as per Gujarat Building & Other Construction Rules.				
27.	Documents related to land possession.	Village form no. 7/12 & N.A order for residential & commercial use in the name of applicant.				

During the meeting, while discussing about management of treated sewage during the monsoon season, the project proponent replied that a tank of adequate capacity will be provided for storing the treated sewage when its utilization for gardening purpose is not possible during high rainy days. After detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.

10	Vishwanath Elegance	S.No.340/a, 335/p/2/k, F.P.No.72/1, 67/5/2, T.P.S.No. 1, Shela, Ta: Sanand, Dist: Ahmedabad	Screening / Scoping & appraisal
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Details of the proposed project as presented before the committee is tabulated below:

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

2.	Type of Project	Residential Building Construction Project															
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)															
4.	Name of the project	Vishwanath Elegance															
5.	Name of Developer	Vishwanath Builders															
6.	Estimated Project Cost (Rs. In Crores)	73.5 crores															
7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²): 7,848.00 FSI area (m²):21,036.56 Total BUA (m²):31,988.91 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area</td> <td>21,189.60</td> <td>21,036.56</td> </tr> <tr> <td>Ground Coverage</td> <td>---</td> <td>3,597.94</td> </tr> <tr> <td>Common Plot Area</td> <td>627.91</td> <td>627.91</td> </tr> <tr> <td>Max. building height</td> <td>---</td> <td>27.85</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area	21,189.60	21,036.56	Ground Coverage	---	3,597.94	Common Plot Area	627.91	627.91	Max. building height	---	27.85
	Permissible	Proposed															
FSI Area	21,189.60	21,036.56															
Ground Coverage	---	3,597.94															
Common Plot Area	627.91	627.91															
Max. building height	---	27.85															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings:5 No. of Blocks:10 Scope of buildings/blocks: Basement + hollow plinth +7 floors. No. & size of Residential Units: 280 No. & type of Commercial Units: - Details of amenities if any:--- 															
10.	No. of expected residents / users	1512 Population and @151 visitors/d															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day):18.75 Source of water: Local water tankers. Waste water generation quantity (KL/day):8.60 Mode of disposal: Septic tank and soak pits Details of reuse of water, if any: - 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Total water requirement (KL/day): 233.81 Fresh water requirement (KL/day): 160.74 Source of water: water supply from AUDA Waste water generation quantity (KL/day): 206.08 Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. 30% of the treated sewage will be used for gardening & flushing purpose within premises and remaining quantity of treated sewage will be discharged into the drainage line of AUDA. In case of STP provision, capacity of STP: 210.0 STP Technology: STP with primary, secondary & tertiary treatment facilities. 															

		<ul style="list-style-type: none"> • Purposes for treated sewage utilization: Gardening and Flushing • Quantity of treated sewage to be reused: 1. Gardening (KL/day): 3.52 2. Flushing (KL/day): 69.55 • Provision of dual plumbing system (Yes/No): yes • Quantity and type (treated/untreated) of sewage to be discharged: Treated sewage will be used for gardening & flushing purpose within premises and remaining quantity of treated sewage will be discharged into the drainage line of AUDA. • Mode of disposal: As above. 																																				
13.	Status of water supply and drainage line	Water supply & drainage connection of AUDA will be available to the project during the operation phase of the project.																																				
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation</th> <th>Quantity to be reused</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>627(m³)</td> <td>627(m³)</td> <td>Will be reused for greenbelt development within premises.</td> </tr> <tr> <td>Other excavated earth</td> <td>25,500(m³)</td> <td>2,800(m³) will be used for back filling & for internal road.</td> <td>Remaining will be supplied to other low-lying areas</td> </tr> <tr> <td>Construction debris</td> <td>9.00(m³)</td> <td>9.00(m³) will be reused for re-filling and re-surfacing</td> <td>---</td> </tr> <tr> <td>Steel scrap</td> <td>2.5 MT</td> <td>-</td> <td>Sale to vendor</td> </tr> <tr> <td>Discarded packing materials</td> <td>-</td> <td>-</td> <td>Sale to vendor</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste & wet waste</td> <td>756</td> <td>Into bins to be provided to each individual unit.</td> <td>Final collection & disposal through agency appointed by AUDA.</td> </tr> <tr> <td>STP Sludge</td> <td>200</td> <td>In Bags</td> <td>Use as Manure</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: no • Capacity and no. of community bins to be placed within premises: 1440 bins and 25 lit. • Landfill site where waste will be ultimately disposed by local authority: Final collection & disposal through agency appointed by AUDA. 		Generation	Quantity to be reused	Mode of Disposal / Reuse	Top Soil	627(m ³)	627(m ³)	Will be reused for greenbelt development within premises.	Other excavated earth	25,500(m ³)	2,800(m ³) will be used for back filling & for internal road.	Remaining will be supplied to other low-lying areas	Construction debris	9.00(m ³)	9.00(m ³) will be reused for re-filling and re-surfacing	---	Steel scrap	2.5 MT	-	Sale to vendor	Discarded packing materials	-	-	Sale to vendor	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste & wet waste	756	Into bins to be provided to each individual unit.	Final collection & disposal through agency appointed by AUDA.	STP Sludge	200	In Bags	Use as Manure
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STP Sludge	200	In Bags	Use as Manure																																			
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 4,207.32(m²) • Parking area requirement for residential units as per GDCR: 4,207.32 (m²) • Total number of CPS requirement for the project as per NBC: 280 																																				

		<ul style="list-style-type: none"> • Number of CPS requirement for residential units as per NBC: 280 • Total Parking area provided (m²) & No. of ECS:8,924.07 & 295 • Parking area provided in basement (m²) & No. of ECS: 6,251.07 & 195 • Parking area provided in hollow plinth (m²) & No. of ECS:2,071.0 & 74 • Parking area provided as open surface (m²) & No. of ECS:602.0 & 26 				
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads:18.0 m wide road on North side and 12.00 m wide road on south side • Number of Entry & Exit provided on approach road/s: 2 gates will be provided. • Width of Entry & Exit provided on approach road/s: 7.50 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m • Width of all internal roads: 7.50 m. 				
17.	Details of Green Building measures proposed.	Use of AAC blocks, fly ash paver blocks, PPC blocks, LEC / CFL lights for common area lighting, water meters for each block & underground tanks, water control valves, low water consuming fixtures, provision of STP & reuse of treated sewage for gardening & flushing purpose within premises, rain water harvesting & ground water recharge through 2 nos. of percolation wells etc.				
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand:1,400 KW Connected load:--- Source: UGVCL • Energy saving measures: LED / CFL lights for common area lighting, water meters for each block & underground tanks, provision of APFC (Automatic Power Factor Controller) to optimize the power factor to unity to reduce the reactive power flow etc. • DG Sets: For Emergency Power only No. and capacity of the DG sets:1 x 160 KVA Fuel & its quantity:30 lit/hr 				
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • During Construction Phase: Provision of Personal Protective Equipment's (PPEs) and its usage shall be ensured and supervised • During Operation Phase: Fire extinguishers, underground fire water storage tank of 100 KL capacity, overhead water tank on each block etc. • Nearest Fire Station: Bodakdev Fire station Distance from the station: 6.70 km Time required for the fire tender to reach at the project site: 13 min. 				
20.	Details on staircase					
	Type & no. of buildings	No. of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)
	4 buildings (A+B, C+D, F+G, H+I)	B+H.P.+7	592.08	2	1.50	<30
	1 residential building (E+J)	B+H.P.+7	635.76	2	1.50	25.24
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table:> 90 m • No. & dimensions of RWH tank(s) :2 nos and 2.0*2.0*2.5 m • No. and depth of percolations wells :2 nos. • Details on Pre-treatment facilities : Filtration. 				
22.	Green area	• Tree covered area (m ²) :380.0				

	details	<ul style="list-style-type: none"> • Area covered by shrubs and bushes (m²): - • Lawn covered area (m²):247.91 • Total Green Area (m²):627.91 • Green Area % of plot area: 8% • No. of trees and species to be planted: 118 trees like like Limbdo, Asopalav, Desi Badam and Gulmohar.
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	Capital cost of 33.5 lacs & recurring cost of 8.65 lacs has been proposed during the operation phase of the project for the proposed Environment Management Plan including D.G set maintenance & monitoring, solid waste management, STP operation & maintenance, rain water harvesting, green belt development etc.
24.	Proposed dust control measures during the construction phase	Applying water or non-toxic chemicals to minimize dust, To transport the materials from nearest places to avoid the direct energy and associated vehicular emissions, to cover the materials during transportation to avoid the fugitive emissions from transportation operation, to use telescopic chute to regulate falling of fine powder materials from height during unloading at site to mitigate the fugitive emissions, vehicles will be well-maintained and properly serviced having PUC certificate etc.
25.	Eco friendly building material usage details.	Use of AAC blocks, fly ash paver blocks, PPC blocks etc.
26.	Basic amenities to be provided to construction workers.	Sanitation facilities, periodic health check up, drinking water etc.
27.	Documents related to land possession	Village form no. 7 & 12 submitted by them shows that the N.A land is in the name of applicant Mr. Hitesh R. Vyas.

During the meeting, after detailed discussion, it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.

11	Shree rang Housing Corporation	S. No. 233+234/9, F.P. No. 93, Village: Randesan, Ta & dist: Gandhinagar	Screening & Scoping
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Details of the proposed project as presented before the committee are tabulated below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project
2.	Type of Project	Residential & commercial building project
3.	Project / Activity No. [8(a) or 8(b)]	8(a)
4.	Name of the project	Shree Rang Pearl
5.	Name of Developer	M/s. Shree Rang Housing Corporation
6.	Estimated Project Cost (Rs. In Crores)	Rs. 45 Crore approx.

7.	Whether construction work has been initiated at site? If yes, details thereof	No															
8.	Project Details	<ul style="list-style-type: none"> Total land area (m²): 7,892 FSI area (m²): 17,754.89 Total Built Up Area (m²): 27,328.70 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>17,757.0</td> <td>21,910.84</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>---</td> <td>2,755.70</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>789.20 m²</td> <td>1,207.65</td> </tr> <tr> <td>Max. building height (m)</td> <td>45.0</td> <td>26.2</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	17,757.0	21,910.84	Ground Coverage (m ²)	---	2,755.70	Common Plot Area (m ²)	789.20 m ²	1,207.65	Max. building height (m)	45.0	26.2
	Permissible	Proposed															
FSI Area (m ²)	17,757.0	21,910.84															
Ground Coverage (m ²)	---	2,755.70															
Common Plot Area (m ²)	789.20 m ²	1,207.65															
Max. building height (m)	45.0	26.2															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 6 No. of Blocks: 8 Scope of buildings/blocks: Basement + hollow plinth+ 7 floors. No. & size of Residential Units: 192 units of 2 & 3 BHK. No. & type of Commercial Units: 35 shops. 															
10.	No. of expected residents / users	---															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 50.0 Source of water: Water supply from Gandhinagar Urban Development Authority (GUDA) Waste water generation quantity (KL/day): 4.0 Mode of disposal: Into septic tank & soak pit system. Details of reuse of water, if any: No 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Fresh water requirement (KL/day): 154 Source of water: Water supply from Gandhinagar Urban Development Authority (GUDA) Waste water generation quantity (KL/day):122 Mode of disposal: Into drainage line of GUDA. 															
13.	Status of water supply and drainage line	Available at site															
14.	Solid waste Management	<ul style="list-style-type: none"> Capacity and no. of community bins to be placed within premises: total 40 Nos. of bins with 80 Liter capacity will be provided within premises. Commercial- Domestic (35 Units x 250 gm/Person/Day x 2 Person/Shop)=18 kg/day Residential - Domestic : (192 residential units x 5 persons per unit = 960 persons x 500 gm/Person/Day)=480 kg/day 															
15.	Parking Details Traffic Management	<ul style="list-style-type: none"> Total parking area requirement for the project as per GDCR: 3,006.85 m² Parking area requirement for residential units as per GDCR: 2,692.85 m² Parking area requirement for Commercial units as per GDCR: 314.0 m² Total number of CPS requirement for the project as per NBC :131 Number of CPS requirement for residential units as per NBC: 120 Number of CPS requirement for commercial units as per NBC:11 															

		<ul style="list-style-type: none"> • Total Parking area provided (m²) & No. of CPS: 8,264.76 & 277 CPS • Parking area provided in basement (m²) & No. of CPS:5,571.32 & 174 CPS • Parking area provided in hollow plinth (m²) & No. of CPS:1,810.12 & 65 CPS • Parking area provided as open surface (m²) & No. of CPS: 883.32 & 38 CPS. 																								
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m wide road on two sides • Number of Entry & Exit provided on approach road/s: Three gates will be provided. • Width of Entry & Exit provided on approach road/s: 9 m & 6 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3 m • Width of all internal roads: 6 m & 7.5 m. 																								
17.	Details of Green Building measures proposed.	Use of energy efficient pumps and motors, LED lights in common areas in buildings, maximum use of natural light & ventilation through proper orientation of buildings, rain water harvesting & ground water recharge through 2 nos. of percolation wells.																								
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: During Construction Phase: 20 HP During Operational Phase: 1500 KW • Source: UGVCL • D.G. Sets: Capacity of the D. G. Sets: 1 × 60 KVA Fuel & its quantity: HSD-75 L/hr. (The D. G. Sets will be used as emergency power back-up only). 																								
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • Fire water storage tank of 100 KL capacity, separate fire fighting system in each block with flexible hose pile connected with hydrant system etc. • The nearest fire station: Gandhinagar fire station Distance from the project site: 5 km Travel time: 10 - 15 minutes. 																								
20.	Details on staircase																									
	<table border="1"> <thead> <tr> <th>Bldg. No.</th> <th>No. of floor</th> <th>Floor Area (m²)</th> <th>No. of staircase</th> <th>Width of Staircase (m)</th> <th>Maximum Travel Distance up to the Staircase (m)</th> </tr> </thead> <tbody> <tr> <td>A,B</td> <td>B+H.P.+7</td> <td>465.19</td> <td>1</td> <td>1.6</td> <td><30</td> </tr> <tr> <td>C+D, G+H</td> <td>B+H.P.+7</td> <td>604.03</td> <td>2</td> <td>1.6</td> <td><30</td> </tr> <tr> <td>E,F</td> <td>B+H.P.+7</td> <td>323.07</td> <td>1</td> <td>1.6</td> <td><30</td> </tr> </tbody> </table>	Bldg. No.	No. of floor	Floor Area (m ²)	No. of staircase	Width of Staircase (m)	Maximum Travel Distance up to the Staircase (m)	A,B	B+H.P.+7	465.19	1	1.6	<30	C+D, G+H	B+H.P.+7	604.03	2	1.6	<30	E,F	B+H.P.+7	323.07	1	1.6	<30	
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C+D, G+H	B+H.P.+7	604.03	2	1.6	<30																					
E,F	B+H.P.+7	323.07	1	1.6	<30																					
21.	Rain Water Harvesting (RWH)	➤ Two percolating wells will be provided within premises.																								
22.	Green area details	<ul style="list-style-type: none"> • Green Belt Area (m²) : 960.94 • Tree covered area (m²): 170.00 • Lawn covered area (m²): 790.94 • No. of trees and species to be planted: 60-number of trees of Neem, Pipal , Asopalav, and Gulmohar 																								

23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	---
24.	Proposed dust control measures.	Downwash of trucks (Especially wheels) prior to departure from site, covering loose construction material with tarpaulin, use of Ready Mix Concrete to minimize handling of construction material, barricading the project site, water sprinkling on roads etc.
25.	Use of Eco – friendly building materials.	Use of fly ash bricks, fly ash paver blocks, flush doors from waste wood, Portland Pozollona Cement.
26.	Details on amenities to be provided to construction workers	Relevant provisions of minimum wages act will be followed, PPEs like helmet, boots, goggles, dust masks etc will be provided, sanitary blocks & safe potable water etc.

During the meeting, while asking by the committee, it was replied that water supply & drainage lines of GUDA will be available to the project and they have already paid charges for the same. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Land possession documents showing ownership of the project site by the applicant / project proponent.
2. Details on solar energy utilization for the proposed project.
3. Project plans showing building wise, floor wise built up area, FSI area, floor area tables & plot area statement.
4. Copy receipt obtained from GUDA against the charges paid for drainage connection, water supply, municipal solid waste collection etc.
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 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.

12	Building Construction Project of Slum Rehabilitation proposed by Vadodara Municipal Corporation	at S.No.39/2,40,41, Moje: Sama, Dist: Vadodara	Screening & Scoping
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Details of the project as presented before the committee is tabulated below:

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

4.	Name of the project	Mukhyamantri Gruh Yojana of Slum Rehabilitation under Public Private Partnership (PPP) Model																	
5.	Name of Developer	Vadodara Municipal Corporation																	
6.	Estimated Project Cost (Rs. In crores)	77 Crore																	
7.	Whether construction work has been initiated at site? If yes, details thereof	Yes																	
8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²) : 46,222 Net Plot area (m²) : 11,456.65 FSI area (m²): 26,733.54 Total BUA (m²): 34,861.38 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>34,369.95</td> <td>26,733.54</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>----</td> <td>4,505.10</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>----</td> <td>916.70</td> </tr> <tr> <td>Max. building height (m)</td> <td>---</td> <td>25 m</td> </tr> </tbody> </table>				Permissible	Proposed	FSI Area (m ²)	34,369.95	26,733.54	Ground Coverage (m ²)	----	4,505.10	Common Plot Area (m ²)	----	916.70	Max. building height (m)	---	25 m
	Permissible	Proposed																	
FSI Area (m ²)	34,369.95	26,733.54																	
Ground Coverage (m ²)	----	4,505.10																	
Common Plot Area (m ²)	----	916.70																	
Max. building height (m)	---	25 m																	
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 7 No. of blocks: 22 Scope of buildings/blocks: 6 buildings – ground floor (shops & parking) + 7 floors. 1 building – basement + ground floor (shops & parking) + 7 floors. No. & size of Residential Units: 861 No. & type of Commercial Units: 12 Details of amenities if any: - ---- 																	
10.	No. of expected residents / users	3600 of Residential 24 of Commercial																	
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 20.25 Source of water: Local water tankers Waste water generation quantity (KL/day): 10.53 Mode of disposal: Vadodara Mahanagar Seva Sadan (VMSS) sewer line. Details of reuse of water, if any: 4 KLD for curing 																	
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> Fresh water requirement (KL/day): 494.34 Source of water: Water supply from Vadodara Mahanagar Seva Sadan. Wastewater generation quantity (KL/day): 416.62 Mode of disposal: Into drainage line of Vadodara Mahanagar Seva Sadan (VMSS) 																	
13.	Status of water supply and drainage line	VMSS drainage line and water supply line is available at site																	
14.	Solid waste Management	Construction Phase: <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal /</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal /											
	Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal /																

				Reuse								
	Top Soil	Top soil to be generated will be used in landscaping										
	Other excavated earth	Excavated earth to be generated will be completely used for internal roads and other paved area, back filling etc.										
	Construction debris	310	110	Back filling and internal road development								
	Steel scrap	12	---	Sold to vendors								
	Discarded packing materials	8	----	Sold to vendors								
	<p>Remaining quantity of construction debris will be used for back filling for the other projects in the vicinity as well as road development outside the premises.</p> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry & wet waste.</td> <td>About 2,225</td> <td></td> <td>Bio degradable waste will be disposed into nearby bins and non biodegradable waste will be sold to vendors</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: Green bins for bio degradable waste & White bin for non-biodegradable waste. • Capacity and no. of community bins to be placed within premises: Total 1700 bins to be provided with 5 litre to 25 litre capacity • Landfill site where waste will be ultimately disposed by local authority: nearby MSW collection point of VMC / VMSS. 				Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry & wet waste.	About 2,225		Bio degradable waste will be disposed into nearby bins and non biodegradable waste will be sold to vendors
Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse									
Dry & wet waste.	About 2,225		Bio degradable waste will be disposed into nearby bins and non biodegradable waste will be sold to vendors									
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 3,037.47 m² • Parking area requirement for residential units as per GDCR: 2,926.19 m² • Parking area requirement for Commercial units as per GDCR: 111.28 m² • Total number of CPS requirement for the project as per NBC: 405 CPS • Number of CPS requirement for residential units as per NBC: 401 • Number of CPS requirement for commercial units as per NBC: 4 CPS • Total Parking area provided (m²) & No. of CPS: Area – 3,058.51 m² , CPS - 114 • Parking area provided in basement (m²) & No. of CPS: Area – 573.02 m², CPS – 18 • Parking area provided in hollow plinth (m²) & No. of CPS: CPS: Area 										

		<ul style="list-style-type: none"> – 1561.31 m² , CPS - 56 • Parking area provided as open surface (m²) & No. of CPS: CPS: Area – 924.18 m² , CPS – 40 																																										
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: Proposed 45 m on Western side • Number of Entry & Exit provided on approach road/s: 01 • Width of Entry & Exit provided on approach road/s: 18.0 m • Minimum width of open path all around the buildings for easy access of fire tender(excluding the width for the plantation): 3m • Width of all internal roads: 6.0 m & 7.5 m. 																																										
17.	Details of Green Building measures proposed.	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, rain water harvesting & ground water recharge etc.																																										
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 3500 KVA Connected load:---- • Source: MGVCL • Energy saving by Non-conventional Methods: • 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 etc. 																																										
19.	Fire and Life Safety Measures	<ul style="list-style-type: none"> • During the operation phase: Fire extinguishers, hose reel, down comer, manually operated electric fire alarm system, terrace water tank of 25 KL capacity on each block etc. • Name of the nearest fire station: Vadiwadi Fire Station Distance from the project site: About 3.6 Km Time required by the fire tender to reach the project site: 20 minutes 																																										
20.	Details on staircase <table border="1" data-bbox="247 1377 1364 1881"> <thead> <tr> <th>Type & no. Of buildings</th> <th>No. Of floors</th> <th>Floor area</th> <th>No. of staircase</th> <th>Width of the staircase</th> <th>Travel distance (m)</th> </tr> </thead> <tbody> <tr> <td>A & B</td> <td>P/G + 7</td> <td>353.12</td> <td>2</td> <td>1.5</td> <td rowspan="8">< 30 m</td> </tr> <tr> <td>C & D</td> <td>P/G + 7</td> <td>425.22</td> <td>2</td> <td>1.5</td> </tr> <tr> <td>E & F</td> <td>P/G + 7</td> <td>425.22</td> <td>2</td> <td>1.5</td> </tr> <tr> <td>G,H,I</td> <td>B + P/G + 7</td> <td>635.22</td> <td>3</td> <td>1.5</td> </tr> <tr> <td>J,K,L,M</td> <td>P/G + 7</td> <td>772.42</td> <td>4</td> <td>1.5</td> </tr> <tr> <td>N,O,P,Q</td> <td>P/G + 7</td> <td>841.28</td> <td>4</td> <td>1.5</td> </tr> <tr> <td>R,S,T,U,V</td> <td>P/G + 7</td> <td>1052.62</td> <td>5</td> <td>1.5</td> </tr> </tbody> </table>		Type & no. Of buildings	No. Of floors	Floor area	No. of staircase	Width of the staircase	Travel distance (m)	A & B	P/G + 7	353.12	2	1.5	< 30 m	C & D	P/G + 7	425.22	2	1.5	E & F	P/G + 7	425.22	2	1.5	G,H,I	B + P/G + 7	635.22	3	1.5	J,K,L,M	P/G + 7	772.42	4	1.5	N,O,P,Q	P/G + 7	841.28	4	1.5	R,S,T,U,V	P/G + 7	1052.62	5	1.5
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	(RWH)	<ul style="list-style-type: none"> No. and depth of percolations wells : 03 Details on Pre-treatment facilities : Desilting cum filter chamber
22.	Green area details	<ul style="list-style-type: none"> Tree covered area (m²) : 400 Area covered by shrubs, bushes and lawn (m²): 516.7 Total Green Area (m²): 916.7 Green Area % of plot area: 8 No. of trees and species to be planted: 200
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	---
24.	Proposed dust control measures during the construction phase	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
25.	Eco friendly building material usage details.	Fly ash bricks/fly ash blended concrete blocks, fly ash paving blocks.
26.	Details of the amenities to be provided to the construction workers	Sanitation facilities, welfare facilities as per Gujarat Building & Other Construction Workers Rules etc.
27.	Documents related to land possession documents.	N.A orders for all the survey numbers submitted by them shows that the land has been allotted to Vadodara Mahanagar Seva Sadan for construction of houses for people of economically weaker section. A copy of work order given by Vadodara Mahanagar Seva Sadan to M/s Manav Infrastructure Pvt. Ltd. for development of the proposed slum rehabilitation project has been submitted.

During the meeting, the committee took note of the letter dated 03/06/2016 from Deputy Secretary (Housing), Urban Development & Urban Housing Department wherein it was mentioned that this is an important Government project benefitting the 800 families under the MMGY and requested to expedite the Environmental Clearance process at the earliest to create the trust amongst the slum dwellers.

The committee also discussed about the letter dated 03/06/2016 received from Municipal Commissioner, Vadodara Municipal Corporation wherein it was mentioned that looking to the importance of Government scheme and priority given for the slum rehabilitation work, the proposed project of slum rehabilitation has got approval from CSMC of MoHUPA & Government of Gujarat. Subsequent upon the transfer of land to VMC and demolition of the said slum, the work has been initiated for the construction of houses for slum dwellers as per policy and timeline given for the project. It was further mentioned that the illegal & unplanned settlement of slum had no facility of infrastructure therefore they were discharging drainage, solid waste & open defecation as well to the Vishwamitri Kotar part.

During the meeting, it was presented that the project site is at a distance of 200 m from river Vishwamitri.

The project proponent was asked to take adequate measures to avoid adverse impacts due to flood, considering the HFL of river Vishwamitri. As the proposed project is to be developed specially for people residing in slum area, the parking area provision as per NBC norms was not insisted upon.

During the meeting, with reference to receipt of the letters from (1) Deputy Secretary (Housing), Urban Development & Urban Housing Department & (2) Municipal Commissioner, Vadodara Municipal Corporation, the committee deliberated that the proposed houses are specially built for poor people living in slums where there is no facility for sanitation & lack of other hygienic conditions is responsible for further degradation of the surrounding environmental condition. In addition to that delay in process of granting the Environmental Clearance will further deprive the poorest amongst the poor people, residing in slums, from obtaining their own houses. Hence, after detailed deliberation, looking to the merits of the case, the committee decided to recommend the project to SEIAA Gujarat for granting Environmental Clearance with a condition that a legal action may be initiated by filing a case against Vadodara Municipal Corporation for violation taken place and outcome of the draft Notification No. S.O.1705(E) dated 10/05/2016 as and when finalized will be applicable to the proposed project.

13	Vishal Laboratories	Plot No. 148, Kuvadva GIDC, Kuvadva, Rajkot	Screening & Scoping																							
<p>Project / Activity No.: 5(f)</p> <ul style="list-style-type: none"> M/s: Vishal Laboratories (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/49842015 dated 08/12/2015. Proposal was scheduled for screening and scoping during meeting held on 03/02/2016 and committee sought additional information. PP submitted additional information on 23/05/2016. <p>Project status: New</p> <p>Project / Activity Details:</p> <p>This is a new unit proposes the manufacturing of following Synthetic Organic Chemicals (Bulk Drugs) items.</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of Product/Activity</th> <th>Quantity MT/Month</th> </tr> </thead> <tbody> <tr> <td colspan="3">Organic Products</td> </tr> <tr> <td rowspan="5">1.</td> <td>Piperazine Citrate</td> <td rowspan="5">20</td> </tr> <tr> <td>Pipearzne Hexahydrate</td> </tr> <tr> <td>Pipearzne Adipate</td> </tr> <tr> <td>PiperazineDihydrochloride</td> </tr> <tr> <td>Piperazine Phosphate</td> </tr> <tr> <td>2.</td> <td>Povidone Iodine</td> <td>10</td> </tr> <tr> <td rowspan="2">3.</td> <td>Potassium Citrate</td> <td rowspan="2">10</td> </tr> <tr> <td>Sodium Citrate</td> </tr> <tr> <td colspan="3">Inorganic Products Drug Intermediates</td> </tr> </tbody> </table>				Sr. No.	Name of Product/Activity	Quantity MT/Month	Organic Products			1.	Piperazine Citrate	20	Pipearzne Hexahydrate	Pipearzne Adipate	PiperazineDihydrochloride	Piperazine Phosphate	2.	Povidone Iodine	10	3.	Potassium Citrate	10	Sodium Citrate	Inorganic Products Drug Intermediates		
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1.	Potassium Iodide	5
	Sodium Iodide	

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

Total plot area is 500 sq. m & unit has proposed 150 sq meter area for the green belt development/Tree plantation. Expected project cost is Rs. 0.45 Crores. Total water consumption for proposed project will be 2.3 KL/day (1 KL for Domestic, 0.6 KL for Gardening, 0.3 KL for process, 0.1 KL for washing and 0.3 KL for boiler) which will be sourced from GIDC water supply. Industrial waste water generation will be 0.93 KL/day Boiler 0.03 KL & Washing 0.1 KL), which will be collected in equalization tank and evaporated. Domestic waste water (0.8 KL/day) will be disposed off into soak pit system. It is proposed to install one small Boiler (0.15 TPH). Agro waste (0.5 MT/day) will be used as fuel for Boiler. Cyclone dust collector is proposed as APCM. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be ETP/Evaporation salt (25 Kg/Month), Discarded containers/Bags/Liners (250 Nos. /Month). ETP/Evaporation salt will be disposed off at the common TSDF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers.

Observations & Discussions:

Technical presentation was made during the meeting by project proponent. Looking to the low pollution potential in terms of air & water and location of the project in GIDC, Kuvadva, committee unanimously decided to categorise project under B2 and the additional information was sought. PP submitted additional information on 23/05/2016. PP submitted copy of GIDC plot holding certificate in the name of Vishal Laboratories, Plot NO; 148, Kuvadva industrial estate, Rajkot. PP submitted a letter from GIDC mentioning that Kuvadva GIDC is established since 1962. Details of surrounding industrial units are given by PP which are engineering unit, chemical units, pesticide units, Agriculture produce units, forging units etc. PP has submitted legal undertaking regarding unit is complying the three conditions i.e. Water consumption is less than 25 KLPD, fuel consumption is less than 25 MTPD and it is not covered in the category of Major Accidents Hazard (MAH) unit as per the MSIHC Rules 1989. PP has submitted demarcation of proposed activities in lay out plan, material balance for each product. Detailed product-wise water consumption is submitted. PP mentioned that 0.1 KLPD from washing and 0.03 KLPD from boiler blow down will be collected, equalized and evaporated. Composite quality of treated waste water was mentioned comprising COD: 920 mg/litre, TDS: 3065 mg/litre, Color: colourless pH: 7.3. Kettle capacity of evaporator will be 1 KL to be operated once in a week and steam requirement to evaporate waste water will be 1 Ton/week. Total requirement of steam for the project is 7 hours per week. Steam boiler capacity is 0.150 TPH. Hence same boiler will be used for steam supply to evaporator. PP informed committee that waste water is mainly from washing and boiler blow down and will be having no major organic load/ VOC. Mother liquor from the centrifuge is product with less than 10% concentration which needs further recycle for recovery of product. There is no process emission. One steam boiler of capacity 0.150 TPH with proposed fuel agro waste: 0.5 TPD will be used. Stack height will be 15 m with air pollution control measures as cyclone separator. PP has suggested measures to control fugitive emission within premises that includes close handling system to be furnished to transfer the chemicals, pneumatic transfer of liquid chemicals to reactor, provision of paved

road and sprinkling of water on the road to prevent dusting during transportation. During process, there is no generation of spent acid/ by products/ spent solvent. PP suggested measures to curb noise pollution and its monitoring. For handling of HCl, PP suggested provision of adequate PPE to workers reduce occupational health impacts. PP mentioned that permission from PESO is not required as storage of hazardous chemicals does not exceed the threshold limit. PP informed that provision of fire extinguishers will be made at sensitive location of plant. After presentation, committee found reply of additional information submitted by the project proponent was satisfactory and unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance.

14	Aries Colorchem Pvt. Ltd	Plot no. Z-29 &30, SEZ- Dahej, Ta.: Vagra, Dist.: Bharuch	Screening & Scoping
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Project / Activity No.: 5 (f)

Project status: Expansion

Chronology of EC Process:

- This project proposed by M/s: Aries Colorchem Pvt. Ltd. (herein after Project Proponent – PP) has submitted Application vide their letter dated 17/04/2014.
- The project was considered in the SEAC meeting held on 28/07/2015.
- During the meeting, Committee noted that PP has not presented actual scenario for such products like H-acid & other Dyes intermediates having high pollution potential. Committee asked to submit revised Form-1 with all such details considering manufacturing of products having high pollution potential at maximum possible production capacity along with its EMS. After detailed deliberations, It was unanimously decided to consider the project for TOR/Scoping only after submission of the Revised Form-1 with all relevant details/corrected data and PFR.
- PP has submitted revised Form-1 and PFR dated 13/10/2015.
- The project was considered in the SEAC meeting held on 27/11/2015.
- During the meeting dated 27/11/2015, while discussing about the treatability of the concentrated effluent after MEE, PP replied that it will be evaporated through Spray dryer. Committee noted that the content of H-Acid effluent comprises of high COD having refractive COD which shall be disposed through thermal decomposition at high temperature. Spray drying includes temperature profile of 250 deg. C to 400 deg. C and under prevailing temperature profile the thermal decomposition does not take place instead transformation of the phase occurs resulting evaporation of vapour of high COD effluent into the ambient air polluting ambient air quality. Committee also discussed about the handling of spent acid and deliberated that there is no infrastructure available to handle spent sulphuric acid generated from such products. After deliberation, committee asked PP to come with the proposal with sound environment management plan. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after submission of the revised proposal with Revised Form-1 & relevant details.
- PP has submitted revised Form-1 and PFR dated 08/03/2016.

Project status: Expansion

Project / Activity Details:

This is existing unit engaged in manufacturing of Synthetic Organic Chemicals i.e. Dyes and dyes intermediates and now proposes for expansion as tabulated below:

Sr. No.	Name of Product	Quantity (MT/Month)		
		Existing	Proposed	Total
Dyes Production:		1800	0	1800
Dye Intermediates Production				
1	FC Acid	100	0	100
2	DASA	100	0	100
3	4-NADPSA	25	0	25
4	Gamma Acid	0	25	25
5	4-NAP	0	5	5
6	4-NAPSA	0	5	5
7	H Acid	0	150	150
Total:		225	185	410

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Plot area is approx. 34899 sq.m. At present green belt/tree plantation area is 2360 sq. m and now unit has proposed additional 8200 sq. m area for tree plantation and green belt area development. Estimated cost of proposed expansion is Rs. 30.10 Crores. Fresh water requirement after proposed expansion will be increased from 237 KL/day to 374 KL/day (5 KL Domestic, 367 KL Industrial & 2 KL Gardening) which will be supplied by the GIDC. At present w/w generation from Dyes manufacturing and Dyes intermediate plant is 108 KL/day and 109 KL/day (High COD-40 KL & Low COD 69 KL) resp. Wastewater generation after the expansion will be increased from 221 KL/day [217 KL/day industrial + 4 KL/day domestic] to 331.5 KL/day [327.5 KL/day industrial + 4 KL/day domestic]. W/w generation from proposed Dyes intermediate plant will be 110.5 KL/day (Low Conce. 20 KL & High Conc. 90.5 KL). Domestic waste water (4 KL/day) will be disposed off into septic tank/soak pit system. At present unit has provided Primary, Secondary and Tertiary treatment plant and MEE plant for treatment of effluent generated from the dyes and dye intermediate products. Treated effluent goes to GIDC drainage line for Sea disposal. Unit has proposed ETP followed by MEE and Spray dryer for effluent to be generated from the proposed expansion. At present Natural gas (16000 SCM/Hr) is used in three Boilers. One DG set (250 KVA) is installed for emergency purpose in which HSD (30 ltrs/hr) is used. Unit has proposed one steam boiler (8 TPH) and one TFH (4 Lac Kcal/hr). Coal (7 MT/day) or LDO (2.6 MT/dy) or FO (2.7 MT/Day) will be used as fuel for proposed Boiler and natural gas (400 SCM/day) will be used as fuel for proposed TFH. Bag filter & wet scrubber is proposed as APCM for proposed Boiler. At present cyclone separators are provided with 4 no.s of Spray Dryers. Water scrubber followed by Caustic scrubber is provided with existing Sulphonation reaction vessel to control process

emissions like HCl, SO₂ & CL₂. Unit has proposed Cyclone separator with Spin Flash Dryer (SFD) and Water scrubber followed by Caustic scrubber with proposed reaction vessel as APCM. Hazardous waste to be generated are ETP waste (1440 MT + 590 MT = 2030 MT/Year), MEE salt (3 MT + 7 MT = 10 MT/Year), Gypsum sludge (0 + 13230 MT = 13230 MT/Year), Iron sludge (2820 MT + 2454 MT = 5274 MT/Year), Discarded containers (6 MT + 12 MT = 18 MT/Year) and Used Oil (0.5 KL + 0.5 KI = 1 KL/Year). ETP waste, MEE salt, Iron sludge and Process waste will be disposed off at the common TSD site of BEIL, Ankleshwar. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil will be sold only to the registered recyclers.

Discussions/Observations:

Technical presentation made during the meeting by project proponent. During the meeting, while discussing about the compliance status with regards to existing manufacturing activity, Committee observed that unit has violated the environmental conditions stipulated in CC&A. At present unit has adopted segregation of low COD stream and high COD stream. Low COD stream is discharged into GIDC drainage after treatment and high COD stream is subjected to ETP followed by MEE. Unit has proposed to discharge 89 KL/day of dilute stream waste water after treatment and remaining concentrated stream waste water will be subjected to in-house MEE. Committee felt that dual mode of disposal for proposed project (i.e. discharge for dilute stream and zero liquid discharge for concentrated stream) will create monitoring problem with respect to quantity and quality of the effluent. Looking to the product profile, while concerning about the problems of treatability of concentrated effluent & its disposal issues being faced in present scenario, Committee was of view that unit shall not go for further discharge to GIDC drainage. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after satisfactory submission of the revised proposal with sound environmental management system including Complete Zero discharge for existing as well as proposed products.

15	Kansai Nerolac Paints Limited	Plot no: C-385 & C-386, Saykha Industrial Area, Village Argama, Ta.: Vagra, Dist.: Bharuch	Screening & Scoping
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Project / Activity No.: 5(h)

- M/s: Kansai Nerolac Paints Limited (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11070/2016 dated 14/04/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of the Product	Capacity MT/Annum
1	Resin	40080
2	Paint and varnish, Enamels, Lacquer	68280
3	Thinner	18000
	Total Production	126360

The project falls under Category B of project activity 5(h) as per the schedule of EIA Notification 2006. Total plot area is 152151.11 sq. m & unit has proposed 50209.87 sq m area for the green belt development/Tree plantation. Expected project cost is Rs.420 Crores. Total water consumption for proposed project will be 750 KL/day (55 KL for Domestic, 60 KL for Gardening, 645 KL for Industrial) which will be sourced from GIDC water supply. Industrial waste water generation will be 140 KL/day, which will be treated in proposed ETP followed by RO system & MEE. Sewage (50 KL/day) will be sent to STP for treatment and treated water will be used for gardening/toilet flushing. Industrial waste water will be sent to ETP furnished with UF/RO for treatment and treated water (permeate) will be used for cooling tower and rejects will be sent to MEE for evaporation.

Fuel Consumption and Flue Gas Stack Details

Sr. No.	Stack Attached to	Nos.	Type of Fuel used	Fuel consumption	Stack Height in meter	APCM Attached
1	Boiler (5000 kg/hr)	2	Dual fired – HSD/PNG	275.2 Kg/hr	33	Adequate Stack height
2	Boiler (850 kg/Hr)	1	HSD	43 kg/Hr	30	
3	Boiler (850 kg/Hr)	1	HSD	43 kg/Hr	30	
4	Thermic fluid heater (15 lac Kcal)	2	Dual fired- HSD/PNG	142 Kg/Hr.	33	
5	Thermic fluid heater (10 lac Kcal)	2	Dual fired – HSD/PNG	94.6 kg/hr	33	
6	Incinerator	1	HSD	69 kg/hr	30	Ventury Scrubber and Packed Bed scrubber
7	D. G. Set (2000 KVA)	1	HSD	344 kg/Hr	33	Adequate Stack height
8	D. G. Set (2000 KVA)	1	HSD	344 kg/Hr	33	
9	D G Set (400 KVA)	1	Dual Fired – HSD/PNG	75.7 Kg/hr	9	
10	Gas Genset (1400 KVA)	2	PNG	335 SCM/hr each	30	

Process Vent Details

S. No.	Stack Attached to	Nos. of Stacks	Stack Height in m	Pollutants Emitted	Air Pollution Control Measures Attached
1	Scrubber Stack	1	11	Particulate matter	Wet scrubber
2	Fume extraction system	16	11	Traces of VOC	Adequate stack height

3	Reactor vents	20	11	Traces of VOC	Open to air
4	Mixers	18	11	VOC	Fume extraction system followed by carbon filter
5	Pre Mixers	6	11	Dust	Dust Collectors followed by Pulse jet bag filter

Hazardous Waste Generation and Disposal Details

Sr. no.	Type of waste	Quantity MT/Year	Disposal
1	Process wastes, residues and sludge	340	Incineration
2	Fillers Residues	3.0	
3	Distillation Residue	402	
4	Spent Organic Solvent	1340	To Solvent recovery plant for distillation
5	Used / spent oil	6	GPCB approved authorized recycler
6	Discarded containers/ barrels	395	Sold to GPCB approved recycler
7	ETP Sludge	60	To Incinerator plant for disposal by incineration
8	Contaminated cotton waste/liners	25	
9	Oil/grease scheming residue	4	
10	MEE Salt	50	To TSDF for disposal by landfill
11	Incinerator ash	180	

Observations / Discussion:

Technical presentation made during the meeting by project proponent. Committee noted that unit has obtained NOC of GPCB for Paint and varnish, Enamels, Lacquer & Thinner; however, they have planned to manufacture resin also and applied as an integrated paint industry. After deliberation on various aspects, following additional TOR was prescribed for the EIA study covering 5 km radius of the project boundary.

1. Copy of plot holding certificate obtained from GIDC Saykha.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
4. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
5. Details of manufacturing process / operations of each product along with chemical reactions, mass balance, consumption of raw materials etc. Details on strategy for the implementation of cleaner

- production activities.
6. Details on requirement of raw materials (binders, solvents, pigments, additives, water, etc.), its source and storage at the plant.
 7. Details on lead balance and compliance management protocol.
 8. Complete process flow diagram describing each unit, its processes and operations (mixing, grinding, milling, finishing, etc.), along with material balance.
 9. Chemical name of each proposed product to be manufactured. Details on end use of each product.
 10. 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.
 11. 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.
 12. 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.
 13. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
 14. Segregation of waste streams and details on specific treatment and disposal of each stream.
 15. Action plan for 'Zero' discharge of effluent shall be included.
 16. Details of ETP including dimensions of each unit along with schematic flow diagram. Inlet, transitional and treated effluent qualities with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Inlet effluent quality should be based on worst case scenario considering production of most polluting products that can be manufactured in the plant concurrently.
 17. Technical details of MEE including evaporation capacity, steam required for evaporation, adequacy of the proposed boiler to supply steam for evaporation in addition to the steam required for the process etc. Techno-economical viability of the evaporation system. Control measures proposed for the evaporation system in order to avoid/reduce gaseous emission/VOC from evaporation of industrial effluent containing solvents & other chemicals.
 18. Technical details of proposed Incinerator/Spray dryer including capacity, fuel to be used, adequacy etc. Techno-economical viability of the proposed Incinerator. Control measures proposed for the Incinerator in order to avoid/reduce gaseous emission/VOC from incineration of industrial effluent containing solvents & other chemicals.
 19. Technical details of RO/NF system.
 20. Undertaking stating that a separate electric meter will be provided for the ETP, RO, Incinerator/Spray Dryer & MEE.
 21. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
 22. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
 23. Application wise break-up of effluent quantity to be recycled / reused in various applications like

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

Facility, if any.

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

pump, toxic gas detectors etc.

45. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
46. Detailed five year greenbelt development program including annual budget, types & number of trees to be planted, area under green belt development [with map], budgetary outlay; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere.
47. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment. Submit a detailed plan for social corporate responsibilities, with appropriate budgetary provisions for the next five years and activities proposed to be carried out; specific to the current demographic status of the area.
48. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
49. (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.
50. 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.
51. 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.
52. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
53. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
54. 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 Integrated Paint Industry shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 05/06/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the

SEAC.			
16	Nutrapius India Limited	Plot No -d-2/CH-42/43, GIDC-Dahej , Ta.: Vagra, Dist.: Bharuch.	Screening & Scoping

Project / Activity No.: 5(f)

- M/s: Nutrapius India Limited (herein after Project Proponent – PP) has submitted application vide their letter dated 16/07/2015.
- This project was considered in the meeting of the SEAC held on 17/11/2015.
- During meeting, looking to the product profile, while concerning about the problems of treatability of concentrated effluent & its disposal issues being faced in present scenario as well as in absence of any common infrastructure facility in Dahej Industrial estate, the committee was of the view that manufacturing of such proposals shall be considered with Zero Liquid Discharge (ZLD) only. The committee unanimously decided to consider the case for TOR/Scoping only after submission of revised proposal with complete Zero Liquid Discharge.
- PP has submitted revised proposal with Revised Form-1 & PFR.

Project status: New**Project / Activity Details:**

This is a new unit proposes the manufacturing Bulk Drugs and Bulk drug intermediates as tabulated below:

Sr. no.	Name of the Products	Quantity (MT/Month)
1	Ibuprofen	880
2	Diclofenac sodium	
3	Aceclofenac	
4	Nimesulide	
5	Chlorzoxasone	
6	Mefenamic acid	
7	Mesalamine	
8	Albendazole	
9	Febendazole	
10	Mebendazole	
11	Metronidazole	
12	Metronidazole benzoate	
13	Tinidazole	
14	Ornidazole	
15	Oxyclozanide	
16	Roxarsone	
17	Chlorpheniramine maleate (c.p. maleate)	
18	Bromhexine hcl	
19	Ambroxol hcl	
20	Phenylefrine hcl	

21	Dexo metherphan hbr	
22	Salbutemol sulphate	
23	Theophyllin	
24	Caffein	
25	Theobromine	
26	Ciprofloxacin	
27	Oflaxacin	
28	Enrofloxacin	
29	Sildinafil citrate	
30	Tramadol hcl	
31	Lumefantrine	
32	Aluminium hydroxide gel/powder	
33	Ampicillin	
34	Amoxicillin	
35	Cloxacillon	
36	Cephalexin	
Total		880

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

Total plot area is 37464 sq. m & unit has proposed 12000 sq m area for the green belt development/Tree plantation. Expected project cost is Rs. 100 Crores. Total water consumption for proposed project will be 282.5 KL/day (67.5 KL for Domestic, 5 KL for Gardening, 210 KL for Process) which will be sourced from GIDC water supply. Industrial waste water generation will be 150 KL/day. Unit has proposed to segregate industrial effluent into two streams (1) High COD stream waste water (50 KL/day) and (2) Low COD stream (100 KL/day). Unit has proposed solvent stripper, Effluent treatment plant comprises of primary, secondary & tertiary treatment units, RO system and Spray dryer unit. 50 KL/Day industrial effluent (High COD) will be treated in solvent stripper and solvents will be distilled in solvent distillation facility. 20 KL/day of low COD waste water will be sent to ETP for further treatment with low COD stream. RO permeate (84 KL/day) will be reused for utility section. Domestic waste water (50 KL/day) will be disposed off into soak pit via septic tank. It is proposed to install 3 Boiler (Cap. 6 TPH each) and one TFH. Coal /Agro waste (36 MT/day) will be used as fuel for Boiler & TFH. Dust collector followed by Bag filter & scrubber is proposed as APCM. Unit has proposed one DG set. Unit has proposed scrubbing systems for control of process gaseous emissions of HCl, SO₂, Cl₂ & NH₃. Hazardous waste to be generated are ETP sludge, Discarded Containers, HDPE Bags, Distillation Residue, Used Oil, Process Waste, Spent Carbon, Iron Sludge, Spent Catalyst, Spray Dryer Salt, HCl (32%), H₂SO₄ (70%), Inorganic Salt, Caustic Solution, Sodium Bromide, KCl Salt, Sodium AlCl₂, Piperazine ML, Liquor Ammonia, Sodium Acetate etc.

Observations / Discussion:

Technical presentation made during the meeting by project proponent. While discussing about the waste water treatment and management, upon asking about treatment of high COD waste water, PP informed that contribution of high COD is due to solvents and the COD will be reduced by solvent stripper. Further,

generated mixed solvent will be sent for in-house distillation column. The project proponent presented that they have carried out baseline environmental monitoring for M/s: Aadi Drugs located at Plot. No. CH/138, GIDC, Dahej-II, Tal. Vagra, Dist. Bharuch during March-2016 to May-2016 and requested to allow them to use the same for the preparation of the EIA report which was agreed to by the committee. After deliberation on various aspects, following additional TOR was prescribed for the EIA study covering 10 km radius of the project boundary.

1. Copy of plot holding certificate obtained from GIDC Dahej.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
4. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
5. Details of manufacturing process / operations of each product along with chemical reactions, mass balance, consumption of raw materials etc. Details on strategy for the implementation of cleaner production activities.
6. Chemical name of each proposed product to be manufactured. Details on end use of each product.
7. NOC/Permission from concern department for manufacturing of Controlled substances i.e. Ephedrine, Pseudoephedrine, Nor ephedrine etc.
8. Detailed mass balance and water balance (including reuse-recycle, if any) along with qualitative and quantitative analysis of the each waste stream from the processes.
9. Assessment of source of the water supply with adequacy of the same to meet with the requirements for the project. Permission obtained from the GIDC for supply of raw water. Undertaking stating that no bore well shall be dug within the premises.
10. Explore the possibility of reuse / recycle and other cleaner production options for reduction of wastes. Details of methods to be adopted for the water conservation.
11. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
12. Segregation of waste streams and details on specific treatment and disposal of each stream.
13. Explore the possibilities to reuse treated waste water (RO Permeate & MEE condensate) for other purposes like process, toilet flushing etc. instead of Gardening / Plantation.
14. Action plan for 'Zero' discharge of effluent shall be included.
15. Details of ETP including dimensions of each unit along with schematic flow diagram. Inlet, transitional and treated effluent qualities with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Inlet effluent quality should be based on worst case scenario considering production of most polluting products that can be manufactured in the plant concurrently.
16. Technical details of proposed Spray dryer including capacity, fuel to be used, adequacy etc. Techno-economical viability of the proposed Incinerator. Control measures proposed for the Incinerator in order

to avoid/reduce gaseous emission/VOC from incineration of industrial effluent containing solvents & other chemicals.

17. Technical details of RO system.
18. Undertaking stating that a separate electric meter will be provided for the ETP, RO & Spray dryer.
19. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
20. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
21. Application wise break-up of effluent quantity to be recycled / reused in various applications like sprinkling for dust control and green belt development etc. In case of land application, details on availability of sufficient open land for utilizing effluent for plantation / gardening. How it will be ensured that treated effluent won't flow outside the premises linked with storm water during high rainy days.
22. Plans for management, collection and disposal of waste streams to be generated from spillage, leakages, vessel washing, used container washing etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.
23. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
24. 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.
25. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters like HCl etc. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
26. Modeling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.
27. 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.
28. 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.
29. Details on management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual handling of the hazardous wastes will be minimized. Methodology of de-contamination and disposal of discarded containers and its record keeping.
 30. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, if any.
 31. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
 32. Name and quantity of each type of solvents to be used for proposed production. Details of solvent recovery system including mass balance, solvent loss, recovery efficiency feasibility of reusing the recovered solvents etc. for each type of solvent.
 33. A detailed EMP including the protection and mitigation measures for impact on human health and environment as well as detailed monitoring plan and environmental management cell proposed for implementation and monitoring of EMP. The EMP should also include the concept of waste-minimization, recycle/reuse/recover techniques, energy conservation, and natural resource conservation. Total capital cost and recurring cost/annum earmarked for environment pollution control measures.
 34. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
 35. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment to be provided. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers. Plan for periodic medical checkup of the workers exposed. Details of work place ambient air quality monitoring plan as per Gujarat Factories Rules.
 36. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
 37. Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios should be carried out. The worst-case scenario should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the facilities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures including On-Site / Off-Site Emergency Plan should be provided.
 38. MSDS of all the products and raw materials.
 39. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.

40. Details of quantity of each hazardous chemical (including solvents) to be stored, Material of Construction of major hazardous chemical storage tanks, dyke details, threshold storage quantity as per schedules of the Manufacture, Storage & Import of Hazardous Chemicals Rules of major hazardous chemicals, size of the biggest storage tank to be provided for each raw material & product etc. How the manual handling of the hazardous chemicals will be minimized?
41. Details of the separate isolated storage area for flammable chemicals. Details of flame proof electrical fittings, DCP extinguishers and other safety measures proposed. Detailed fire control plan for flammable substances and processes showing hydrant pipeline network, provision of DG Sets, fire pumps, jockey pump, toxic gas detectors etc.
42. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
43. Detailed five year greenbelt development program including annual budget, types & number of trees to be planted, area under green belt development [with map], budgetary outlay; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere.
44. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment. Submit a detailed plan for social corporate responsibilities, with appropriate budgetary provisions for the next five years and activities proposed to be carried out; specific to the current demographic status of the area.
45. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
46. (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.
47. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA.
48. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
49. Does the company have a system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA Report.
50. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
51. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
52. A tabular chart with index for point-wise compliance of above TORs.

The above mentioned project specific TORs/additional TORs and the model TORs available in the MoEF's sector specific EIA Manual for "Synthetic Organic Chemicals" shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA

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

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 05/06/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

17	Mata Sitadevi Infrastructure and Research Private Limited (MSIRPL)	Survey no. 333(1), Vill. Bhatpore, Ta. Chorasi, Dist. Surat	Screening & Scoping
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Project / Activity No.: 7(e)

- M/s.Mata Sitadevi Infrastructure and Research Private Limited (MSIRPL) (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11418/2016 dated 09/05/2016.

Project status: New

Project / Activity Details:

This is a new project proposes for development of jetty and allied infrastructures for handling anticipated Cargo of 4.3 millionTPA.

Sr. no.	Type of Commodity/Cargo	Capacity (MMTPA)
1	Fertilizers	0.5
2	Cement & Clinker	1.0
3	Fruit, Vegetable and Food grains	0.1
4	Sugar	0.05
5	Project cargo for heavy engineering	0.1
6	General cargo and container and Ro-Ro cargo from local industries	0.45
7	Coal	2.1
	Total	4.3

Cargo handling activity (<5 million MTPA of cargo handling capacity and/or ports/ harbors ≥10,000 TPA of fish handling capacity) falls under Category B of project activity 7(e) as per the schedule of EIA Notification 2006. This is a development of Jetty and allied infrastructures (including a RO-RO & RO-PAX and fast passenger ferry) along the right bank of Tapi at Bhatpore village, Taluka-Chorasi, Dist.: Surat. The location is identified by Gujarat Maritime Board (GMB). Letter of Intent (LoI) received from GMB is submitted. Total

area is 218577.26 sq. m including water front area – 64711.26 sq. m which has to be reclaimed. Unit has proposed 65000 sq. m. area for the green belt development & open area. Expected project cost is Rs. 191.40 Crores. Nearest residential area of village Gavier is @ 1.5 km in SE direction. Water requirement is mainly for domestic, gardening and fire main tanks. No industrial use of water for the proposed project. Water supply required in various locations jetty and premises will be procured by laying DI pipes of designed diameter from suitable point from the water storage tank in the premises. Water from nearest tapping point of GIDC by tanker or by pipeline can be fetched in an underground storage tank. Then this water will be pumped to overhead tanks and supplied through pipes to different location. Wherever drinking water is required, it will be treated by RO plant to be provided in the back up area. Anticipated quantity of water is 100000 Litres/day. During the operation of jetty the anticipated requirement is 1200 KVA. The required Electric Power will be fetched from existing electric substation of GEB. Standby arrangement of power shall be through two DG Set of 600 KVA, One DG Set will remain standby.

Salient features of proposed development is as under:

Zone	Development	Proposed Facilities
Water front	Water front structures	Jetty on piles (440 m x 25 m) to handle four barges simultaneously Three approaches of 120 m x 15 m connecting berth to backup area RO-RO jetty
	Foot print of the pile jetty development	516 number of piles of 1.2 m diameter on inter tidal region
	Dredging	No dredging is envisaged for this project available draft of about 3 to 4 meter is sufficient to operate flat bottom barges
	Reclamation	Back up area will be developed in around 2,18,577.26 m ² filled with suitable material.
	Bathymetry	No dredging is envisaged for this project available draft of about 3 to 4 meter is sufficient to operate flat bottom barges
Backup area	Storage yard and allied infrastructure	Open and closed storage area for dry bulk. General cargo, heavy engineering goods, project cargo and container stacking area Support Back up Infrastructure for operations and maintenance of the Terminal (Buildings, services, utilities and amenities including Fire Fighting, safety and security systems and environment protection measures).
	Land filling	Stack Yards, berthing structure and the approach shall be at levels approximately +6.75 Metres CD. However, the final levels will be optimised during detailed engineering stage.

Navigational and Operational Requirements

- In order to reduce huge capital cost of building deep water & direct berthing port infrastructure, it is planned to develop barge handling facilities for up to 3000 DWT barges.
- The main export /import vessels will be handled in the deep sea at Hazira Port's anchorage point. The flat bottom barges with lesser draft requirements may be used at the proposed facilities.

Barge Size	Length	Width	Loaded draft Max
Up to 3000 DWT	50-80 m	10-15 m	2.80 m

It is proposed to install two D. G. Sets of 600 KVA capacity and HSD (30 Litre/hr) will be used as a fuel in D.G. Set.

Observations/Discussion:

Technical presentation during the meeting also included the details like general information regarding the project, need of the project and its importance, location of the project & lay out map, the anticipated cargo traffic, navigational & operational requirement, Navigational channel, Bathymetry near project site, storage area requirement & planning, waste generation and its management, Proposed ToR etc. During meeting, on asking about the mangrove patch in the proposed site, PP informed that there is no mangrove in the proposed site and vicinity of the site. However, Committee asked to carry out careful field survey and to identify Valued Environmental Components and likely impacts due to proposed project. After detailed discussion on each and every aspect of the project, following TOR were prescribed to include them in the EIA Report including marine and terrestrial component to be prepared for the study area covering 10 km radius from the boundary of the project 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 (Environmental Management System) 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 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. 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. Complete 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.
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 Tapi Estuary. Measures proposed to ensure that there will be no any hindrance to the movement of fishing vessels or fishermen.
26. Details of sea traffic management in Tapi Estuary and its likely impact due to the proposed project.
27. 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.
28. Impact on marine life and fishing activities in the surrounding region.
29. 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.
30. 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.
31. 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.
32. Details on quantity of each hazardous chemical/Material to be stored, material of construction of storage tanks, threshold storage quantity as per schedules of Manufacture, Storage & Import of Hazardous Chemicals (MSIHC) Rules 1989.
33. Details of hazardous processes and their engineering controls.
34. Details of possibility of occupational health hazard from the proposed manufacturing activities and proposed measures to prevent it.
35. Measures proposed to arrest the micronized fine particles generated during the painting process. Disposal of waste paint / paint residue.
36. Details for the use of lead free paints in the proposed project. Undertaking for use of only lead free paints in the project.
37. Submit the details of storage yard and dust suppression measures.
38. 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.
39. 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.
40. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
41. 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.

42. 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.
43. Apart from terrestrial EIA study, marine EIA study shall be conducted through the environmental consultant accredited by NABET, QCI 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.
44. 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.
45. 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.
46. Include coastal geo-morphology in the EIA study report.
47. 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.
48. 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.
49. Details of mangrove along with its species in the project area.
50. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
51. 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.
52. 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.

53. 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.
54. Lay out of project premises showing open unobstructed peripheral margin, green belt, separate gates for entry and exit, parking area for tankers / trucks / visitors etc.
55. 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.
56. 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.
57. Methodology of de-contamination and disposal of discarded containers and its record keeping.
58. Specific safety details /provisions for various solvents to be used in the process including onsite / offsite emergency plan.
59. Detailed odor management plan.
60. To explore the use of renewable energy to the maximum extent possible.
61. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
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 tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
86. (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.
87. (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.
88. 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.
89. 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.
90. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
91. 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 "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 draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 05/06/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

18	Shiven Yarn Pvt. Ltd.	Plot no. A/1, Block no. 179, Moje : Molvan, Ta.: Mangrol, Dist.: Surat	Screening & Scoping
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Project / Activity No.: 5(d)

- M/s: Shiven Yarn Pvt. Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/11422/2016 dated 10/05/2016.

Project status: New

Project / Activity Details:

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

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

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

Total plot area is 5122.69 sq. m & unit has proposed 1508.83 sq m area for the green belt development/Tree plantation. Aerial distance of nearest residential area of Village Molvan is @ 2 km from the project site. Expected project cost is Rs. 35.22 Crores. Total water consumption for proposed project will be 95 KL/day (5 KL for Domestic, 6 KL for Gardening, 84 KL for Industrial). Unit has proposed to recycle treated water of 47.3 KL/day for cooling purpose, hence fresh water requirement will be 47.7 KL/day which will be sourced from ground water (i.e. Bore well) water supply. Industrial waste water generation will be 47.3 KL/day, which will be treated in proposed effluent treatment plant and treated waste water will be used cooling purpose. Domestic waste water (4.5 KL/day) will be disposed off into soak pit system. There will be no flue gas generation from manufacturing process or utilities. Unit has proposed one DG set (110 KVA) in which HSD (15 ltrs/hr) will be used as fuel. No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be ETP sludge (4 MT/Year), Discarded containers/Bags/Liners (600 Nos./Year) and used oil (0.1 KL /Year). ETP waste will be disposed off at the nearby common TSDF. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers/vendors. Used oil will be sold only to the registered recyclers.

Observations & Discussions:

Presentation made by the proponent included the general information about the project, plant layout, raw material & resource consumption, manufacturing process, water balance diagram & waste water treatment scheme, hazardous waste generation and its disposal etc. On asking about the reuse of treated waste water, PP informed that they will reuse treated waste water for gardening & plantation to which Committee did not agree and asked to reuse treated waste water for any other purpose instead of gardening. PP informed that they will reuse treated waste water for cooling purpose and fresh water will be used for gardening purpose. The request of categorizing the project as B2 was considered by the committee as per OM issued MoEF vide no. J-13012/12/2013-IA-II (I) dated 24th December, 2013. Following additional information was sought from the project proponent for appraisal of the project.

1. Land possession documents and status of NA permission for the proposed project site.
2. Project site specific details such as distance of the project site from the nearest (1) Village-Nearest residential area (2) Water Body: Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) National Park / Wild Life Sanctuary/ Eco Sensitive zone etc. (8) Aanganwadi/School/College/Institute etc. and likely impact on them due to the proposed project along with the mitigation measures proposed to minimize the likely impact. Give

satellite image of 5 KM radius.

3. Name and address with type of industries located within 1 KM radius from the project boundary.
4. Monthly production details with raw material consumption for each product.
5. Manufacturing process along with chemical reactions and mass balance.
6. Exact source of water supply during the operational phase of the project and permission of the concerned authority for water supply as per the requirement of the project.
7. Manufacturing process along with chemical reactions and mass balance.
8. Detailed water balance (including reuse-recycle, if any) along with qualitative and quantitative analysis of each waste stream to be generated from all sources including Boilers, Cooling Towers, D.M. Plant etc. Details of methods to be adopted for the water conservation.
9. Complete waste water management plan for existing as well as proposed production. Characteristics of untreated and treated wastewater. Detailed effluent treat ability study vis-à-vis adequacy and efficacy of the treatment facilities for existing as well as proposed for the wastewater to be generated along with adequacy and efficacy report. The characteristic on which treatability is based shall also be stated.
10. Details of the ETP units including its capacity, size of each unit, retention time and other technical parameters and details about up-gradation in the existing ETP (if any proposed) to take care of the wastewater to be generated after the proposed expansion.
11. Undertaking stating that a separate electric meter & flow meter will be provided for the ETP & Reuse system.
12. Application wise break-up of treated effluent quantity to be recycled / reused in various applications like washing, domestic, gardening and plantation etc. Details about availability of open land for utilizing the treated water for plantation / gardening. Suitability of use of treated effluent / sewage on the land with respect to the soil characteristic and its capacity to take up effluent load etc. shall be studied and a report in this regard shall be submitted.
13. How it will be ensured that treated effluent/sewage won't flow outside the premises linked with storm water during high rainy days. Treated effluent management plan during monsoon season including detail on provision and capacity of a tank for storage of treated effluent during high rainy days when utilization of treated effluent for gardening & plantation purpose is not feasible. Detailed study report considering Percolation rate of the land available for gardening & plantation. Ensure that land is suitable for utilization of treated sewage for plantation & gardening.
14. Specific details of (i) Details of the utilities required (ii) Flue gas emission rate from each utility (iii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (iv) List the sources of fugitive emission from the unit along with proposed measures to control it.
15. Base line status of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
16. Impact of the transport of raw material and finished product on the existing transport system should be assessed and provided. Whether any additional infrastructure is required to be constructed, details thereof and the agency responsible for the same with time frame.
17. Details of management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual

handling of the hazardous wastes will be minimized.

18. Copy of membership certificate of Common Environmental Infrastructure like TSDF, if any taken, should be incorporated.
19. A detailed EMP including the protection and mitigation measures for impacts 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-minimisation, recycle/reuse/recover techniques, energy conservation, and natural resource conservation. Total capital cost and recurring cost/annum earmarked for environment pollution control measures.
20. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment to be provided to the workers. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers. Plan for periodic medical check up of the workers exposed. Details of work zone ambient air quality monitoring plan as per Gujarat Factories Rules.
21. Fire fighting arrangement and requirement of its strengthening due to proposed augmentation. This should include details of automatic detection and control system & detailed control plan showing hydrant pipeline network, provision of DG Sets, diesel driven fire pumps for operation during power disruption, jockey pump, fire water monitor, toxic gas detectors, fire / foam tenders etc.
22. Detailed risk assessment report including prediction of the worst case scenario and maximum credible accident scenario along with damage distances and preparedness plan to combat such situations and risk mitigation measures.
23. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, terminal staff for safety related measures.
24. Detailed disaster management plan. This should include also scenario of natural catastrophe like earth quake, cyclone and tsunami 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.
25. 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.
26. Proposal for socio-economic development activities 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.
27. A tabular chart with index for point-wise compliance of above details.

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

19	Aditya Coke Pvt. Ltd	.No.14 & 15, Village.: Chopadva, Ta.: Bhachau, Dist.: Kutch	Appraisal
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Project / Activity No.: 4(b)

Project status: Expansion

Chronology of EC Process:

- This project proposed by M/s: Aditya Coke Pvt. Ltd. (herein after Project Proponent – PP) has submitted application vide their letter dated 21/08/2014.
- The project was considered for TOR finalization in the meeting of the SEAC held on 05/12/2014.
- EIA Report prepared by M/s: Excel Enviro Tech (NABET Accredited), Ahmedabad was submitted by project proponent vide dated 29/09/2015.
- Project was appraised during SEAC meeting held on 17/11/2015 and additional information was sought which was submitted by the PP on 25/04/2016

Project / Activity Details:

It is an existing unit having Non Recovery Coke manufacturing Plant with capacity of 96000 TPA and now proposes to have additional capacity of 120000 TPA non-recovery met coke and 11 MW waste heat recovery (WHR) power plant as shown in table below :

Sr. No.	Name of Product	Existing	Proposed	Total after expansion
1	Metallurgical Coke	96,000 TPA	1,20,000 TPA	2,16,000 TPA
2	Co-Gen Power	NIL	11 MW	11 MW

As the production capacity after the proposed expansion is $<2,50,000$ & $\geq 25,000$ tonnes/annum, the proposal falls in category B of the project / activity no. 4(b) as per the schedule of the EIA Notification, 2006. Unit has applied for expansion of Coke Oven Plant and WHR (Waste Heat Recovery) Power Plant. Unit will install additional Non-Recovery based Stamp charging Coke Oven Battery with Waste Heat Recovery type Power Plant. Expected cost of the project for expansion is Rs. 144 Crores. Total land area is 85796 m². Existing greenbelt area is 9089 sq. m. And this area will be increase up to 30000 sq. m. The expansion is proposed in the existing premises of the unit and no additional land will be acquired for the proposed expansion. Number of Batteries & Ovens will be increased from 1 to 3 & 30 to 90 respectively. The unit is situated at 1.8 Km distance from village Chopadava.

The Raw material required for Met Coke production is Low ash Coking coal. The company intends to Import Coking coal from different sources such as Australia, USA, Mozambique, Canada, Russia depending on blending requirements and international market conditions. The total raw water consumption will increase from existing 150 KL/day to 840 KL/day (increase by 690 KL/day) which will be sourced from GWIL. The domestic wastewater generation will increase from existing 4 KL/day to 8 KL/day (increase by 4 KL/day) and it will be treated in sewage treatment plant and treated water will be used for greenbelt development. Water will be used for quenching of hot coke. The water after quenching will carry along with it certain quantities of coke breeze. The mixture of water and breeze will be led to a surrounding water collection line where the coke breeze along with ash particles will settle down by gravity. Coke breeze will be re-used with raw material or sold to cement, sinter plant. The overflow will be taken to the quenching tank and fresh water will be added for make up. Quenching water will be completely recycled back and hence no industrial

wastewater discharge is envisaged from the unit. Requirement of coking coal will increase from 137143 MT/Month to 308571 MT/Month (increase by 171428 MT/Month). The unit has one Coke Oven Battery with 40 m stack at present and it is proposed to install 2 additional Coke Oven Batteries with 40 m stack for the proposed expansion. Unit has proposed WHR power plant with capacity 11 MW. Hot waste gas will be used as fuel in 2 waste heat recovery boilers connected to coke ovens directly. The waste heat recovery boilers jointly produce about 31 TPH steam at 66-68 kg/cm²g pressure and 4900C temperature. With this available steam 7.65 MW (Average) power can be generated. In addition, a WHR Boiler of 12 TPH will be installed for the existing operational battery. Together 3 boilers will generate steam of about 43 TPH. The project proponent has proposed to install one DG Set of 500 KVA capacity as standby power source in addition to existing 320 KVA capacity DG set. All the crushers, screens and conveyors in the existing plants are covered and proposed to install DFS (Dry Fog System) system. Generation of used oil will increase from existing 16 lit/year to 36 lit/year whereas generation of coal dust and coke breeze (solid waste from Settling Tanks) will increase from existing 1 MT/Month to 2.2 MT/Month. Coal dust and Coke breeze will be collected and recycled with coke. Water sprinkling system is proposed for Coal stockyard and Vehicle Movement area. Dedusting system and water sprinkler will be provided to control fugitive emissions. Process dust and fume during coal charging emitting through charging lids can be controlled by creating negative pressure in the battery during coal charging. The project proponent presented that they have already started baseline environmental monitoring from 1st October 2014 and requested to allow them to use the same for the preparation of the EIA report which was agreed to by the committee. After deliberation on various aspects, the TOR proposed by the project proponent were accepted and additional TOR were prescribed for the EIA study to be done covering 10 km radius from the project boundary of the proposed site.

PP submitted final EIA report on 29/09/2015 and project was appraised during SEAC meeting 17/11/2015. During the meeting on 17/11/2015, Issues raised during the public hearing and representations received from the stake holders were discussed in detail. Study period for preparation of EIA was October 2014 to December 2014 covering 10 km radius from the project boundary. The wind direction is predominantly from SSW to NNE direction. Ambient Air Quality Monitoring (AAQM) was carried out at 6 locations during the study period for PM₁₀, PM_{2.5}, SO₂, and NO_x and found within National Ambient Air Quality standards. Committee observed that the base line study carried out did not cover the nearest residential area of village Chopadva which is located in down wind direction at a distance @ 350 meter, though the PP was asked specifically to install one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur. Committee also noted that the distance of nearest residential area of village Chopadva is mentioned 1.2 km, though the nearest habitat of vill. Chopadva is located within 1 km radius from the project site. On asking, PP could not reply satisfactorily. Committee viewed this seriously and asked for clarification. After detailed deliberations the Committee unanimously decided to consider this case for further appraisal only after submission of the following: (1) Clarification regarding the nearest residential area from the project boundary. Give exact aerial distance of nearby residential area on satellite map. (2) Clarification regarding not considering the nearest residential area of village Chopadva where maximum ground level concentration is likely to occur. (3) Clarification regarding discrepancy in distance of Village Chopadva from the Project Site as you have

mentioned (1) 1.89 km at Page no. 3-2, (2) 1.2 km at Page no. 2-3 and (3) 1.8 km in details submitted during presentation. (4) Complete compliance of ToR no. 28, 29, 30 & 37 (5) Complete management of Coke breeze/solid waste generated from the proposed project including break up of quantity to be recycled / reused within the premises and quantity to be sold outside along with Name and address of end consumers, Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said wastes from the proposed project. Give detailed justification and feasibility of reuse/recycle of the particular item.(6) Clarification regarding “ There is no national park, wildlife sanctuary or reserved forest was recorded within the 10 km radius of the study area, as it was observed that forest and Wild Ass Sanctuary are located within/ in the vicinity of the study area. (7) 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). (8) Summary & Conclusion as per the generic structure given in Appendix III A of the EIA Notification 2006. PP submitted the reply of aforementioned queries on 25/04/2016 and details are as under: PP submitted clarification regarding the nearest residential area which is Chopadva and it is located at 960 m away from project site in NE Direction. Regarding Clarification for not considering the nearest residential area of village Chopadva where maximum ground level concentration is likely to occur, PP submitted that (1) The unit itself is located in Chopadava Village and Site concentration can be represented as concentrations of Chopadva. In baseline study, it was considered having AAQ Locations covering all directions and distances; However, Sampling was carried out and the concentrations of Chopadava village (residential area) found within NAAQ standards. PP submitted that exact aerial distance of the nearest residential area from project boundary is 960 meter. Further PP mentioned that on page 3.2 of EIA report, the distance of village shown (as per Lat/ Long of Gram Panchayat) from site centre which is 1.89 km. On page 2.3 of EIA report, site specification details shown are By-Road distance which is 1.2km and PP further clarified that during presentation nearest distance 1.89 km was rounded off to 1.8 km. Regarding complete compliance of TOR 28,29,30 and 37, PP conducted study within 10 km radius of the project. Regarding TOR 28: PP identified anticipated environmental impacts due to proposed activity, impacts of air environment including transportation, material handling and preparation facilities, coke manufacturing process. Regarding estimation of Ground Level concentration, PP estimated incremental rise of pollutants through dispersion model and results identified are for SPM: 1.42 micro gram/M³- 1.37 micro gram/M³, SO₂: 2.17micro gram/M³- 1.79 micro gram/M³ and NO_X: 0.76 micro gram/M³- 0.64 micro gram/M³. It is further submitted that regarding PM₁₀ for the six monitoring stations, after taking incremental load of the proposed project in account, PM₁₀ concentration varies from 73.18 microgram/M³ at ChiraiMoti to 53.67 microgram/M³ at Sikara. Considering baseline study results of PM,SO₂ and NO_X and incremental addition due to the project comes to be 51.523 microgram/NM³, 26.37 microgram/M³ and 32.061 microgram/M³ respectively which are well within national ambient air quality standards. Regarding noise control measures, PP mentioned that housing and casing shall be provided for all noise generating machines and extensive oiling/lubrication and preventive maintenance shall be carried out to reduce noise generation. Regarding water environment, PP informed that industrial activities include power plant, dust suppression, watering of plantation, human

consumption and coke quenching. For drinking purpose of 200 people, water requirement shall be met from surface water from connection of Gujarat Water Infrastructure Limited (Narmada Canal).Boiler blow down shall be treated in ETP and same shall be blended with raw water and used for dust suppression or gardening within premises. PP also submitted impact on land environment, occupation health, ecological environment, socio-economic environment, impact on road network and its associated mitigation plan.

Regarding TOR 29: PP submitted one complete season AAQ data for period October 2014- December 2014 for PM2.5, PM10, SO2 and NOx for 7 locations including Chopadva along with maximum GLC from dispersion model considering vehicle movement and its impact on ambient air. Regarding TOR 30: PP submitted that detailed air pollution modelling is done using AEROMOD software. GLC is calculated for proposed expansion activities superimposed upon ambient air quality monitoring results and combined values are found within permissible NAAQ standards. Regarding TOR 37: PP submitted details of existing process gas vents, proposed process gas vents along with fugitive visible emission in terms of PLD (percentage leaking doors), PLL (Percentage leaking lids, PLO(Percentage leaking off-takes and Aspiration through high pressure liquor injection in gooseneck (HPLA). PP stated that coke breeze(undersized coke: 0-6mm) is a sleable product having same characteristics as main product except size. It is sold to various industrial units and traders.He further informed committee that during last year Unit has sold 2078 MT of coke breeze to end udders. Potential end consumers of coke breeze are GHCL, Sutrapada, Gir Somnath, SRK International, Gandhidham, Kutch and Aadesh International, Apnanagar, Gandhidham. Pp further mentioned that solid waste generated from separation of quenching water in settling tank shall be reused up to 30% and remaining 70% is sold to local brick manufacturers. PP confirmed that there is no national park, wildlife sanctuary or reserved forest was recorded within the 10 km radius of the study area. PP further mentioned that the nearest distance of forest/wild ass sanctuary from the site is more than 14 km. An undertaking by the PP regarding ownership of the EIA report as per MOEF&CC OM dated 05/10/2011 and an undertaking by the consultant regarding prescribed TORs have been complied with and data submitted is factually correct as per the MOEF&CC OM dated 04/08/2009 are submitted. PP has submitted summary of the project and conclusion which is as follow: (i) Construction phase will not impart appreciable impact, because indicated mitigation measures will be followed and implemented. (ii) Negligible impacts will occur on air quality during operation phase. This will be controlled by long baffled tunnel and the gas will pass through waste heat recovery boiler.(iii) No ecological damage is emphasized.(iv) No adverse impacts will occur on water environment because the ground water will not be used for industrial purposes. Surface water from Narmada canal would be used.(v) Economic status of the local population will be improved due to the increased business Opportunities. The industry will generate employment. (vi) Environmental Management Plan has been formulated to control all the pollution control measures and Environmental Management Cell has been set-up to follow the formulated environmental plan.

After presentation, committee found reply of additional information submitted by the project proponent satisfactory and unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance

20	M.D. Inducto Cast Pvt. Ltd.	Plot no:144, Paiki 1 & 2, Vill: Nesada, Ta: Sihor, Dist: Bhavnagar	Appraisal
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Project / Activity No.: 3(a), (c)

- M/s: M.D. Inducto Cast Pvt. Ltd. (herein after Project Proponent – PP) has submitted Application vide their letter dated 10/09/2014.
- The project was considered for TOR finalization in the meeting of the SEAC held on 08/12/2014.
- TOR was prescribed for the EIA study to be done covering 10 Km radius from the project boundary.
- Public hearing was arranged by Gujarat Pollution Control Board on 18/01/2016.
- EIA Report prepared by M/s: Pollution and Ecology Control Services, Nagpur was submitted by project proponent on 29/03/2016. (Online proposal no. SIA/GJ/IND/10635/2014 dated 17/03/2016).

Project status: Expansion

Project / Activity Details:

This is a expansion project for manufacturing of M.S. Billets, M.S. Ingots, TMT Bars, Angles, Channels as tabulated below:

Sr. No.	Product details	Existing Capacity MT/Annum	Proposed Expansion MT/Annum	Total after expansion MT/Annum
1	M.S. Billets and M.S. Ingots	30000	450000	480000
2	TMT Bars Angles, Channels	30000	450000	480000

The project falls under Cat. 3 (a) (c) Secondary metallurgical processing industry [ii] All other non-toxic secondary metallurgical processing industries as per the schedule of the EIA Notification, 2006.

Expected cost of the project is Rs. 25 Crores. No additional land is to be acquired as the expansion is proposed within the existing premises of the unit. Total area of existing premises is 62423 sq. m. Unit has proposed more than 33% area of total acquired land for green belt development. Spnge Iron and MS Scrap will be used as raw materials. Total raw water requirement will be 500 KL/day which will be sourced from Gujarat Water Infrastructure Limited. No industrial effluent generation is envisaged. Domestic waste water will be disposed off into soak pit system. At present there is one Induction Furnace with capacity 25 TPH. Unit has proposed two induction furnaces with capacity 25 TPH each. One no. of Producer gas plant will be installed for gasification of coal to generate producer gas and this producer gas will be fired in the Reheating furnace to maintain the required temperature inside the furnace. Total coal consumption will be 4800 MT/Annum. Fume extraction system, Multi cyclone & Bag filters will be provided as air pollution control system. Slag - 24000 MT/Annum from the Melting Furnace shall be used for hardening of internal roads/working area. Tail cuttings – 14400 MT/Annum will be reused in induction furnace. Nearest village Nesada is @ 0.5 KM from the site.

Observations/Discussions:

Technical presentation made during the meeting by project proponent. During the presentation Committee observed that the Public hearing was scheduled at a distance of 6 Km from the project site as per the

representation received in writing. Upon asking about the justification for selection of venue for the public consultation, project proponent could not reply satisfactorily. After detailed deliberations, Committee unanimously decided to consider this case for further appraisal only after submission of the satisfactory justification for selection of venue for the public consultation.

21	Bharat Rasayan	Plot no:22/1/B, GIDC Nandesari, Dist.: Vadodara	Appraisal
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Project / Activity No.: 5(f)

- M/s: Bharat Rasayan (herein after Project Proponent – PP) has submitted Application for Environmental Clearance vide their letter dated 20/10/2014.
- Project was scheduled in SEAC meeting held on 23/12/2014 for screening and scoping and TORs were prescribed.
- PP submitted final EIA report on 16/06/2015.
- PP was invited for appraisal during SEAC meeting held on 28/07/2015. During meeting additional information pertaining to the TOR was sought as same were not addressed satisfactorily.
- PP submitted reply of additional information sought on 26/04/2016. Project was scheduled for appraisal on 06/06/2016.

Project Status: New

Project / Activity Details:

This unit has applied for manufacturing of CPC Green Pigment 7. List of Product and By-products is as below:

Sr. no.	Name of Product	Quantity MT/Month
1	CPC Green Pigment 7	50
By-Products		
1.	Aluminium Chloride solution (8-10 %)	1165
2.	Hydrochloric acid	216
3.	Sodium Hypochloride	221

The proposed production activity falls under project activity 5(f) as per the EIA Notification 2006. As the proposed project is located within notified industrial estate of GIDC Nandesari, it is a category B project. Cost of the proposed project will be Rs. 1. 25 Crores. Total area acquired for the proposed project is 904.68 sq. m. Unit has proposed 70 sq. m land for tree plantation/green belt area. Basic raw materials for the proposed product will be Aluminium Chloride, Cupric Chloride, CPC Blue crude, Chlorine gas MCB, Caustic flakes etc. Fresh Water Requirement for the proposed project will be 125 KL/day (Domestic & Gardening: 5 KL/day, Ind. –0 KL/day) which will be sourced from GIDC water supply system. Industrial waste water generation will be 53 KL/day (Process- 29, washings- 15, Boiler- 2 & Cooling- 2). Unit has proposed primary ETP for industrial waste water. Primary treated effluent will be sent to CETP Nandesari. Domestic waste water (5 KL/day) will be disposed to septic tank/soak pit and overflow will be sent to CETP through ETP with industrial waste water. Unit has proposed one steam boiler (2 TPH) and one TFH (2 Lac Kcal/hr). Natural gas (500 SCM/hr) will be used as fuel in Boiler & TFH. Particulate Matter (PM) emission will be also from one Spin Flash Dryer (SFD) and one Spray Dryer. Unit has proposed Bag filter for SFD and Cyclone separator for Spray dryer. Unit has proposed Water scrubber followed by alkali scrubber as APCM with

Reactor for control of process gaseous emission of HCL and Cl₂. D. G set (125 KVA) is proposed as standby facility in case of power failure. 50 ltr/hr of diesel will be used as fuel in DG set. Hazardous waste to be generated are ETP waste (24 MT/Yr), Discarded Drums/Containers (600 no.s/Month) & Bags with liners (1200 no.s/Month) & Used oil (600 ltrs/Yr). Generated Aluminium Chloride Solution (8-10%) (1165 MT/Month), Hydrochloric Acid (216 MT/Month) and Sodium Hypochlorite (221 MT/Month) solution will be sale out to actual users.

Observations & Discussions:

During SEAC meeting held on 23/12/2014, technical presentation by the PP and additional TORs were issued covering 5 km radius from the project site as study area. PP submitted final EIA on 16/06/2015 and project was appraised in the SEAC meeting held on 28/07/2015. Technical presentation during the meeting included the Point wise ToR compliance including technical details. The baseline environmental quality has been assessed in the post-monsoon season (December, 2014 to February, 2015) in a study area covering 10 km radius around the plant site. The wind direction is predominantly from NE to SW. Ambient Air Quality Monitoring (AAQM) was carried out at 7 locations during the study period for PM₁₀, PM_{2.5}, SO₂, NO_x, HCL, Cl₂ & VOCs. The values of HCl and Cl₂ were found Below Detectable Limit. The average concentration of PM_{2.5}, SO₂ and NO_x are within prescribed limit at all locations. Only PM₁₀, concentration is higher side due to construction of new 6 lane highway and regular traffic of heavy trucks on the rough roads. The Industrial Source Complex – Short Term Version 3 (ISCST-3) model has been used for prediction of impact on air environment. The maximum incremental increase in concentration for SO₂, NO_x and PM is 0.08 µg/m³, 0.02 µg/m³ and 0.05 µg/m³ respectively at a distance of about 1.4 km in the South. On asking about safety precautions of Chlorine, PP informed that the storage & Handling of Chlorine & MCB has been considered for quantitative risk assessment and they will take necessary precautionary measures as per the recommendations based on consequence analysis. On asking about the management of by-products, PP informed that they will sale out to M/s: Acid Sales Corporation. Committee noted that this buyer is not an actual user and has no permission from the GPCB. During the reviewing of the EIA report, it was also observed that details related to Lay out plan, cleaner production options, details of CETP-Nandesari, by-products management, Solvent recovery system, etc. were not covered properly in the EIA report. After detailed deliberations the Committee sought following additional information for further consideration of the proposal:

1. Submit the complete details for following TORs which were found properly not attended in the EIA report

TOR no.	Details to be submitted
3	Readable Layout plan with necessary marking and measurements.
8	Give specific details regarding Cleaner production options.
12	<ul style="list-style-type: none"> • Final certificate from the CETP-Nandesari confirming the acceptance of proposed quantity of effluent from your industry. • Give details of CETP- Nandesari including (1) Total capacity & Spare capacity of the CETP, (2) Actual load at present (Qualitative and Quantitative) (3) CETP Up gradation scheme, if any. (4) Analysis Reports of GPCB for Inlet and outlet of CETP for last 6 months. Comparative statement with respect to Norms prescribed by the GPCB.

	<ul style="list-style-type: none"> Recommendations and suggestions of the last two Environment Audit reports of CETP-Nandesari and their compliance report.
21	Membership certificate should be for maximum quantity of hazardous waste to be generated from the proposed project.
22	Copy of CC&A of the actual user M/s: Acid Sales Corporation and its point wise compliance. Give feasibility report for use of specific by-product in respective product. Complete Management plan for By-products/Spent acids to be generated from the project including their quantity, quality, characteristics, end use etc. shall be submitted. Ensure that these by-products are not covered under the Hazardous waste (Management, Handling and Transboundary Movement) Rules 2008 and its amendments. Give technical details.
23.	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. Give quantity and disposal method of distillation residue.
24	Monitoring and reporting arrangements, laboratory facilities, documentation & records, budget & procurement schedule etc. shall be incorporated in EIA report.
27	The input parameters considered for worst case scenarios. 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.
33	Commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere. Identify the green belt area in consultation with GIDC/ Association.
38	Latest status of the stay order got from Hon. Gujarat High Court regarding Certificate of accreditation by the NABET, QCI.

2. Complete details of DM water supplier M/s: Unique Enterprise i.e. Copy of permission letters from concern authorities.

3. An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF&CC OM dated 05/10/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the MoEF&CC OM dated 04/08/2009.

On 26/04/2016, Project proponent submitted the reply of additional information sought during SEAC meeting held on 28/07/2015 and proposal was scheduled for appraisal on 06/06/2016. Presentation of additional information sought was made by PP and detail is as under: Query 1: Submit the complete details for following TORs which were found properly not attended in the EIA report. Compliance of TOR submitted by the PP is as under: TOR 3: Project proponent submitted plant lay out with necessary marking and measurement. TOR 8: Regarding cleaner production option, PP submitted following details In addition to measures mentioned in EIA Report, additional measures to be implemented are as follow:-

(i) Water of azeotropic distillation will be used in next batch.

- (ii) Recovered sodium hypochloride (formed due to adsorption of unreacted chlorine) will be reused in effluent treatment plant.
- (iii) Reverse Osmosis will be installed at two places.
- (iv) GIDC water will be passed through RO and reject will be used in drowning operation of pigment. Thus all water will be utilized and need of fresh DM water will not be required.
- (v) The treated ETP water will be subjected to RO and 37 KL/Day of water will be recycled back to process. The reject will be sent to CETP for further treatment.
- (vi) The aluminum chloride solution will be sold to actual user for manufacturing of aluminum hydroxide AND/OR poly aluminum chloride.
- (vii) Spin flash dryer will be used in place of tray dryer to reduce the dusting level. Thus it will improve housekeeping and material going to atmosphere will be recovered back.
- (viii) Cleaner fuel such as natural gas will be used in place of coal.
- (ix) Water from restrooms will be collected and used back in process/ washing after primary filtration.

TOR 12: Details of CETP along with final certificate from CETP , Nandesari confirming the acceptance of proposed quantity of effluent i.e. 16 KL/Day is submitted.

TOR 21: Membership certificate for maximum quantity of hazardous waste to be generated is submitted.

TOR 22: PP submitted as follow:

The unit will be generating following by-product :

Hydrochloric Acid – 216 MT/Month
 Aluminum Chloride- 1165 MT/Month
 Sodium Hypochloride- 221 MT/Month

Specification of HCl to be generated is as under:

Sr. No.	Parameter	Result
1.	Physical State	Liquid
2.	Colour	Water white to pale yellow
3.	Percentage Purity of HCl	22 % to 25 %
4.	Percentage Sulphate	Absent
5.	Percentage Chlorine	Absent
6.	Organic	10-15 ppm
7.	Percentage HF	Nil

End Use:

HCl is used in manufacturing of calcium chloride and potassium chloride. It will be given to M/s. Silver Chemicals at plot no. 6006/1/C GIDC, Nr. KA Malle Pharma GIDC Ankleshwar-393002. Copy of MOU and valid GPCB consent is attached as an Annexure-IV.

It will be manufactured by following reaction:

- $\text{Ca}(\text{OH})_2 + 2 \text{HCl} = \text{CaCl}_2 + 2 \text{H}_2\text{O}$
- $\text{KOH} + \text{HCl} = \text{KCl} + \text{H}_2\text{O}$

Specification of Aluminum Chloride is as under:

Sr. No.	Parameter	Result
1.	Physical State	Liquid
2.	Colour	Greenish yellow
3.	Percentage Purity of $AlCl_3$	Aluminium chloride 8% to 10 %
4.	Percentage Sulphate	Nil
5.	Organic	10-15 ppm

End Use:

- Aluminium chloride of 400 MT/Month will be given to M/s. Pentagon Chemical at Plot No. 303/8/D, 2nd Phase GIDC Vapi-396195 and 765 MT/Month will be given to M/s. Arkil Chem Pvt. Ltd. at plot no. 3116, Chemical zone behind sabero organics GIDC Sarigam, Gujarat-396155.
- Both of the above mentioned units are manufacturing poly aluminium chloride. Copy of MOU and valid GPCB consent is submitted.
- The poly aluminium chloride is used as coagulating agent in water purification plants and waste water treatment plants.

Specification of Sodium Hypochloride is a under:

Sr. No.	Parameter	Result
1.	Physical State	Liquid
2.	Colour	White to off-white
3.	Percentage Purity of Sodium Hypochloride	5% to 6 %
4.	H P	8-8.5

End Use:

- It will be used in units own ETP and surplus will be given to M/s. Pentagon Chemical directly.
- Since the unit has plans to recover back the treated effluent all the quantity of sodium hypochloride will be used to bring down COD less then 250 mg/L.
- The improved effluent treatment plant is as under:

PP further submitted details of effluent quality to be treated at different stages of ETP and Various ETP units with capacity are submitted.

TOR 23:

- The unit will be using only one solvent that is mono chloro benzene (MCB). The monthly consumption will be 2.5 MT/Month. The solvent is used during pigmentation of green pigment.
- At the end of pigmentation the MCB is distilled along with water. All the chloro benzene is recovered under azeotropic distillation.MCB being heavier will settle down below the water and it will not escape in atmospheric. The recovered MCB and water is used in next batch.
- PP has submitted solvent balance considering 580.25 kg recycled MCB along with 4.9 fresh MCB

which results in azeotropic distillation and 580.25 kg of MCB is recycled in next batch and 4.9 kg MCB goes along with wet cake/ETP. This above solvent balance is for 100 kg of the production of CPC Green 7 pigment, thus the recovery efficiency is 99.1%. Solvent is from CPC Green 7 pigment only and it is to be reused in same product without any purification. There will be no solvent residue in CPC green process.

TOR 24: PP submitted details of various various instruments to be procured along with budgetary cost and procurement schedule.

TOR 27:

The input parameters considered for worst case scenarios considered are Release of Chlorine, Release of MCB, late pool fire, Late explosion and risk contours are superimposed on the plant layout with details of its possible impacts that reveals impacts remain within limit of premises. Recommendations made include: (1) Evacuation routes shall be planned such that alternate route is available from any corner in more than one direction. (2) Extra precautions to be taken in unloading of flammable solvents. The details of precautions during storage, handling and transportation of solvents have been given in separate paragraph (3) Fire fighting arrangements shall be provided as per the guidelines of OISD (4) Evacuation Plan shall be designed considering the above mentioned worst case scenarios.

TOR 33: PP submitted commitment for tree plantation in 2500 sq. meter area

TOR 38: Latest stay order from Hon. Gujarat High Court regarding Certificate of accreditation by the NABET, QCI is submitted.

Query 2: Complete details of DM water supplier M/s: Unique Enterprise i.e. Copy of permission letters from concern authorities.

(1). Unit has now proposed not to procure any DM water, instead it will take excess water from GIDC. Total water from GIDC will be 85 KL/Day. Updated water letter from GIDC is submitted. (2) In view of updated GIDC water letter, water consumption and wastewater generation details along with water balance is given below.

Sr. No.	Category	Water Consumption (KL/Day)	Waste Water Consumption (KL/Day)
1.	Domestic	5	5
2.	Industrial		
2.1	Process	65	29
2.2	Washing	15	15
2.3	Cooling	16	2
2.4	Boiler	20	2

3	Gardening	1	0
Total (Industrial)		117	48
Total (Domestic + Industrial)		122	53

Query 3: An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF&CC OM dated 05/10/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the MoEF&CC OM dated 04/08/2009.

Undertaking from Project proponent and consultant is submitted by PP.

After technical presentation, Committee noticed that during production AICI3 and HCl are produced along with product Pigment Green 7 and these items are covered under the Hazardous and Other wastes (Management and Transboundary Movement) Rules, 2016 and committee mentioned that HCl, AICI3 and Sod Hypochloride attracts Hazardous & other Waste (Management and Transboundary Movement) Rules, 2016.

Considering above, Committee found reply of additional information submitted by the project proponent satisfactory and unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance with consideration of byproducts mentioned by PP as hazardous wastes.

22	Fancy Foam Pvt. Ltd.	Plot no. 507-508, Bhagya Laxmi Estate, Rakanpur, Ta.: Kalol, Dist.: Gandhinagar	Appraisal
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Project / Activity No.: 5(f)

- M/s: Fancy Foam Pvt. Ltd (herein after Project Proponent – PP) has submitted application vide their letter dated 23/04/2015.
- PP were invited for technical presentation before the committee on 28/07/2015. After presentation, committee sought additional information.
- PP submitted reply of additional information and made presentation before the committee on 06/06/2016.

Project status: Expansion

Project / Activity Details:

This is an existing unit and proposes for expansion as tabulated below:

Sr. no.	Name of the Product	Existing	Proposed	Total after expansion
1	Flexible Polyurethane Foam	45 MT/Month	255 MT/Month	300 MT/Month

The location of the unit is outside the notified area. As per amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014, small units are categorized as Category “B” projects. Small units are defined as with water consumption less than 25 M³/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989. During presentation, PP informed that water requirement is 5.3 KL/day. Fuel requirement is 80

ltrs/day (<25 MT/day) and Chemicals to be used are not covered in MAH category. Hence, the proposed products of Resins fall under Category B of project activity 5(f) as per the EIA Notification 2006.

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Plot area is approx. 6365.70 sq.m. Unit has proposed 300 sq. m area for green belt development. Estimated cost of proposed expansion is Rs. 0.10 Crores. Aerial distance of nearest residential area of vill. Santej is @ 1.20 km from the site. Water consumption will be increased from 4.05 KL/day to 5.30 KL/day. Fresh water requirement of 5.30 KL/day will be supplied by the road tankers. Wastewater generation from the existing as well as proposed expansion will be nil. Domestic waste water (3.20 KL/day) will be disposed off into septic tank/soak pit system. Unit has provided one steam boiler (0.3 TPH) and one DG set (65 KVA). Diesel is used as a fuel for Boiler and DG set. No process gas emissions are envisaged. Hazardous wastes to be generated are Discarded containers (4560 no.s/Year) and Used Oil (30 ltrs/Year). Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized vendors. Used oil will be sold only to the registered recyclers.

Observations & Discussions:

During SEAC meeting held on 28/07/2015, Technical presentation included general information about the project, details of product & raw materials, manufacturing process with process flow diagram, water & waste water details, details of ETP, hazardous waste generation & management proposed, Health and safety measures proposed etc. On asking about storage and handling details of Toluene di-Isocyanate (TDI), PP informed that they will follow all the prevailing guidelines for safety precautions of TDI and other hazardous chemicals. PP assured that handling Isolated storage and industrial activity at a site including transport through carrier or pipeline of hazardous chemicals will not cross the threshold quantities specified in the MSIHC Rules, 1989 for MAH installations. Looking to the small scale of the project, its location, low pollution potential and the details presented during the meeting, after detailed discussion, the project was categorized as B2. After presentation, additional information was sought for appraisal of the project. PP submitted reply of additional information sought by the committee and made presentation on 06/06/2016.

PP submitted land possession document in the name of Fancy Foam Pvt. Limited and copy of CC&A of existing unit. PP further informed that 250+ industrial units are located within 5 km radius of their industry which includes pharmaceutical, chemical, metallurgical, casting BMW disposal products, Plastic packaging units etc. The specific details such as distance of project from village, water body, National high way, Railway line, heritage site etc are submitted as below:

Sr No	Location	Distance from Project site (km)
1	Village: Rakanpur	0.65
2	Water body: Rakanpur Pond	0.20
3	National Highway 8C	4.50
4	State Highway	Does not exist within 5 km radius
5	Railway Line	Does not exist within 5 km radius
6	Heritage site	Does not exist within 5 km radius
7	National Park/ Wildlife sanctuary/Eco sensitive zone	Does not exist within 5 km radius
8	School-Rakanpur	0.750

PP has submitted undertaking regarding water consumption is 5.35 KLPD, Diesel consumption: (maximum) is 40 litre/day and unit is not covered in category of MAH unit and storage of TDI will be less than 10 MT threshold limit. It is informed that three gates are provided with adequate margin of 4m to 6 m around the plant for movement of vehicles. PP has submitted material balance to produce foam block per month. Water will be sourced through water tanker. No bore well is constructed within the premises. Water consumption after expansion will be 5.35 KLPD and CGWA permission is not applicable.

Sr No	Description	Water Consumption(KLPD)			Waste Water Generation (KLPD)		
		Existing	Proposed	Toal	Existing	Proposed	Toal
I	Domestic	3500	500	4000	2800	400	3200
II	Gardening	50	NIL	50	NIL	NIL	NIL
III	Industrial						
A	Process	100	400	500	NIL	NIL	NIL
B	Cooling	100	100	200	NIL	NIL	NIL
C	Boiler	300	300	600	NIL	NIL	NIL
	Total	4050	1300	5350	2800	400	3200

Domestic waste water will be disposed off to septic tank/soak pit system. PP further informed that no vessel washing will be carried out. No effluent is generated from the manufacturing process and other ancillary industrial operations. Frequency of boiler blow down is low as it is operated 4 to 5 times in month. The cutting waste is generated during foam cutting process and it is reused for making the rebounded foam. Due to RCC flooring, contamination of soil is prevented. Steam boiler of 0.3 TPH is proposed. LDO will be used as fuel @10 litre/hour. DG Set of 65 KVA will be installed with LDO consumption of 8 litre/hour. PP mentioned that all measures will be taken to prevent fugitive emission along with release of VOC that includes keeping container tightly closed, transferring of chemicals through closed pipeline, preventive checks for Valve, pipe joint, regular monitoring for the chemicals to identify the concentration, provision of mechanical ventilation at the top of shed to remove the contaminated air by mixing the clean air etc. Measures to control noise pollution would cover following: (1) Proper and timely oiling, lubrication and preventive maintenance for the machineries and equipments to reduce noise generation.(2)The foundations of pumps will be provided with anti vibration padding.(3)The driver of goods vehicle shall be informed to avoid unnecessary speeding of vehicles inside the premises. The discarded barrels 3600 Nos/Year, Bags with liners: 960 Nos. /month will be collected, stored and sold to Hindustan Enviro Life Protection Service Limited, registered recycler. Used oil: 30 litre per year will be collected, stored and sold to the registered refiners or will be used for lubricating machineries. For safe storage and handling of chemicals, PP will give training to the workers. Exposures to hazardous chemicals will be minimized, hazardous chemicals will be transferred through closed piping system and separate storage section with adequate ventilation will be provided for hazardous and non – hazardous raw materials. Flame proof electrical fitting will be installed in the plant premises. Fire extinguisher will be provided in the plant and storage area. D.G. Set (65 KVA) will be provided for emergency purpose. Overhead storage tank of 5 KL will be kept reserved for fire fighting. All the drums transferring will be carried out after providing the suitable earthing and transferring through hose pipe so that contact of chemicals can be avoided. PP submitted risk assessment study covering worst case scenario. Annual medical examination of the worker is carried out by certified surgeon, Industrial Safety &

Health, Gandhinagar. PP has submitted risk assessment details including worst case scenario for TDI. PP has also submitted Do's and Don'ts of preventive maintenance, strengthening of HSE, utility staff for safety related measures. PP informed committee that no fatal accident/loss of life or man hours occurred in the existing unit in last three years.

After presentation, committee found reply of additional information submitted by the project proponent was satisfactory and unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance

23	Active Specialities	Plot no.3536/6, GIDC-Chhatral, Ta.: Kalol, Dist.: Gandhinagar	Appraisal
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Project / Activity No.: 5(f)

- M/s: Active Specialities (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/2380/2015 dated 22/09/2015.
- Proposal was scheduled for screening and scoping during SEAC meeting held on 27/11/2015. After meeting, committee sought additional information.
- PP submitted additional information on 14/03/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of the Products	Quantity (MT/Month)
1	Styrene Acrylic Printing Binder <u>Trade Name:</u> ACI EXL 34/ 38/ 45/ 50/ 1025/ 2012/ 2030, ACI FIX F2, etc.	175
2	Styrene Acrylic Paint Binder <u>Trade Name:</u> ACRYL 560 / 4560, etc.	75
3	Pure Acrylic Paint Binder <u>Trade Name:</u> ACRY PURE 4750, etc.	50
4	VAM Acrylic Printing Binder <u>Trade Name:</u> ACRY VAM 4750 / 5055, etc.	25
5	Ethyl Acrylic Printing binder <u>Trade Name:</u> ACI TH 60, DA 620, ETL 35 / 45, ACI ECO 4000 KB, etc.	25

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

Total plot area is 688.80 sq. m & unit has proposed 60.20 sq. m. area for the green belt development/Tree plantation. Expected project cost is Rs. 150 lacs. Total water consumption for proposed project will be 2.6 KL/day (0.8 KL/day for Domestic, 0.1 KL/day for Gardening, 1.5 KL/day for boiler & 0.2 KL/day for cooling tower) which will be sourced from GIDC water supply. Industrial waste water generation of 0.15 KL/day from boiler & cooling tower will be used for gardening & plantation after mixing it with fresh water once in a month when blow down occurs. Domestic waste water of 0.64 KL/day will be disposed off into soak pit system. It is proposed to install one small Boiler (0.6TPH) with adequate stack height and LDO at the rate of 20 lit/hour will be used as fuel. Hazardous waste generated from the manufacturing activity will be discarded drums / containers (965 Nos./month) and bags with liner (180 Nos./month). Discarded drums/containers will be sold

to registered recycler or will be reused for finished goods packing. Bags with liner will be sold to recyclers.

Observations/Discussions:

Technical presentation was made on 27/11/2015 during the meeting by project proponent. Looking to the low pollution potential in terms of air & water and location of the project in GIDC, Chhatral, committee unanimously decided to categorize project under B2 and the additional information was sought. Additional information was submitted by the PP on 14/03/2016 and project was further appraised. PP submitted copy of GIDC plot holding certificate transferred in the name of M/S Active Specialties. PP informed that they will provide two gates to their premises for entry and exit with adequate margin of 4m to 4.5 m around the plant for movement of vehicles. Details of plant/machineries submitted by the PP. Details of monthly consumption of raw material, products and manufacturing process is submitted by the PP along with end use of products. About 2600 litre per day water demand of the unit will be fulfilled by the GIDC and a letter in this regard is submitted by the PP. In the unit 2 mixing vessel and 2 reaction vessels would be installed. Products (Binders) will be manufactured by the same type of process and hence unit does not require the separate reaction vessel for products. No washing of the vessels is required as stoichiometry included is same for all the products. There shall be boiler and cooling tower blow down from the utilities @ 150 lit once in month which will be mixed with fresh water and will be used for gardening/plantation. PP informed that RCC floor will be provided and hence possibilities of chemical seepage and soil contamination are nil. PP mentioned that all measures will be taken to prevent fugitive emission along with release of VOC that includes keeping container tightly closed, transferring of chemicals through closed pipeline, preventive checks for Valve, pipe joint, regular monitoring for the chemicals to identify the concentration, provision of mechanical ventilation at the top of shed to remove the contaminated air by mixing the clean air etc. Measures to control noise pollution would cover following: (1) Proper and timely oiling, lubrication and preventive maintenance for the machineries and equipments to reduce noise generation.(2)The foundations of pumps will be provided with anti vibration padding.(3)The driver of goods vehicle shall be informed to avoid unnecessary speeding of vehicles inside the premises. The hazardous waste generated will be stored in the hazardous waste storage area. Trolley will be used for the movement of discarded drum / bags to avoid manual handling. For safe storage and handling of chemicals, PP will give training to the workers. Exposures to hazardous chemicals will be minimized, hazardous chemicals will be transferred through closed piping system and separate storage section with adequate ventilation will be provided for hazardous and non – hazardous raw materials. Flame proof electrical fitting will be installed in the plant premises. Fire extinguisher will be provided in the plant and storage area. D.G. Set (10 KVA) will be provided for emergency purpose. Overhead storage tank of 5 KL will be kept reserved for fire fighting. All the drums transferring will be carried out after providing the suitable earthing and transferring through hose pipe so that contact of chemicals can be avoided. PP submitted risk assessment study covering worst case scenario.

After presentation, committee found reply of additional information submitted by the project proponent was satisfactory and unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance.

24	Shree Chem	C1-18/10, GIDC Kadi, Ta.: Kadi, Dist- Mahesana	Appraisal
Project / Activity No.: 5(f)			
<ul style="list-style-type: none"> M/s: Shree Chem (herein after Project Proponent – PP) has submitted application vide their letter dated 			

01/09/2015.

- Proposal was scheduled for screening and scoping during SEAC meeting on 17/11/2015 and committee sought additional information.
- PP submitted the reply of additional information on 10/05/2016.

Project status: New

Project / Activity Details:

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

Sr. No.	Name of Products	Quantity
1	Carbomer	15 MT/Month

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

Basic raw materials of Carbomer are Ethylene Dichloride and Acrylic acid. Total plot area is 703.38 sq. m & unit has proposed 80 sq. m area for the green belt development/Tree plantation. Expected project cost is Rs. 0.4 Crores. Total water consumption for proposed project will be 2.4 KL/day (0.6 KL for Domestic & 1.8 KL for Industrial) which will be sourced from GIDC water supply. Industrial waste water (Boiler blow down) generation will be 0.15 KL (Once in 15 days), which will be mixed with fresh water and will be reused for gardening/plantation. Domestic waste water (0.48 KL/day) will be disposed off into soak pit system. Discarded barrels / containers / bags / liners will be either reused or returned back to suppliers or sold only to the authorized recyclers/vendors after decontamination. Used oil will be sold only to the registered recyclers.

Observations/Discussions:

Technical presentation was made on 17/11/2015 during the meeting by project proponent. Looking to the low pollution potential in terms of air & water and location of the project in GIDC, Kadi, committee unanimously decided to categorise project under B2 and the additional information was sought. Additional information was submitted by the PP on 10/05/2016 and project was further appraised. PP submitted a lease deed for five years for the plot procured. PP informed that they shall provide two gates for entry and exit. PP submitted details of plant machineries to be installed, proposed raw material consumption per month, material balance and manufacturing process. About 2500 litre per day water demand of the unit will be fulfilled by the GIDC. No washing of the vessels is required. There shall be boiler and cooling tower blow down from the utilities @ 150 lit once in month which will be mixed with fresh water and will be used for gardening/plantation. PP informed that RCC floor will be provided and hence possibilities of chemical seepage and soil contamination are nil. Small industrial boiler (Cap:0.3 TPH) will be installed with agro waste: 25 kg/hour as fuel and cyclone separator as APCM. PP mentioned that all measures will be taken to prevent fugitive emission along with release of VOC that includes keeping container tightly closed, transferring of chemicals through closed pipeline, preventive checks for Valve, pipe joint, regular monitoring for the chemicals to identify the concentration, provision of mechanical ventilation at the top of shed to remove the contaminated air by mixing the clean air etc. Measures to control noise pollution would cover following: (1) Proper and timely oiling, lubrication and preventive maintenance for the machineries and equipments to reduce noise generation.(2)The foundations of pumps will be provided with anti vibration

padding.(3)The driver of goods vehicle shall be informed to avoid unnecessary speeding of vehicles inside the premises. The hazardous waste generated will be stored in the hazardous waste storage area. Trolley will be used for the movement of discarded drum / bags to avoid manual handling. Ethylene dichloride solvent will be used @ 1500 kg/batch and @ 525 kg/batch will be recovered with loss of 75 kg/batch. For safe storage and handling of chemicals, PP will give training to the workers. Exposures to hazardous chemicals will be minimized, hazardous chemicals will be transferred through closed piping system and separate storage section with adequate ventilation will be provided for hazardous and non – hazardous raw materials. Flame proof electrical fitting will be installed in the plant premises. Fire extinguisher will be provided in the plant and storage area. D.G. Set (10 KVA) will be provided for emergency purpose. Overhead storage tank of 5 KL will be kept reserved for fire fighting. All the drums transferring will be carried out after providing the suitable earthing and transferring through hose pipe so that contact of chemicals can be avoided. PP submitted risk assessment study covering worst case scenario.

After presentation, committee found reply of additional information submitted by the project proponent was satisfactory and unanimously decided to recommend the project to SEIAA, Gujarat for the grant of Environmental Clearance

25	Good earth Maritime Limited	Jakhau Port, Village Jakhau, Ta.: Abadasa, Dist.: Kutch	Appraisal
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Project / Activity No.: 7 (e)

Project status: New

Chronology of EC Process:

- This project proposed by M/s: Goodearth Maritime Limited (herein after Project Proponent – PP) has submitted Application vide their letter dated 15/11/2013.
- The project was considered for TOR finalization in the meeting of the SEAC held on 14/08/2014.
- Public hearing was arranged out by Gujarat Pollution Control Board on 21/03/2016.
- Final EIA Report prepared by M/s: Kadam Environmental Consultants, Vadodara was submitted by project proponent vide their no. NIL dated 18/05/2016.

Project status: New

Project / Activity Details:

The proposal is for extension of existing jetty facility from 56.6 meter to 200 meter length (i.e addition of another 143.4 m jetty).The existing cargo handling capacity for the high grade washed salt in bulk is 8,00,000 TPA and total cargo handling capacity of the jetty after the proposed extension will be 25,00,000 TPA. The project falls in the project activity 7(e) as per the schedule of the EIA Notification-2006. As the cargo handling capacity of the project is <5 MMTPA, it is a category B project.

The existing “T” shaped jetty of 56.6 m was constructed by Fisheries Department during 1970’s and is operational with natural depth of 11 meters at berth. The existing jetty can meet the loading requirement of only one vessel /barge of 1300 DWT at time. After expansion, the jetty can meet the berthing requirement of two vessels /barges of 1300 DWT at a time. Dimensions of the jetty after proposed extension will be 200 m (56.6 m existing + 143.4 m proposed) x 22.2 m (12.7 m existing part + 9.5 m width after extension).

Observations/Discussions:

During meeting before starting the technical presentation, Project proponent requested for new date of presentation due to reason that they have applied for NOC from the forest department which is pending as on today. The letter in this regard is also submitted. In view of this, Committee unanimously decided to consider the case for appraisal only after submission of the NOC from Forest department as per the letter no. સી/જમન/ટે-૧૧/૫૬૪૬૫/૨૦૧૩-૧૪ dated 03.02.2014 from the Office of the Deputy Conservator of Forest, Western Forest department of Kutch, Bhuj-Kutch.

26	Gujarat Alkalies and Chemicals Ltd. (GACL)	Plot No. 3, GIDC Dahej-I, Ta. Vagra, Dist. Bharuch	ToR amendment
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Project / Activity No.: 4 (d) and 5(f)

- M/s: Gujarat Alkalies and Chemicals Ltd. (GACL) (herein after Project Proponent – PP) has submitted application vide their letter dated 22/03/2016.
- The project proponent was called for brief presentation and discussion in the meeting of SEAC held on 23/03/2016. During the meeting held on 23/03/2016, certain additional TOR was prescribed for the EIA study to be done covering 10 Km of study area.
- Now project proponent has requested to amend the TOR vide their online proposal no. SIA/GJ/IND2/11350/2016 dated 05/05/2016 for correction of list of Production as given in the revised Form-1. PP has submitted Revised Form-1 with relevant details. As per their submission, PP requested to exclude Coal based power plant of 120 MW and addition of new products Phosphoric Acid, Hydrogen Peroxide and Chloromethane. .
- During meeting, on asking about the change in product list, PP informed that they are dropping out Coal based Power plant due to easy and sufficient availability of power from State grid and existing power plant. Further they informed that some of the products namely Phosphoric Acid, Hydrogen Peroxide and Chloromethane were already applied at MOEF&CC for Environmental clearance due to possible end use of Phosphoric acid for fertilizers applications. However, they have decided to manufacture non-fertilizer grade phosphoric acid, i.e. a product that will not have its end use in Fertilizers.
- Committee asked to include additional project specific parameters due to proposed addition of new products for study of baseline which was agreed to by the project proponent.
- After deliberations Committee accepted the amendment sought by the project proponent as mentioned in their revised Form-1 and now project details shall be read as under.

Project / Activity Details:

This unit has proposed for expansion of Chlor-Alkali and Synthetic Organic Chemical products and addition of new synthetic organic chemical products within the existing plot no. 3, GIDC-Dahej as tabulated below:

S. No.	Products	Existing capacity (MTPM)	Additional Proposed (MTPM)	Total after expansion (MTPM)
A	Caustic Soda Plant (Expansion)			
1	Caustic Soda (100%) Lye/Prills/Flakes	23550	9000	32550
2	Chlorine Gas	20784	7942	28726
3	Hydrochloric acid	7260	2790	10050

4	Hydrogen Gas	600	240	840
5	Sodium Hypochlorite	1019	387	1406
6	Dilute Sulphuric acid (78-80%)	589	225	814
7	Gypsum	780	297	1077
B	Hydrogen Peroxide Plant (Expansion)			
1	Hydrogen Peroxide (100 %)	2493	1200	3693
C	Phosphoric Acid Plant (Expansion)			
1	Phosphoric Acid (100 % P ₂ O ₅ basis)	1725	2783	4508
2	Phosphoric Acid (86 % H ₃ PO ₄ basis)	2790	4500	7290
3	High Boiling Material	6	9.67	15.67
4	Calcium Chloride	17400	0	17400
D	Chloromethane Plant (New)			
1	C1	0	750	750
2	C2	0	12660	12660
3	C3	0	3900	3900
4	C4	0	690	690
E	Hydrazine Hydrate (New)			
1	Hydrazine Hydrate (80 % w/w)	0	910	910
F	Chlorotoluene (New)			
1	Benzyl chloride	0	1100	1100
2	Benzyldehyde	0	600	600
3	Benzyl Alcohol	0	800	800
4	Benzoyl chloride	0	80	80
5	Cinemic aldehyde	0	80	80
6	Benzyl acetate	0	200	200
	<i>Intermediate product</i>			
1	Benzal chloride	0	1050	1050
	<i>By Product</i>			
1	Sodium benzoate	0	48	48
2	Di benzyl ether	0	80	80
3	Hydrochloric acid	0	2090	2090
G	Mono Chloro Acetic Acid (MCA) (New)			
	Mono Chloro Acetic Acid	0	3000	3000

Details of Production capacity of Existing (No-Expansion) Products:

S. No.	Products	Existing capacity (MTPM)
G	Poly Aluminum Chloride Plant	
1	Poly Aluminum Chloride (18%)	3750
2	Poly Aluminum Chloride (30%)	1080
H	Anhydrous Aluminum Chloride Plant	

1	A.A.C (Granules/Powder)	1890		
2	Sodium hypochlorite (10-13% Cl ₂ basis)	755		
3	Non- Ferrous Alum	6		
I	Stable Bleaching Powder	1250		
J	Sodium Chlorate Plant	1800		
<i>Details of Existing Natural Gas Based Captive Power Plant (CPP) (No-Expansion)</i>				
S. No.	Plant	Existing capacity (MW)		
1	Power	70,560 MWH/M		
2	Steam	120 TPH HP 24 TPH IP		
<i>List of major Raw materials</i>				
S. No.	Raw Material	Proposed Quantity (MTPA)	Source	Mode of Transport
Caustic Soda				
1	Salt	164835	Dahej, Jambusar and Bhavnagar	Trucks
2	Sodium Carbonate	1249	Local Market	
3	Sulphuric acid	1748	In-House	Pipeline
4	Sodium Bisulphate	40	Local Market	Trucks
5	Alpha cellulose	40		
6	Caustic soda (internal)	1399	In-House	Pipeline
7	Hydrochloric acid (internal)	2098		
8	Flocculent	2	Local Market	Trucks
Chlorotoluene				
1	Toluene	48180	Open market	Truck
2	Chlorine	58400	In-house	Pipeline
3	Soda ash	638.75	Local market	Truck
4	Caustic soda lye	182.5	In-house	Pipeline
5	Stabilizer	109.5	Local market	Truck
6	Ferric chloride	91.25	Local market	Truck
Hydrazine Hydrate				
1	Hydrogen Peroxide (50%)	15360	In-house	Pipeline
2	Methyl Ethyl Ketone (MEK) (96%)	2400	Open market	Truck
3	Acetamide (95.5%)	360	Open market	Truck
4	Ammonia	9360	Local market	Cylinder
5	Ethylene Diamine Tetra Acetic Acid (EDTA)	120	Local market	Truck
6	Ammonium Acetate	120	Local market	Truck
Mono-chloro Acetic Acid (MCA)				
1	Acetic acid	21600	Local market	Truck

2	Acetic anhydride	1440	Local market	Truck
3	Chlorine	31680	In-house	Pipeline
4	Hydrogen	288	In-house	Pipeline
5	Caustic lye as 100%	1800	In-house	Pipeline
Phosphoric Acid				
1	Rock Phosphate	124200	JPMC, Jordan and OCPA, Morocco	Trucks
2	Hydrochloric acid (30%)	237600	In-house	Tanks
3	Caustic soda lye (100%)	378		Pipeline
4	Hydrated lime	12420	Local market	Trucks
5	Isoamyl Alcohol	27		Tanks
6	Flocculent (ETP)	6.48		
7	Flocculent (Process)	14.58		
8	Antifoam	135		
9	Hydrogen Peroxide	3240		
Hydrogen Peroxide				
1	Hydrogen Gas(Nm ³ /M)	876000	In-house	Pipeline
2	Ethyl Anthra Quinon (EAQ)	1.44	Local market	Truck
3	Shelsoll	1.2		
4	Tetra Butyl Urea (TBU)	1.2		
5	Tetra Octyl Phosphate (TOP)	0.24		
6	Catalyst	0.048		
7	Stabilizer (Dequest)	1.2		
8	Nitric Acid	1.2		
9	Phosphoric Acid	1.2		In-House
10	Caustic Soda	0		Pipeline
11	Treated Alumina	13.872	Local market	Truck
Chloromethane				
1	Methanol	72000	Local market	Tanks
2	Chlorine	186000	In-house	Pipeline
3	98 % H ₂ SO ₄	4000		
4	50 % CS Lye	22000		

The project falls under Category B of project activity 4(d) and 5(f) as per the schedule of EIA Notification 2006. Plot area is approx. 993860 sq. m. (99.386 ha). Green belt area of 206000 sq. m (20.6 ha). Estimated cost of proposed expansion is INR: 2465 Crores. Fresh water requirement 11915 KLPD (Caustic Soda Plant – 2500 KL, Hydrogen Peroxide Plant – 1015 KL, Phosphoric Acid Plant – 3820 KL, Chloromethane plant – 1880 KL, Chlorotoluene plant – 1680 KL, Hydrazine Hydrate plant – 370 KL & MCA plant – 650 KL) will be sourced from GIDC reservoir. Industrial waste water generation will be 3700 KL/day (Caustic Soda Plant – 535 KL, Hydrogen Peroxide Plant – 275 KL, Phosphoric Acid Plant – 1730 KL, Chloromethane plant – 425 KL, Chlorotoluene plant – 270 KL, Hydrazine Hydrate plant – 185 KL & MCA plant – 280 KL) which will be treated in ETP and disposed into sub sea through existing discharge outlet/ disposal line. ETP is provided and will be upgraded as per the requirement. Sewage will be sent to STP for treatment and treated water will

be used for gardening

Details of emissions from proposed process stacks along with their mitigation methods

S. No.	Stack Attached to	Stack Height (m)	Stack Diameter (m)	Pollutants	Mitigation measures
Process Stacks					
Caustic Soda Plant					
1	HCl Synthesis Unit	30	0.15	HCl, Cl ₂	Single Stage DM Water Scrubbing System
2	Waste air De-Chlorination Unit	30	0.4	Cl ₂	3 Stage Caustic Scrubbing System
Phosphoric Acid Plant					
1	Vent Scrubber in Sec 01 (All process vents are attached to vent scrubber)	14	0.19	HCl, HF	Caustic Scrubbing followed by Water Scrubbing
2	Condenser in Sec 02 (Chilled Water Circulation)	14	0.19	HCl, Cl ₂	Chilled Water Circulation
Hydrogen Peroxide Plant					
1	Depleted air from solvent recovery unit	32	0.4	Hydrocarbon Solvent	Activated Carbon Adsorption
Chlorotoluene Plant					
1	Scrubbing unit	33	0.4	HCl, Cl ₂	Caustic Soda Scrubber
Monochloro Acetic Acid Plant (MCA)					
1	From Caustic scrubber vent after HCl Absorber	30	0.4	HCl, Cl ₂	Caustic Soda Scrubber
2	From Hydrogenator Vent after caustic scrubbing	30	0.4	H ₂	Hydrogen vent free from Cl ₂

Project proponent presented that there is no increase in fuel consumption for the proposed project. Details of Proposed Hazardous Solid waste along with the Category and disposal method.

S. No	Waste Name	Category	Quantity MTPA	Source	Disposal Method
Hazardous Waste					
1	High M.P Liquid Impurities	26.1	1500	Chlorotoluene Plant	Collection storage, reception within factory premises and transportation to incineration own/common incinerator of M/s BEIL

2	Process Residue	26.1	1000	From Section 300 (Ketazine Synthesis)	Collection storage, reception within factory premises and transportation to common incinerator of M/s BEIL
3	Mix Filter cake (Chemical Sludge)	17.1	54000	Phosphoric Acid Plant	Collection storage, reception within factory premises and transportation and final disposal at own TSDF
4	Spent Activated Carbon	35.3	80		Collection storage, reception within factory premises and transportation and final disposal at own TSDF
5	Contaminated spent alumina	35.1	150	Hydrogen peroxide	Packed in 50 kg PE bags and disposed to M/s. BEIL, Ankleshwar landfill
6	Spent Catalyst	35.2	600 Kg		Packed in bags and sell to authorized and approved
7	Activated Carbon	35.3	5		Packed in 50 kg PE bags and disposed to M/s. BEIL, Ankleshwar landfill
8	Waste Drums	33.3	400 Nos.		Sell to authorized and approved vendor.
9	High boilers include the process residue	26.1	330	Chloromethane Plant	Incineration
<i>Non-Hazardous Waste</i>					
1	Brine Sludge	--	3300	Caustic Soda Plant	Disposed to owned TSDF site

No additional D. G. set will be provided for proposed expansion.

The project proponent presented that they have already started baseline environmental monitoring in the winter 2015-2016 (December 2015 to March 2016) and requested to allow them to use the same for the preparation of the EIA report which was agreed to by the committee. After deliberation on various aspects, the committee asked the project proponent to consider following additional TOR in EIA in addition to the TOR prescribed during the earlier meeting held on 23/03/2016 :

1. Unit shall submitted undertaking regarding manufacturing of non-fertilizer grade Phosphoric Acid.

The draft EIA report as per the TOR prescribed during the SEAC meeting 23/03/2016 shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project shall be appraised on receipt of the final EIA report.

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 22/03/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

The following cases were also discussed during meeting.

1	Dorf Ketal Speciality Catalyst Pvt. Ltd.	Survey no. 141(Part), Mundra Port & SEZ Ltd.(MPSEZ Ltd.), Mundra, Dist.: Kutch	Reconsideration
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M/s: Dorf Ketal Speciality Catalyst Pvt. Ltd applied for environmental clearance and the SEAC recommended the project for grant of environmental clearance vide this office letter no. EIA-10-2015-6958/5 dated 12/01/2016 for setting up of the proposed expansion for installation of additional storage tank (Ethylene Oxide – 24.3 MT) at Survey no.141(Part), Mundra Port & SEZ Ltd. (MPSEZ Ltd.), Mundra, Dist.: Kutch.

The case was referred back by the SEIAA vide their letter no. SEIAA/GUJ/EC/6(b)/06/2016 dated 27/01/2016 for reconsideration to the SEAC based on the discussion in the SEIAA meetings held on 16/01/2016 with the following points: (1) Purpose of installation of proposed EO Storage tank. (2) Purpose of installation of additional TFH of 15 Lac K Cal / Hr (3) Details of water consumption and waste water generation with respect to the proposed expansion.

Project proponent vide their letter dated 20/02/2016, submitted the point wise reply as below: (1) The unit has a valid Environmental Clearance vide Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum. The development was to be done phase wise. They had covered all the products, By Products, Water consumption, Waste Water Generation of Phase I & Phase II in the existing environmental clearance. In the phase I only 30,000 MT / Annum of the Product was planned to be manufactured. Based on the same for phase I the CCA – Ref AWH – 42532 Dated 29.06.2011 was also taken for 30,000 MT/ Annum. Now as a part of the Phase II they wish to achieve the full manufacturing capacity of 55,000 MT/Annum as mentioned in the existing Environmental Clearance. One of the Product covered as per the existing Environmental Clearance SR-1125 was not being manufactured in Phase I. Now as a part of Phase II they are going to manufacture the same. This requires EO to be procured from Reliance Industries as a raw material. For the same, the additional Storage of Ethylene Oxide 24.3 MT is required. Products and Capacities to remain the same as per the existing Environmental Clearance. (2) Existing capacity of the Thermic fluid heater is in-adequate for the manufacturing on full capacity as per the existing environmental clearance. Hence, a new Thermic fluid heater of 15 Lac K.Cal. /Hr. has been proposed. The existing Thermic fluid heater of 4 Lac K.Cal /Hr. will be kept as standby. (3) The unit has a valid Environmental Clearance vide Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum. The development was to be done phase wise. They had covered all the products, By Products, Water consumption, Waste Water Generation of Phase I & Phase II in the existing environmental clearance. Products and Capacities to remain the same as per the existing Environmental Clearance. – No Change. Water consumption (600 KLD) & waste water discharge (85 KLD Industrial + 15 KLD Domestic) to remain same as per the existing Environmental Clearance. – No Change.

The said reply was considered by the committee in the SEAC meeting dated 23/03/2016. During the meeting, Committee noted that PP has submitted reply of points raised by SEIAA. The Committee was satisfied with the clarification given by the project proponent and decided to forward the same to SEIAA for the grant of environment clearance with the same conditions which were prescribed earlier in the

recommendation letter dated 12/01/2016:

The case was again referred back by the SEIAA vide their letter no. SEIAA/GUJ/EC/6(b)/341/2016 dated 20/05/2016 for reconsideration to the SEAC based on the discussion in the SEIAA meetings held on 07/05/2016 with the following point: (1) To verify the additional water requirement with technical justification. (2) To verify the requirement of additional TFH with technical justification. (3) To verify the aspects of production capacity with respect to changes in EO Storage and additional TFH Proposed.

Project proponent vide their letter dated 03/06/2016, submitted the reply as below:

1. Justification for additional water requirement

Existing water consumption

Sr. No.	Description	Water Consumption KLD for full production of 55,000 MT/Annum	Proposed water Consumption KLD	Total Water Consumption KLD	Approved Water Consumption KLD (As per existing Environmental Clearance for full production of 55,000 MT/Annum)
A.	Domestic	20	0	20	
	Gardening & Fire fighting	20	0	20	
B.	Industrial				
	Boiler	180	0	180	
	Cooling	330	0	330	
	Washing	10	0	10	
	Scrubber	20	4 (EO Scrubber)	24	
	Total Water Consumption A+B	580	4	584	600

Proposed water consumption

- Presently the plant is not running at full capacity. However when the full capacity will be achieved, the total water consumption will be 584 KLD i.e. within the permissible limits of 600 KLD as per the existing environmental clearance.
- Water Consumption value to remain same as per the existing Environmental Clearance. There is no change in the product profile compared to the existing Environmental Clearance. (Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum.)

Waste Water Details

Sr. No.	Description	Waste Water Generation KLD for full production	Waste Water Recycle KLD for full	Proposed Waste Water Generation KLD	Proposed Waste Water Recycle KLD	Total Waste Water Generation KLD	Approved Waste water Generation KLD(As per existing)

		of 55,000 MT/Annum	production of 55,000 MT/Annum				<u>Environmental Clearance)</u>
A.	Domestic	15	0	0	0	15	15
B.	Industrial						85
	Process	5	0	0	0	5	
	Boiler	10	0	0	0	10	
	Cooling	50	35	0	0	15	
	Washing	10	0	0	0	10	
	RO Reject	45	25	0	0	20	
	Scrubber	20	0	4 (EO Scrubber)	0	24	
	Total Waste Water A+B	155	60	4	0	99	100
	Waste Water Discharged	95 KLD (A+B)		4 KLD (A+B)		99 KLD	100 KLD

Proposed waste water generation

- Presently the plant is not running at full capacity. On full manufacturing capacity the total waste water generation will be 99 KLD i.e. within the permissible limits of 100 KLD (85 KLD Industrial + 15 KLD domestic) as per the existing environmental clearance.
- No additional waste water generation in excess to the approved value.
- Waste Water generation value to remain same as per the existing Environmental Clearance. (Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum.)

2. Justification for requirement of additional TFH

- The unit has a valid Environmental Clearance vide Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum.
- The development was to be done phase wise.
- In the phase I only 30,000 MT / Annum of the Product was planned to be manufactured. Based on the same for phase I the CCA – Ref AWH – 42532 Dated 29.06.2011 was also taken for 30,000 MT/ Annum.
- Actual production has been 9457 MT/Annum in 2014-15 & 11804 MT/Annum in 2015-16 i.e. much lesser than the approved quantity.
- During this it was observed that the Thermic Fluid Heater capacity was just adequate to cater to the present requirements.
- Now as a part of the Phase II we wish to achieve the full manufacturing capacity of 55,000 MT/Annum as mentioned in the existing Environmental Clearance.
- Considering that the existing capacity of the Thermic fluid heater is just adequate to meet the present requirements, we need to enhance the capacity of the TFH to achieve the full capacity as per the existing environmental clearance.
- Hence a new Thermic fluid heater of 15 Lac K.Cal. /Hr. (Working) has been proposed.
- The existing Thermic fluid heater of 4 Lac K.Cal./Hr. will be kept as standby.

3. Existing products

Sr. No.	Name of Product	Quantity MT/Annum
	Ref: Existing Environmental Clearance vide Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum.	
1.	TETRA – ISOPROPYL TITANATE (TPT)	10000
2.	TPT BASED TITANATES: 1. TnBT 2. ET-80 (Tetra Ethyl Titanate) 3. Insocat-SD (Ethyl Aceto Acetate Titanate Chelate) 4. Insocat-SI (Ethyl Aceto Acetate Isobutyl Titanate Chelate) 5. Insocat-TE (Tetra Triethanol Amine Titanate) 6. Insocat-C6 (Tetra Ethyl Hexanol Titanate)	10000
3.	COLD FILTER PLUG POINT (CFPP) PRODUCT: 1. SR 1649 (Ethylene- Vinyl Acetate Co-Polymer in Solvent)	10000
4.	PROCESS CHEMICALS: 1. SR 1008, NBMA (Antifoulants) (N-Butoxy Methacrylate) 2. SR 1200 (Corrosion Inhibitors) (Imidazoline in Solvent) 3. SR 2008 Long Chain Alkyl Carboxylic Acid (Lubricity Improver) (C16-C18 Fatty Acid in Solvent) 4. SR 1125 (Demulsifier) (Blend of PB563 KB1303 KB3341 and Methanol) 5. SR 1795 (Antistatic Additives) (Blend of Dodecylbenzene Sulphonic Acid)	20000
5.	HYDROGENATED ANTI OXIDANTS: 1. UOP 5 (N-N Disecbutyl Phenylene Diamine) 2. UOP 225 (N-N Butylamino Bisphenyl) 3. CL 1000 (4-4" Butylamino Biscyclohexane)	5000
PRODUCTS MT/ANNUM AS PER EXISTING ENVIRONMENTAL CLEARANCE		55000
6.	SALT OF AMMONIUM CHLORIDE (BY-PRODUCT) AS PER EXISTING ENVIRONMENTAL CLEARANCE	11220

Proposed products

- No additional products proposed.
- The unit has a valid Environmental Clearance vide Ref No SEIAA/GU/EC/5(f) & 6(b)/28/2011 Dated 8 Feb 2011 for manufacturing 55,000 MT / Annum.
- The development was to be done phase wise.
- We had covered all the products, By Products, Water consumption, Waste Water Generation of Phase I & Phase II in the existing environmental clearance.
- In the phase I only 30,000 MT / Annum of the Product was planned to be manufactured.
- Based on the same for phase I the CCA – Ref AWH – 42532 Dated 29.06.2011 was also taken for 30,000 MT/ Annum valid up to 14.04.2014.
- Now as a part of the Phase II we wish to achieve the full manufacturing capacity of 55,000 MT/Annum as mentioned in the existing Environmental Clearance.
- One of the Product covered as per the existing Environmental Clearance SR-1125 (Sr. No

4, Item No 4 in the table in point 3 above showing product profile) was not being manufactured in Phase I and hence no EO storage was provided at site. Now as a part of Phase II we are going to manufacture the same. Hence at this stage the CCoE approvals were sought & received for the EO storage.

- This requires EO to be procured from Reliance Industries as raw material.
- For the same, the Storage of Ethylene Oxide 24.3 MT is required.
- Products and Capacities to remain the same as per the existing Environmental Clearance.
- SR 1125 is manufactured in multistage process.
- The stage 1 of the process requires manufacturing resin.
- The resin manufacturing requires heating of 195°C this is done with TFH.
- Brief Block diagram is attached. TFH is required for first step of resin manufacturing.

The said reply was considered by the committee in the meeting of the SEAC held on 06/06/2016. During the meeting, committee noted that PP has submitted reply of point raised by SEIAA. Committee found that the additional water consumption is only 4 KL/day which is for EO scrubber and the total water consumption after proposed expansion will be 584 KL/day. Waste water generated from proposed scrubber will be 4 KL/day which will be treated with effluent of existing activities. Total effluent quantity will be 99 KL/day after proposed expansion. At present production is much lesser than the approved quantity and the TFH is just adequate to cater to the present requirements. Existing TFH (4 Lac K Cal./Hr.) will be kept as stand-by after installation of proposed TFH (15 Lac K. Cal./Hr.). EO (Ethylene Oxide) will be used as a raw material for Phase-II product namely SR-1125 which was not being manufactured in Phase-I. Hence, the storage of Ethylene Oxide 24.3 MT is required. No additional products will be manufactured. The committee was satisfied with the clarification given by the project proponent and decided to forward the proposal to SEIAA for the grant of environment clearance by replacing the Condition No. 1, 2 and 4 as below and with rest of conditions same as prescribed earlier in the recommendation letter dated 12/01/2016:

Condition no. 1

Additional water requirement for scrubber shall not exceed 4 KL/day. However, the total water requirement after the proposed expansion shall not exceed 584 KL/day. No ground water shall be used for the project. Water requirement shall be met only through water supply of the MPSEZ Ltd. The water meter shall be installed and records of monthly water consumption shall be maintained regularly.

Condition no. 2

The waste water generation from the scrubber shall not exceed 4 KL/day, which shall be treated in existing ETP and total effluent quantity shall not exceed 99 KL/day after proposed expansion.

Condition no. 4

Total effluent discharge from the unit shall not exceed the 99 KL/day [i.e. 84 KL/day industrial effluent + 15 KL/day domestic effluent].

Condition no. 10

FO to the tune of 180 kg/hr shall be used for additional TFH (Cap. 15 Lac Kcal/hr). Existing TFH (4 Lac K Cal./Hr.) shall be kept as stand-by.

2.	M/s. Mahavir Eco Projects Pvt. Ltd.	at Plot no: 2430, GIDC Estate, Sachin, Choryasi, Surat.	Reconsideration case.
The additional information received from the project proponent M/s. Mahavir Eco Projects Pvt. Ltd. (MEPPL) located at Plot no: 2430, GIDC Estate, Sachin, Choryasi, Surat, which was sought during SEAC meeting dated 12/01/2016 for further consideration of the proposal.			

Point wise reply submitted as: Revised water balance diagram including reuse of waste water. Member wise details of the products manufactured and quantity and quality of different streams, effluent quantity booked with the MEPL etc., scheme for segregation of the different streams at member units, Monitoring Protocol, Details regarding inlet norms of the MEPL and monitoring scheme for different streams, Description of treatment facility, Details of the monitoring plan of the member units, details of flue gas and process gas emission, technical specification of APCMs, Adequacy of the air pollution control measures, details of Greenbelt Development Program, copy of stay order by the High Court of Gujarat regarding Amendment to EIA Notification 2006 dated 03/03/2016, copy of CTE and its point wise compliance, revised Summary & Conclusion. Project proponent has also submitted revised Form-1, PFR and revised EIA report with relevant changes. However, Committee found that the details regarding characteristics of different streams, its segregation based on different treatment along with complete mass balance is not adequate. Committee also desired to have clarification regarding raw materials to be used for SYN gas generation. After detailed deliberations, Committee decided to consider the project on satisfactory submission of the following:

- (1) Characteristics of different streams, its segregation based on different treatment along with complete mass balance.
- (2) Clarification regarding raw materials to be used for SYN gas generation.

3.	"Someshwar Market & Hotel"	T.P.S.No.6, R.S.No. 299/1, O.P.No.28/2, F.P. No. 2, Village: Vesu, Ta: Choryasi, Dist: Surat.	Refer back case.
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The SEIAA, Gujarat has accorded environmental clearance to M/s ESS EN Organizers P. Ltd. for the commercial building construction project – "Someshwar Market & Hotel" at T.P.S.No.6, R.S.No.299/1, O.P.No.28/2, F.P.No.2, Village: Vesu, Ta:Choryasi, Dist:Surat vide order no. SEIAA/GUJ/EC/8(a)/67/ 2013 dated 16/04/2013 for the built up area of 26,174.16 m² comprising of 2 commercial buildings housing 220 nos of shops, 23 nos. of super markets, 10 nos. of banquet halls and a hotel with 246 rooms.

Project proponent in the name of M/s Someshwar Organizers vide their letter dated 24/03/2015 submitted revised Form I & Form IA and requested for amendment of Environmental Clearance order dated 16/04/2013 for the proposed changes in planning of the project.

With reference to the receipt of the above mentioned proposal, the project was considered during the meeting of SEAC held on 29/09/2015. The project was recommended for amendment of the Environmental Clearance order dated 16/04/2013 vide this office letter no. EIA-10-2015-7002-E-1116 dated 04/05/2016 based on the decision taken during the meeting of SEAC held on 31/03/2016.

The project was referred back by SEIAA vide letter no. SEIAA/GUJ/EC/8(a)/331/2016 dated 20/05/2016 based on the decision taken in the meeting of SEIAA held on 06/05/2016 for the following reason.

"To verify that the transfer of Environmental Clearance and amendment can be done simultaneously or not."

The matter was discussed during the meeting and it was observed that as per the provisions of the EIA Notification 2006 the project proponent in the name of M/s Someshwar Organizers submitted revised Form I & IA with project plans within a validity period of the Environmental Clearance order no. 16/04/2013 for the proposed amendment. The project was appraised during the meeting of SEAC held on 29/09/2015 for the proposed expansion with new planning.

In view of the above, it was decided to again recommend the project to SEIAA Gujarat for grant of Environmental Clearance for the proposed amendment in terms of expansion in supersession of the earlier

Environmental Clearance order No. SEIAA/GUJ/EC/8(a)/67/2013 dated 16/04/2013.

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	Alcatraz chemicals, Plot.no.155/9-10, GIDC- Nandesari, Nandesari Dist.: Vadodara.
2	Krishna Processor & Traders, Survey no.206/P4, Plot no:13, 14, Vill.: Ravki, Ta.: Lodhika, Dist.: Rajkot
3	M/s: Sodium Metal Pvt. Ltd. Plot no.21, GIDC-Nandesari, Dist.: Vadodara.
4	M/s.: Philoden Agrochem Pvt. Ltd., Plot no. 145,GIDC-Nandesari, Dist.: Vadodara
5	M/s.Piramal Glass Limited , O.N.G.C. Road, Village: Tarsadi, Po: Kosamba (R. S.), Dist: Surat
6	M/s.Aeidan industries , Plot no.: 769/6, GIDC-Jhagadia, Jhagadia, Dist.: Bharuch
7	M/s.Elastopoint Industries, C-63,Saykha Industrial Estate, Saykha GIDC, Vill:Saykha, Vagra, Bharuch
8	M/s.Inol Industry LLP Plot no. C1-475, Road no.4/82-c, GIDC-Sachin, Ta.: Choryasi, Dist.: Surat
9	M/s.Sandhya plasticizers and chemicals , Plot no:1250, GIDC-Sarigam, Ta.: Umbergaon, Dist.: Valsad
10	M/s. Arvalli Castor Derivatives Pvt. Ltd., Jambusar Tarapur Road,521 & 609 Ekalbara, Padra, Vadodara
11	Ecolec Bioscience , Plot no: 805, GIDC Estate, Sarigam, Ta. Umargaon, Dist. Valsad.
12	Building Construction Project at F.P.No.141, R.S.No.471, T.P.S.No.42, Sola – Thaltej, Ahmedabad proposed by M/s Safflya Infra LLP.
13	Shiv Shrushti, Block no. 554, Moje: Umbhel, Ta:Kamrej, Dist: Surat. As the Surat district falls under Safe category from the ground water availability point of view as per the assessment of Central Ground Water Authority (CGWA), it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance with a condition that the necessary permission from Central Ground Water Authority (CGWA) shall be obtained before digging up the borewell within premises as well as abstracting ground water for the proposed project. All the conditions stipulated in the permission of CGWA shall be fulfilled in true spirit.
14	Emerald City, Block No. 34, Moje: Chikhli, Tal: Vyara, Dist: Tapi. As Vyara Taluka of Tapi district falls under Safe category from the ground water availability point of view as per the assessment of Central Ground Water Authority (CGWA), it was decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance with a condition that the necessary permission from Central Ground Water Authority (CGWA) shall be obtained before digging up the borewell within premises as well as abstracting ground water for the proposed project. All the conditions stipulated in the permission of CGWA shall be fulfilled in true spirit.
15	Sky Bell, S. No.- 774/2, O.P. No.- 31/2, F.P. No.- 31/2/1, T.P.S.No.- 114 (Vastral – Ramol), Vill: Vastral, Tal.: Vatva , Dist.: Ahmedabad.
16	Millenium Textile House 2, T.P.No.7 (Anjana), O.P.No.28-A/2 & 28-A/3, F.P.No.95, 96 & 97, Anjana, Dist: Surat.

The additional information received from the project proponents was considered by the committee during the meeting and as it was not found satisfactory, the committee decided to call the project proponent in one of the upcoming meetings of SEAC.

1. Kasha Rivera, T.P.S.No.14(Pal),Block No.343, O.P.No.70, F.P.No.134, Paikie Sub Plot No.B, At-Pal, Surat

The following proponents did not remain present during the meeting:

1. Shyam Sangini 1-(B) (Warehouse Textile Market Project), Block No. 25,27/A, 215,48, O.P. No. 102, 183, 185, & 171/a, F.P. 102, 183, 185, & 171/1, Surat.
2. Megafine Specialty Chemicals Pvt Ltd., Plot No.S.PS 13/1, Sarod, Ta.: Jambusar, Dist. Bharuch.
3. Shubhalakshmi Polyesters Ltd., Survey No. 81-87, 90-96, 98-102, 113,119,120,123-127. Vill. Bhensali, Ta. Vagra, Dist. Bharuch.
4. CRL Terminal Private Limited, Nr. Oil Jetty, Opp. IFFCO, OLD Kandla, Gandhidham, Kutch.

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

Meeting ended with thanks to the Chair and the Members.

Minutes approved by:

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