

Minutes of the 308th meeting of the State Level Expert Appraisal Committee held on 05/10/2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar.

The 308th meeting of the State Level Expert Appraisal Committee (SEAC) was held on 5th October ,2016 at Committee Room, Gujarat Pollution Control Board, Gandhinagar. Following members attended the meeting:

1. *Shri T. P. Singh, Chairman, SEAC.*
2. *Shri V. C. Soni, Vice Chairman, SEAC.*
3. *Shri R. J. Shah, Member, SEAC.*
4. *Dr. V. K. Jain, Member, SEAC.*
5. *Shri Rajesh Shah, Member, SEAC.*
6. *Shri Hardik Shah, IAS, Secretary, SEAC.*

The agenda of TOR/Scoping/Category 8 (a) cases and Appraisal cases was taken up. Twelve (12) cases of TOR/Scoping/Category 8 (a) and three (3) 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	Casa Vyoma	F.P No: 269, S.P. No: 269/A, T.P.S No: 1 Vastrapur, Ahmedabad	Appraisal case.
<p>The project was earlier taken up in the meeting of SEAC held on 29/06/2016. During the meeting held on 29/06/2016, it was observed that they have submitted structural stability certificate for buildings E-F, C-D & K-L stating that the buildings have been designed for basement + H.P.+14 floors considering relevant IS codes, whereas the buildings proposed are maximum of basement + H.P.+13 floors. Further after the proposed expansion, floors of all the buildings will be increased with 2 additional floors and so structural stability certificate for all the building should be submitted. It was found that the project plan submitted by them was not properly legible. After detailed discussion, it was decided to appraise the project only after submission of the following:</p> <ol style="list-style-type: none"> 1. The existing Environmental Clearance needs to be transferred from The Ahmedabad Education Society to M/s Sumedha Spacelink LLP. 2. Justification for the proposed expansion with supporting documents and/or copy of permission obtained from concerned authority for the proposed expansion. 3. Compliance report in respect of the stipulated terms and conditions in the Environmental Clearance order no. SEIAA/GUJ/EC/8(a)/224/2013 dated 22/07/2013. 4. Full size project plan showing building wise & floor wise built up area, FSI area, floor area tables & plot area statement. 5. Structural stability certificate from a structural engineer for all the building stating that the existing foundation of the buildings are capable of bearing the load of the additional floors as proposed after expansion. 6. Detailed Environment Management Plan with respect to various environmental attributes- Water, Air, Noise, Solid wastes including Hazardous Wastes, land etc. of the project both during construction and operation phase and strategy for its implementation with financial outlay. 7. A certificate from the Chartered Civil Engineer stating the percentage of the work completed so far 			

both in terms of project cost and project activities.

8. Soil testing report carried out for the proposed 12 & 13 storied buildings of the project.

Project proponent submitted the above mentioned details along with the project plans, a certificate from Chartered Civil Engineer and soil testing report carried out for the proposed residential buildings for the proposed project vide their letter dated 12/08/2016.

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

It was presented that they have applied to SEIAA Gujarat for transfer of Environmental Clearance in the name of M/s Sumedha Spacelink LLP. Earlier Environment Clearance was granted for FSI area of 42,952.5 m² (FSI of 2.25) and now as per the revised GDCR, FSI of 2.7 is available to the project. Due to availability of the additional FSI, built up area of the project becomes 89,592.92 m² which was 71,667.5 m² as per the environmental clearance granted earlier. Compliance report in respect of the stipulated terms and conditions in the Environmental Clearance order no. SEIAA/GUJ/EC/8(a)/224/2013 dated 22/07/2013 has been submitted. Structural stability certificate has been submitted which states that the buildings are designed for Basement + hollow plinth + 14 floors considering the relevant IS codes in practice. Allocation of Rs. 83.5 lacs & Rs.9.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS including green belt development, rain water harvesting / ground water recharge, solid waste management, sewage treatment & management etc.

Salient Features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	Expansion [SIA/GJ/NCP/54056/2016]
2.	Type of Project	Residential Project
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)
4.	Name of the project	Casa Vyoma
5.	Name of Developer	M/s Sumedha Spacelink LLP
6.	Estimated Project Cost (Rs. In Crores)	90 Crores
7.	Whether construction work has been initiated at site? If yes, details thereof	No

8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²): 19,042.45 FSI area (m²):51,401.86 Total BUA (m²):89,592.92 <table border="1" data-bbox="533 315 1490 517"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>51,414.61</td> <td>51,401.86</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>NA</td> <td>5,454.66</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>1,904.24</td> <td>3,108.81</td> </tr> <tr> <td>Max. building height (m)</td> <td>37.5</td> <td>45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	51,414.61	51,401.86	Ground Coverage (m ²)	NA	5,454.66	Common Plot Area (m ²)	1,904.24	3,108.81	Max. building height (m)	37.5	45
	Permissible	Proposed															
FSI Area (m ²)	51,414.61	51,401.86															
Ground Coverage (m ²)	NA	5,454.66															
Common Plot Area (m ²)	1,904.24	3,108.81															
Max. building height (m)	37.5	45															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings:6 No. of Blocks:12 Scope of buildings/blocks: 4 buildings – basement + hollow plinth + 13 floors. 2 buildings – basement + hollow plinth + 12 floors. No. & size of Residential Units:534 flats. No. & type of Commercial Units : --- Details of amenities if any: No 															
10.	No. of expected residents / users	378 occupants and 100 visitors															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 19.75 Source of water: Water tankers Waste water generation quantity (KL/day): 5.73 Mode of disposal: Soak 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): 372.82 Fresh water requirement (KL/day): 253.56 Source of water: water supply from AMC Waste water generation quantity (KL/day): 291.36 Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening & flushing purpose within premises and remaining quantity of treated sewage will be discharged into the drainage line of AMC. In case of STP provision, capacity of STP: Yes 350 KL/day STP Technology: STP with MBBR reactor. Purposes for treated water utilization: Gardening and Flushing Quantity of treated water to be reused:1.Gardening (KL/day):8.63 2. Flushing (KL/day):110.63 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 AMC. Mode of disposal: As above. 															
13.	Status of water supply and drainage line	Available at site															
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1" data-bbox="533 1899 1490 2009"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>2,500</td> <td>2,500</td> <td>Development of</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	2,500	2,500	Development of							
	Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse														
Top Soil	2,500	2,500	Development of														

				landscape area
		Other excavated earth	47,500	22,500 m ³ will be used for back filling and raising plinth level.
		Construction debris	800	350 m ³ will be used for development of internal road.
		Steel scrap	20	0
		Discarded packing materials	15	0
		Operation Phase:		
		Type of waste	Generation Quantity (Kg/day)	Mode of waste collection
		Dry waste	596.72	White bins
		Wet waste	895.08	Green Bins
		<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 20 number of community bins to be placed in common areas. • Landfill site where waste will be ultimately disposed by local authority: Nearby municipal solid waste collection / dumping site of AMC. 		
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 10,280.37 m² • Parking area requirement for residential units as per GDCR: 10,280.37 m² • Total number of CPS requirement for the project as per NBC :534 • Number of CPS requirement for residential units as per NBC: 534 • Total Parking area provided (m²) & No. of CPS: 22,044.45 m² & 725 CPS • Parking area provided in basement (m²) & No. of CPS:16,256.93 m² & 508 CPS • Parking area provided in hollow plinth (m²) & No. of CPS: 4,331.0 m² & 154 CPS • Parking area provided as open surface (m²) & No. of CPS: 1,456.30 m² & 63 CPS 		
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: existing 12 m wide road which is proposed to be widen up to 18 m. • 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 & 7.5 m. • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5.0 m • Width of all internal roads: 9 m, 7.5 m & 6 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, roof-top thermal insulation, water meters, rain water harvesting & ground water recharge through 5 nos. of percolating wells etc.				
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> Power supply: Maximum demand: 3000 KVA Connected load: Source: Torrent Power Limited % of saving with calculations: ~30% by use of LED, solar lights and star rated energy efficient electronic consumer durables Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area DG Sets: No. and capacity of the DG sets:1 x 125 KVA Fuel & its quantity: HSD, 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, wet riser, automatic sprinkler system in basement, underground static water storage tanks- 2 x 100 KL capacity, terrace tank -10 KL capacity on each building, 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 & no. of buildings	No. of floors	Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)
	A,B,K,L	B +HP+12	411.73	1	2.0	21
	I,J	B+HP+13	411.73	1	2.0	21
	C,D,E,F,G,H	B+HP+13	497.37	1	2.0	26
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> Level of the Ground water table: No. & dimensions of RWH tank(s) : 5 No and 2.5m X 2.0 m X 3.0 m No. and depth of percolations wells : 5 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) :1,192.59 Area covered by shrubs and bushes (m²):included in lawn covered are. Lawn covered area (m²): 1,916.22 Total Green Area (m²):3,108.81 Green Area % of plot area: 16% No. of trees and species to be planted: 286 number of trees of 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	Allocation of Rs. 83.5 lacs & Rs.9.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS including green belt				

	Environmental Management Plan (Rs. in lacs)	development, rain water harvesting / ground water recharge, solid waste management, sewage treatment & management 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	Village from no. 7 submitted by them shows that the land admeasuring 19,402 m ² for residential use is in the name of Sumedha Spacelink LLP thorough its partner.

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

1. Compliance of previous Environment Clearance granted to the project in line with the Office Memorandum no. J-11011/618/2010-IA-II(I) dated 30/05/2012 and J-11013/41/2006-IA.II(I) dated 20/10/2009 published by MoEF&CC.
2. Status of transfer of earlier Environmental Clearance in the name of Sumedha Spacelink LLP.

2	Building construction project by Bharatbhai Gandabhai.	Survey Number: 406/1/1, F.P. No: 53/2, T.P.S No. 42 (Sola Thaltej), Sola, Ahmedabad.	Appraisal case.
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The project was earlier taken up in the meeting of SEAC held on 22/06/2016. During the meeting held on 22/06/2016, it was presented that the travel distance to any of the two staircases from the farthest corner of the floor will be less than 30 m. After detailed discussion, it was decided to appraise the project further only after submission of the following:

1. Copy of permission obtained from Airports Authority of India for the proposed building height.
2. Copy of N.A permission obtained for commercial use of the project site or copy of correspondences made with concerned competent authority for obtaining N.A permission.
3. Details on solar energy utilization for the proposed project and how much of the total energy requirement of the project will be met through the solar energy.
4. Permission from the concerned competent authority or authentic documents showing the availability of the proposed FSI to the project.
5. Plans showing fire fighting installations & floor wise evacuation plan in case of emergency.
6. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
7. Type of activities to be carried out in the commercial units of the proposed project. Notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial

units of the proposed project and any commercial unit shall not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.

8. Details on provision to be made for ventilation, natural lighting and CO sensors in basement.
9. Perspective view of the building(s) to be constructed along with the materials used such as fibers, glass, etc. on the facades or external walls and the impacts thereof on the nearby buildings / residents due to heat island effect and emissions from the air conditioning systems.

Project proponent submitted the above mentioned details and notarized undertaking along with the plans showing fire fighting installations & floor wise evacuation plan vide their letter dated 12/08/2016.

The project appraised based on the additional details submitted as well as facts presented before the committee.

It was presented that they have obtained a permission from Airports Authority of India for maximum structure height of 134.63 m. Copy of N.A permission obtained for commercial use has been submitted. It is proposed install solar panels with capacity of 8153 KWh/day power generation capacity on the terrace floor and it is expected that approximately 48% of the total energy requirement for the project will be met / compensated through the solar energy. Details of the mechanical parking along with the safety features, installation diagram have also been submitted. It is proposed to provide all the basements with 4.1 m height to accommodate the mechanical parking. Natural light & ventilation will be provided in basement through open to sky area in common plot & open ducts. Provision of mechanical ventilation system designed to provide 6 air changes per hour in normal condition & 30 air changes per hour in case of emergency like fire, CO sensors associated with the exhaust fans whose speed level will be automatically maintained as per the CO concentration levels, ductless jet nozzle fan system to push & pull the air in the car park area etc. will be provided in the basements. Perspective view of the building was presented and it was mentioned that maximum efforts will be taken to maintain the U value of the materials being used on outer facades as well as Double Glazing unit will be used to minimize the heat island effect.

Salient features of the project are as under:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/53835/2016]
2.	Type of Project	Commercial Project
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)
4.	Name of the project	Commercial Project
5.	Name of Developer	Bharatbhai Gandabhai
6.	Estimated Project Cost (Rs. In Crores)	50 Crores
7.	Whether construction work has been initiated at site? If yes, details thereof	No

8.	Project Details	<ul style="list-style-type: none"> Land / Plot Area (m²): 3,550.0 FSI area (m²): 14,193 Total BUA (m²):28,598.18 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>14,200</td> <td>14,193</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>NA</td> <td>1,415.49</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>355</td> <td>357.82</td> </tr> <tr> <td>Max. building height (m)</td> <td>70</td> <td>45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	14,200	14,193	Ground Coverage (m ²)	NA	1,415.49	Common Plot Area (m ²)	355	357.82	Max. building height (m)	70	45					
	Permissible	Proposed																				
FSI Area (m ²)	14,200	14,193																				
Ground Coverage (m ²)	NA	1,415.49																				
Common Plot Area (m ²)	355	357.82																				
Max. building height (m)	70	45																				
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings:1 No. of Blocks:1 Scope of buildings/blocks: 3 level basement +Ground floor + 14 floors. No.& size of Residential Units: NA No. & type of Commercial Units: 30 shops, 5 showrooms and 235 offices. Details of amenities if any: No 																				
10.	No. of expected residents / users	1500 occupants and 200 visitors																				
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> Water requirement (KL/day): 21.75 Source of water: 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"> Fresh water requirement (KL/day):71.93 Source of water: Water supply from AMC Waste water generation quantity (KL/day):56.40 Mode of disposal: Into drainage line of AMC. 																				
13.	Status of water supply and drainage line	Available at site																				
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>1600</td> <td>1600</td> <td>Development of landscape area</td> </tr> <tr> <td>Other excavated earth</td> <td>30,400</td> <td>5440 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>250</td> <td>150 m³ will be used for development of internal road.</td> <td>Balance debris will be handed over to local authority or fill in low laying area</td> </tr> <tr> <td>Steel scrap</td> <td>10</td> <td>0</td> <td>Sold to vendors</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	1600	1600	Development of landscape area	Other excavated earth	30,400	5440 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	250	150 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
	Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse																			
Top Soil	1600	1600	Development of landscape area																			
Other excavated earth	30,400	5440 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	250	150 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	8	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>224.8</td> <td>White bins</td> <td>Sold to vendors</td> </tr> <tr> <td>Wet waste</td> <td>337.2</td> <td>Green Bins</td> <td>Municipal bins</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: yes • Capacity and no. of community bins to be placed within premises: 15 kg and 12 number of community bins to be placed in common area • Landfill site where waste will be ultimately disposed by local authority: at the nearby MSW collection point of AMC. 				Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	224.8	White bins	Sold to vendors	Wet waste	337.2	Green Bins	Municipal bins
Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse														
Dry waste	224.8	White bins	Sold to vendors														
Wet waste	337.2	Green Bins	Municipal bins														
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 7,096.5 m² • Parking area requirement for Commercial units as per GDCR:7,096.5 m² • Total number of CPS requirement for the project as per NBC :568 • Number of CPS requirement for commercial units as per NBC:568 • Total Parking area provided (m²) & No. of CPS: 17,647.49 & 568 CPS • Parking area provided in basement (m²) & No. of CPS: 7,806 & 243 CPS • Parking area provided in hollow plinth (m²) & No. of CPS: 723.49 & 25 CPS • Parking area provided as open surface (m²) & No. of CPS:1,312 &57 CPS • Parking area provided (at any other place-specify) (m²) & No. of CPS: Mechanical 7,806 & 243 CPS. 															
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 36 m wide road • Number of Entry & Exit provided on approach road/s: 2 gates will be provided. • Width of Entry & Exit provided on approach road/s:6 m • 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 6.0 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- 8 numbers of solar lighting, roof-top thermal insulation, rain water harvesting & ground water recharge through 1 number of percolating well, to install solar panels with capacity of 8153 KWh/day power generation capacity on the terrace floor which can compensate approximately 48% of the total energy requirement for the project etc.</p>															
18.	Energy Requirement,	<ul style="list-style-type: none"> • Power supply: 															

	Source and Conservation	<p>Maximum demand: 1300 KVA Connected load: 1500 KVA Source: Torrent Power Limited</p> <ul style="list-style-type: none"> • % of saving with calculations: ~40% 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 x 125 KVA Fuel & its quantity: HSD, 25 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: 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 -20 KL capacity (total capacity), provision of refuge area as per the requirement of GDCR & NBC, pump near underground static water storage tank (fire pump) with minimum pressure of 3.5 kg/cm² 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					
	Type & no. of buildings	No. of floors	Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)
	Commercial	3B+G + 14	1,071.0	2	2.1	26
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: • No. & dimensions of RWH tank(s) : 1 No and 2.5m X 2.0 m X 3.0 m • No. and depth of percolations wells : 1 no • 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) :125 • Area covered by shrubs and bushes (m²):100 • Lawn covered area (m²):132.82 • Total Green Area (m²):357.82 • Green Area % of plot area: 10% • No. of trees and species to be planted: 54 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. 12.5 lacs & Rs.7.5 lacs as capital cost & recurring cost respectively has been made for EMP & EMS.				

25.	Details of ecofriendly building materials	Fly ash bricks, aerated blocks, fly ash paving blocks, maximum use of RMC, lead free paints etc.
26.	Details of amenities to be provided to construction workers.	Sanitation facilities, maintaining hygienic condition at the project site to avoid health problems, safe drinking water, PPEs, first aid room with first aid kit & welfare facilities as per the Gujarat Building & Other Construction Workers Rules.
27.	Documents related to land possession.	Village form no. 7 submitted by them shows that the agricultural land is in the name of applicant Mr. Bharatbhai Gandabhai Patel & his family members.

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

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

3.	Shyam Enclave	F.P.No.62, Naroda – 2, R.S.No.959, Nava Naroda, Ahmedabad.	Screening /scoping
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The project proponent did not remain present during the two consecutive meetings of SEAC and hence it was unanimously decided to delist the proposal from the list of applications pending with the SEAC. It was decided to close the file of the proposed project.

4.	Parasmani City	R.S. No.- 79/P, 80/P1, Vill: Karshanpura, Tal: Mandal, Dist.: Ahmedabad.	Screening & scoping.
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Details of the proposed project as presented before the committee are described below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/57486/2016]
2.	Type of Project	Residential
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)
4.	Name of the project	Parasmani city
5.	Name of Developer	Paras Ratna Real Estate India Ltd.
6.	Estimated Project Cost (Rs. In Crores)	22.63 cr.
7.	Whether construction work has been initiated at site? If yes, details thereof	No construction activity has been started

8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²) : 16,646.0 • FSI area (m²): 21,072.36 • Total BUA (m²): 34,313.79 <table border="1" data-bbox="432 315 1286 510"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>24,969.0</td> <td>21,072.36</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>9,155.3</td> <td>6,748.55</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>1,664.60</td> <td>1,705.25</td> </tr> <tr> <td>Max. building height (m)</td> <td>30</td> <td>15.12</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	24,969.0	21,072.36	Ground Coverage (m ²)	9,155.3	6,748.55	Common Plot Area (m ²)	1,664.60	1,705.25	Max. building height (m)	30	15.12
	Permissible	Proposed															
FSI Area (m ²)	24,969.0	21,072.36															
Ground Coverage (m ²)	9,155.3	6,748.55															
Common Plot Area (m ²)	1,664.60	1,705.25															
Max. building height (m)	30	15.12															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 14 • No. of Blocks: 17 • Scope of buildings/blocks: 13 buildings – hollow plinth + 4 floors, 1 building – ground floor + 3 floors. • No. & size of Residential Units: 552 residential units. 500 units of 1 BHK & 52 units of 0 BHK • Details of amenities if any:-- 															
10.	No. of expected residents / users	Fixed population considered for the project: 2760 persons. Floating population considered for the project: 1104 persons.															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 20 • Source of water: Karsanpura Gram Panchayat • Waste water generation quantity (KL/day): 16 • Mode of disposal: Sewage to be generated will be disposed off into septic tank & soak pit system. • Details of reuse of water, if any: In Gardening 															
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Fresh water requirement (KL/day): 416.50 • Source of water: Karsanpura Gram Panchayat • Waste water generation quantity (KL/day): 331.20 • Mode of disposal: Sewage to be generated will be disposed off into septic tank & soak pit system. 															
13.	Status of water supply and drainage line	---															
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1" data-bbox="432 1518 1270 2020"> <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>4,766</td> <td>4,766</td> <td>Will be completely reused for greenbelt development.</td> </tr> <tr> <td>Other excavated earth</td> <td>2,384</td> <td>2,384</td> <td rowspan="2">Completely utilized for back filling, plinth filling & internal road</td> </tr> <tr> <td>Construction debris</td> <td>463</td> <td>463</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	4,766	4,766	Will be completely reused for greenbelt development.	Other excavated earth	2,384	2,384	Completely utilized for back filling, plinth filling & internal road	Construction debris	463	463
	Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse														
Top Soil	4,766	4,766	Will be completely reused for greenbelt development.														
Other excavated earth	2,384	2,384	Completely utilized for back filling, plinth filling & internal road														
Construction debris	463	463															

				development
		Steel scrap	1,092 kg	1,092 kg
		Discarded packing materials	2,384 kg	2,384 kg
		Will be sold to recyclers / vendors.		
		Operation Phase:		
		Type of waste	Generation Quantity (Kg/day)	Mode of waste collection
		Dry waste	276	Mode of Disposal / Reuse
				69 nos. of bins of 80 lit capacity will be provided at various locations.
				The community bins will be regularly emptied at the nearest dumping site.
		<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: 69 nos. of bins of 80 lit capacity will be provided at various locations. • Landfill site where waste will be ultimately disposed by local authority: Karsanpura Gram Panchayat Landfill Area. 		
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 2,107.24 • Parking area requirement for residential units as per GDCR: 2,107.24 • Total number of CPS requirement for the project as per NBC : 276 • Number of CPS requirement for residential units as per NBC: 276 • Total Parking area provided (m²) & No. of ECS: 8,776.28 m² & 330 CPS. • Parking area provided in hollow plinth (m²) & No. of CPS: 6,535.03 m² (113 CPS) • Parking area provided as open surface (m²) & No. of CPS: 2,241.25 m² (127 CPS) 		
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: Viramgam to Bechraji Road • Number of Entry & Exit provided on approach road/s: one gate will be provided. • Width of Entry & Exit provided: 12 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: 9 m & 7.5 m 		
17.	Details of Green Building measures proposed.	Solar lights in common sunlit areas, maximum use of CFL lights, use of variable frequency drive motors, rain water harvesting through ground water recharge etc.		

18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: • Maximum demand: 1656 KW • Connected load: • Source: Gujarat Electricity Board. 																																										
19.	Fire and Life Safety Measures	Fire extinguishers, hose reel, manually operated electric fire alarm system etc. will be provided during the operation phase.																																										
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>No. of Lifts</th> </tr> </thead> <tbody> <tr> <td>Block-A</td> <td>H.P.+4</td> <td>217.35</td> <td>1</td> <td>1.57</td> <td>1</td> </tr> <tr> <td>Block-B,G,I, K,L,M,N,</td> <td>H.P.+4</td> <td>290.19</td> <td>1</td> <td>1.57</td> <td>2</td> </tr> <tr> <td>Block-C+D, E+F,O+P</td> <td>H.P.+4</td> <td>290.19</td> <td>2</td> <td>1.57</td> <td>4</td> </tr> <tr> <td>Block-H</td> <td>H.P.+4</td> <td>292.85</td> <td>1</td> <td>1.50</td> <td>1</td> </tr> <tr> <td>Block-J</td> <td>H.P.+4</td> <td>217.35</td> <td>1</td> <td>1.57</td> <td>2</td> </tr> <tr> <td>Block-Q</td> <td>G+3</td> <td>267.24</td> <td>1</td> <td>1.50</td> <td>2</td> </tr> </tbody> </table>	Type & no. of buildings	No. of floors	Floor area (m ²)	No. of staircase	Width of the staircase (m)	No. of Lifts	Block-A	H.P.+4	217.35	1	1.57	1	Block-B,G,I, K,L,M,N,	H.P.+4	290.19	1	1.57	2	Block-C+D, E+F,O+P	H.P.+4	290.19	2	1.57	4	Block-H	H.P.+4	292.85	1	1.50	1	Block-J	H.P.+4	217.35	1	1.57	2	Block-Q	G+3	267.24	1	1.50	2	
Type & no. of buildings	No. of floors	Floor area (m ²)	No. of staircase	Width of the staircase (m)	No. of Lifts																																							
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Block-Q	G+3	267.24	1	1.50	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: 5 Nos. • Details on Pre-treatment facilities :--- 																																										
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 801.39 • Area covered by shrubs and bushes (m²): Included in lawn covered area. • Lawn covered area (m²): 1,422.62 • Total Green Area (m²): 2,224.01 • Green Area % of plot area: 13.36 % • No. of trees and species to be planted: 250 																																										
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	---																																										
24.	Proposed dust control measures during the construction phase	Temporary windshield barriers, regular water sprinkling, tarpaulin sheet covers on the material during the transportation, uniform piling of sand and proper storage to avoid dusting.																																										
25.	Eco friendly building material usage details.	Use of fly ash paver blocks for pavements/walkways, most of the carpentry structures will be made up of processed engineering wood/ particle board instead of wood, PVC electrical boards,																																										

		maximum use of Portland Pozzolona Cement (PPC),
26.	Details on amenities to be provided to construction workers.	Sanitation facilities, drinking water, municipal solid waste collection facility, first aid facilities etc.
27.	Documents related to land possession.	Copies of village form no. 7 submitted for both the survey numbers show that the land of 80/p/1 for residential use is in the name of M/s Paras Ratna Real Estate (India) Limited and the land of 79/p for residential use is in the name of M/s Paras Ratna Real Estate (India) Limited and others.

During the meeting, the project proponent was suggested to provide STP for treatment of sewage to be generated during the operation phase and to explore the possibility of reusing treated sewage completely within premises. After detailed discussion, it was decided to appraise the project only after submission of the following:

1. Proposal for providing STP for treatment of sewage to be generated during the operation phase. Details of the Sewage Treatment Plant including its capacity, size of each unit, retention time, other technical parameters etc. along with the budget allocation for its installation, operation & maintenance. Quality of treated sewage and application wise break-up of treated sewage quantity to be recycled / reused in flushing & green belt development, its location on the layout plan, STP sludge management plan etc.
2. Revised water balance details considering the reuse of treated sewage for purposes like flushing, gardening etc. within premises.
3. Status on availability of water supply, drainage connection and municipal solid waste collection facility to the proposed project and copy of permission from concerned competent authority in this regard.
4. Management & disposal plan for the municipal solid waste to be generated during operation phase of the project.
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. Realistic details on parking area provision based on the actual parking area available in hollow plinth.
7. Consent of the other land owners of survey number 79/p for issuance of environmental clearance in the name of M/s. Paras Ratna Real Estate (India) Limited.

5.	Building construction project by Mr. Deepak P. Nimbark.	Survey Number: 340/B, 350/B, 347/B, 357/A/B, O.P. Number: 72/2, 81/2, 78/2, 87/2, Final Plot No. 72/2, 81/2, 78/2, 87/2, T.P S. No:1, Shela, Ahmedabad.	Screening /scoping & appraisal.
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Details of the proposed project as presented before the committee are described below:

Sr. No.	Particulars	Details															
1.	Proposal is for	New Project [SIA/GJ/NCP/58528/2016]															
2.	Type of Project	Residential Project															
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)															
4.	Name of the project	Residential project															
5.	Name of Developer	Deepak P. Nimbark															
6.	Estimated Project Cost (Rs. In Crores)	60 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): 9,650 FSI area (m²):26,055 Total BUA (m²):44,390.20 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>26,055</td> <td>26,055</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>NA</td> <td>3,099.96</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>965</td> <td>970</td> </tr> <tr> <td>Max. building height (m)</td> <td>45</td> <td>45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	26,055	26,055	Ground Coverage (m ²)	NA	3,099.96	Common Plot Area (m ²)	965	970	Max. building height (m)	45	45
	Permissible	Proposed															
FSI Area (m ²)	26,055	26,055															
Ground Coverage (m ²)	NA	3,099.96															
Common Plot Area (m ²)	965	970															
Max. building height (m)	45	45															
9.	Building Details	<ul style="list-style-type: none"> No. of Buildings: 3 No. of Blocks: 6 Scope of buildings/blocks: Basement + hollow plinth + 14 floors. No. & size of Residential Units: 336 Flats -3 BHK No. & type of Commercial Units: No Details of amenities if any: One Society Offices 															
10.	No. of expected residents / users	1512 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: 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"> Fresh water requirement (KL/day): 280.01 Source of water: Water supply from Ahmedabad Urban Development Authority (AUDA). Waste water generation quantity (KL/day):220.12 															

		<ul style="list-style-type: none"> • Mode of disposal: Into drainage line of AUDA. 																																				
13.	Status of water supply and drainage line	Available at 2.0km from 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>2,500</td> <td>2,500</td> <td>Will be completely used in development of landscape area / greenbelt.</td> </tr> <tr> <td>Other excavated earth</td> <td>22,500</td> <td>12,500 m³ will be used for back filling and raising plinth level.</td> <td>Balance earth will be used in other project.</td> </tr> <tr> <td>Construction debris</td> <td>430</td> <td>200 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>10</td> <td>0</td> <td>Sold to vendors</td> </tr> <tr> <td>Discarded packing materials</td> <td>8</td> <td>0</td> <td>Sold to vendors</td> </tr> </tbody> </table> <p>Operation Phase:</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>Generation Quantity (Kg/day)</th> <th>Mode of waste collection</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Dry waste</td> <td>370.88</td> <td>White bins</td> <td>Sold to vendors</td> </tr> <tr> <td>Wet waste</td> <td>556.32</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 10 number of community bins to be placed in common area • Landfill site where waste will be ultimately disposed by local authority: AMC 		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	2,500	2,500	Will be completely used in development of landscape area / greenbelt.	Other excavated earth	22,500	12,500 m ³ will be used for back filling and raising plinth level.	Balance earth will be used in other project.	Construction debris	430	200 m ³ will be used for development of internal road.	Balance debris will be handed over to AUDA	Steel scrap	10	0	Sold to vendors	Discarded packing materials	8	0	Sold to vendors	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	370.88	White bins	Sold to vendors	Wet waste	556.32	Green Bins	Municipal bins
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Dry waste	370.88	White bins	Sold to vendors																																			
Wet waste	556.32	Green Bins	Municipal bins																																			
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR:5,211 m² • Parking area requirement for residential units as per GDCR:5,211m² • Total number of CPS requirement for the project as per NBC :336 • Number of CPS requirement for residential units as per NBC: 336 • Total Parking area provided (m²) & No. of CPS: 10,850 m² & 360 CPS • Parking area provided in basement (m²) & No. of CPS: 7,600 & 237 CPS • Parking area provided in hollow plinth (m²) & No. of CPS:2,200 & 78 CPS • Parking area provided as open surface (m²) & No. of CPS: 1,050 & 45 CPS 																																				
16.	Traffic	<ul style="list-style-type: none"> • Width of adjacent public roads: 18 m wide road 																																				

	Management	<ul style="list-style-type: none"> • Number of Entry & Exit provided on approach road/s: 3 gates will be provided. • Width of Entry & Exit provided on approach road/s: 7.5 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 5.0 m • Width of all internal roads: 6.0 m, 4.5 m & 7.5 m. 				
17.	Details of Green Building measures proposed.	Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, water meters, 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 etc.				
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 1,750 KVA Connected load: 1,800 KVA Source: Torrent Power Limited • % of saving with calculations: ~30% by use of LED, solar lights and star rated energy efficient electronic consumer durables • Compliance of the ECBC guidelines (Yes / No),if yes, compliance in tabular form: only roof area • DG Sets: No. and capacity of the DG sets:1 x 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: Fire extinguishers, hose reel, manually operated electric fire alarm system, wet riser, automatic sprinkler system in basement, underground static water storage tank-200 KL capacity, terrace tank -60 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 & no. of buildings	No. of floors	Floor area (m ²)	No. of staircase	Width of the staircase (m)	Travel distance (m)
	A,B,C,D,E,F	HP + 14	392.86	1	2.0	25
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 24m • No. & dimensions of RWH tank(s) : 3 No and 2.0m X 2.0 m X 3.0 m • No. and depth of percolations wells :3 no and 20 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) :350 • Area covered by shrubs and bushes (m²): 200 • Lawn covered area (m²):420 				

		<ul style="list-style-type: none"> • Total Green Area (m²):970 • Green Area % of plot area: 10 % • No. of trees and species to be planted: 145 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. 21.0 lacs & Rs.10 lacs as capital cost & recurring cost respectively has been made for EMP & EMS including green belt development, rain water harvesting / ground water recharge, solid waste management, sewage treatment & reuse 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	Village form no. 7 & 12 submitted for all the survey numbers show that the land for residential use is in the name of applicant.

During the meeting, the project proponent was suggested to provide common open space near the entry/exit gates in front side of the buildings instead of providing it on the back side. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Permission from the concerned competent authority or authentic supporting documents showing availability of the proposed FSI to the project.
2. Explore the possibility of providing common open space in front side of the project and if yes, revised layout plan showing the same should also be submitted.

6	Sikandar Kasam Mansur	Block No. 1083, F.P.No. 337, O.P.No. 337, T.P.S.No.- 66 (Kosad-Variav), Dist. - Surat.	Screening/scoping & appraisal.
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Details of the proposed project as presented before the committee are described below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project [SIA/GJ/NCP/58640/2016]
2.	Type of Project	Commercial
3.	Project / Activity No. [8(a) or 8(b)]	8(a) - Building and construction projects; Category: B
4.	Name of the project	Commercial building project by Mr. Sikandar Kasam Mansur
5.	Name of Developer	Mr. Sikandar Kasam Mansur
6.	Estimated Project Cost (Rs. In Crores)	15 Crore
7.	Whether	No

	construction work has been initiated at site? If yes, details thereof																	
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²): 7,957.0 • FSI area (m²): 16,191.75 • Total BUA (m²): 24,042.87 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area (m²)</td> <td>17,903.25</td> <td>16,191.75</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>3,580.65</td> <td>3,578.80</td> </tr> <tr> <td>Common Plot Area (m²)</td> <td>795.70</td> <td>796.09</td> </tr> <tr> <td>Max. building height (m)</td> <td>-</td> <td>16.50</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area (m ²)	17,903.25	16,191.75	Ground Coverage (m ²)	3,580.65	3,578.80	Common Plot Area (m ²)	795.70	796.09	Max. building height (m)	-	16.50	
	Permissible	Proposed																
FSI Area (m ²)	17,903.25	16,191.75																
Ground Coverage (m ²)	3,580.65	3,578.80																
Common Plot Area (m ²)	795.70	796.09																
Max. building height (m)	-	16.50																
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings: 1 • No. of Blocks: 1 • Scope of buildings/blocks: Ground floor + 4 floors • No. of Residential units: • No. of commercial units: 932 																
10.	No. of expected residents / users	1864 nos. Commercial Users																
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 10.3 • Source of water: water supply from S.M.C • Waste water generation quantity (KL/day): 1.20 • Mode of disposal: Onsite Sanitation facilities (Septic tank/ Soak Pit) will be provided during the construction phase. 																
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Fresh water requirement (KL/day): 84.0 • Source of water: water supply from S.M.C • Waste water generation quantity (KL/day): 66.0 • Mode of disposal: Into drainage line of S.M.C. 																
13.	Status of water supply and drainage line	Water supply and drainage connection of S.M.C will be available to the project during 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 rowspan="2">17,100</td> <td rowspan="2">17,100</td> <td rowspan="3">Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be used for development of greenbelt.</td> </tr> <tr> <td>Other excavated earth</td> </tr> <tr> <td>Construction debris</td> <td>40</td> <td>40</td> </tr> <tr> <td>Steel scrap</td> <td>3.8 MT</td> <td>3.5 MT</td> <td>Will be sold to scrap vendor</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	17,100	17,100	Excavated surplus earth and construction debris will be refilled at low lying areas in the project premises and top soil will be used for development of greenbelt.	Other excavated earth	Construction debris	40	40	Steel scrap	3.8 MT	3.5 MT	Will be sold to scrap vendor
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		Discarded packing materials	1 MT	--	Will be 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 rowspan="2">559 Kg</td> <td rowspan="2">Into separate bins to be provided for dry & wet waste</td> <td rowspan="2">Collection & final disposal through SMC.</td> </tr> <tr> <td>Wet waste</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: The solid wastes to be generated will be segregated into biodegradable and non-biodegradable wastes and collected in separate bins. • Capacity and no. of community bins to be placed within premises: 140 liter each; 12 nos. of bins; • Landfill site where waste will be ultimately disposed by local authority: M.S.W will be finally transported to the final disposal site at Khajod 				Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	559 Kg	Into separate bins to be provided for dry & wet waste	Collection & final disposal through SMC.	Wet waste
Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse											
Dry waste	559 Kg	Into separate bins to be provided for dry & wet waste	Collection & final disposal through SMC.											
Wet waste														
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 4,857.52 m² • Parking area requirement for commercial units as per GDCR: 4,857.52 m² • Total number of CPS requirement for the project as per NBC: 324 • Number of CPS requirement for commercial units as per NBC:324 • Total Parking area provided (m²) & No. of ECS: 8,666.14 m², 344 nos. • Parking area provided in basement (m²) & No. of ECS: 5,726.20 m², 179 nos. • Parking area provided as open surface (m²) & No. of ECS: 974.12 m², 42 nos. • Parking area provided as mechanical parking in basement (m²) & No. of ECS: 1,965.82 m², 123 nos. 												
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 36 m wide road • Number of Entry & Exit provided on approach road/s: 2 nos. • Width of Entry & Exit provided on approach road/s: 4 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 3.0 m • Width of all internal roads: 4 												
17.	Details of Green Building measures proposed.	Maximum utilization of natural light, CFL & LED lighting fixtures in common areas, use of solar energy in external lighting, rain water harvesting & ground water recharge etc.												
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply Maximum demand: 1500 KVA Connected load: -- • Source: D.G.V.C.L 												

		<ul style="list-style-type: none"> • Energy saving measures: Maximum utilization of natural light, CFL & LED lighting fixtures in common areas, use of solar energy in external lighting, aerated block [Cement + Fly Ash + Air mixture] will be used to reduce heat stress inside building etc. • DG Sets: No. and capacity of the DG sets: 1 x 60 KVA Fuel & its quantity: Diesel, 12 Lit./hr. 																								
19.	Fire and Life Safety Measures	Fire extinguisher, hose reel, wet riser, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 75 KL capacity, terrace tank of 25 KL capacity etc.																								
20.	Details on staircase																									
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commercial building	Joint	G + 4	3,245.19	11	1.52	<30																				
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 80-100 ft • No. & dimensions of RWH tank(s) : • No. and depth of percolations wells : 2 nos., 40 m • Details on Pre-treatment facilities : Gravity filter, MOC: PE 																								
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 375.05 • Area covered by shrubs and bushes (m²): inclusive in lawn covered area • Lawn covered area (m²): 421.04 • Total Green Area (m²): 796.09 • Green Area % of plot area: 5% • No. of trees and species to be planted: 125 nos. of trees like Asopalav, Gulamhor, Palm, Neem, Badam tree etc. 																								
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Description</th> <th>Capital Cost (Rs. In Lacs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Landscaping</td> <td>8 Lacs</td> </tr> <tr> <td>2</td> <td>Groundwater Recharge Structure</td> <td>4 Lacs</td> </tr> <tr> <td>3</td> <td>Solar Energy Utilization</td> <td>4 lacs</td> </tr> <tr> <td>4</td> <td>Energy Efficient Lighting</td> <td>2 lacs</td> </tr> <tr> <td>5</td> <td>Solid Waste Management</td> <td>2 lacs</td> </tr> <tr> <td>6</td> <td>Monitoring of Air, Water, Noise & Soil</td> <td>0.75 lacs</td> </tr> <tr> <td colspan="2">Total</td> <td>20.75 Lacs</td> </tr> </tbody> </table>	Sr. No.	Description	Capital Cost (Rs. In Lacs)	1	Landscaping	8 Lacs	2	Groundwater Recharge Structure	4 Lacs	3	Solar Energy Utilization	4 lacs	4	Energy Efficient Lighting	2 lacs	5	Solid Waste Management	2 lacs	6	Monitoring of Air, Water, Noise & Soil	0.75 lacs	Total		20.75 Lacs
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Total		20.75 Lacs																								
24.	Proposed dust control measures during the construction phase	Vertical curtains, water sprinkling, covering the building materials with the tarpaulin sheet etc.																								
25.	Eco friendly building material usage details.	Fly ash based bricks, Ready Mix Concrete, A.C.C Blocks will be used.																								
26.	Amenities for the construction workers.	Sanitation facility, drinking water & tap water, soak pit for domestic waste water collection, first aid box, free medicine, doctor service, PPEs etc.																								

27.	Documents related to land possession.	Copy of village form no. 7 & 12 submitted by them shows that the agricultural land is in the name of applicant & his family members. Copy of application made for obtaining N.A permission has been submitted.
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During the meeting, the project proponent was suggested to increase the parking area provision for the project. It was presented that the proposed shops will be of 8 – 10 m² in size. They have submitted a copy of notarized undertaking stating that no any kind of manufacturing activity shall be allowed in the commercial units of the proposed project and they will not sold/allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics. After detailed discussion, it was decided to consider the project only after submission of the following:

1. Consent of other land owners regarding issuance of the Environmental Clearance in the name of applicant.
2. Explore the possibility of increasing the parking area provision for the project and revised details of the same along with parking plan & complete back up calculation.
3. Details of mechanical parking to be provided (also including its operation, maintenance, energy consumption, appointing trained personnel's etc.) in the basement along with the feasibility of providing mechanical parking considering the basement height.
4. Details on ventilation, lighting arrangements and CO sensors to be provided in the basements. Details on provision to be made for natural lighting & ventilation in the proposed commercial units.
5. Detailed plan for loading / unloading of goods, movement plan, space designated for it, parking area designated for trucks/tempo etc.
6. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided at each floor.

7	North Plaza	Survey No: 193, 195/2, F.P.No: 102, 212, T.P.S. No: 21, Motera, Ahmedabad.	Screening / scoping & appraisal.
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Details of the proposed project as presented before the committee are described below:

Sr. No.	Particulars	Details
1.	Proposal is for	New Project
2.	Type of Project	Commercial Project
3.	Project / Activity No. [8(a) or 8(b)]	8 (a)
4.	Name of the project	Commercial Project
5.	Name of Developer	Keshavlal Hargovandas
6.	Estimated Project Cost (Rs. In Crores)	70 Crores
7.	Whether construction	No

	work has been initiated at site? If yes, details thereof																
8.	Project Details	<ul style="list-style-type: none"> • Land / Plot Area (m²):6,449.0 • FSI area (m²): 17,412.3 • Total BUA (m²):32,084.76 <table border="1"> <thead> <tr> <th></th> <th>Permissible</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>FSI Area</td> <td>17,412.3</td> <td>17,412.3</td> </tr> <tr> <td>Ground Coverage</td> <td>NA</td> <td>3,324.07</td> </tr> <tr> <td>Common Plot Area</td> <td>644.9</td> <td>661.28</td> </tr> <tr> <td>Max. building height</td> <td>70</td> <td>45</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area	17,412.3	17,412.3	Ground Coverage	NA	3,324.07	Common Plot Area	644.9	661.28	Max. building height	70	45
	Permissible	Proposed															
FSI Area	17,412.3	17,412.3															
Ground Coverage	NA	3,324.07															
Common Plot Area	644.9	661.28															
Max. building height	70	45															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings:1 • No. of Blocks:1 • Scope of buildings/blocks: 2 level basement + ground floor + 11 floors • No.& size of Residential Units: NA • No. & type of Commercial Units: 26 shops and 185 offices • Details of amenities if any: No. 															
10.	No. of expected residents / users	1800 occupants and 400 visitors															
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 21.75 • Source of water: 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"> • Fresh water requirement (KL/day):89.64 • Source of water: Water supply from (Ahmedabad Municipal Corporation) AMC. • Waste water generation quantity (KL/day):69.60 • Mode of disposal: Sewer Line 															
13.	Status of water supply and drainage line	Available at site															
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>2,400</td> <td>2,400</td> <td>Development of landscape area</td> </tr> <tr> <td>Other excavated earth</td> <td>45,600</td> <td>20,160 m³ will be used for back filling and raising</td> <td>Balance earth will be used in other projects.</td> </tr> </tbody> </table>		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	2,400	2,400	Development of landscape area	Other excavated earth	45,600	20,160 m ³ will be used for back filling and raising	Balance earth will be used in other projects.			
	Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse														
Top Soil	2,400	2,400	Development of landscape area														
Other excavated earth	45,600	20,160 m ³ will be used for back filling and raising	Balance earth will be used in other projects.														

				plinth level.	
		Construction debris	320	200 m ³ will be used for development of internal road.	Balance debris will be handed over to AMC
		Steel scrap	10	0	Will be sold to vendors
		Discarded packing materials	8	0	Will be sold to vendors
		Operation Phase:			
		Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse
		Dry waste	232	White bins	Sold to vendors
		Wet waste	348	Green Bins	Municipal bins
		<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 12 number of community bins to be placed in common area • Landfill site where waste will be ultimately disposed by local authority: nearby waste collection point of AMC. 			
15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 8,706.15 m² • Parking area requirement for Commercial units as per GDCR: 8,706.15 m² • Total number of CPS requirement for the project as per NBC :697 • Number of CPS requirement for commercial units as per NBC:697 • Total Parking area provided (m²) & No. of CPS: 24,610 m² & 779 CPS • Parking area provided in basement (m²) & No. of CPS: 9,424.07 m² & 294 CPS • Parking area provided in hollow plinth (m²) & No. of CPS: 115.7 & 4 CPS • Parking area provided as open surface (m²) & No. of CPS:900 & 39 CPS • Parking area provided as mechanical parking in basement (m²) & No. of CPS: 14,170.23 & 442 CPS. 			
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads: 24 m, 12 m and 9 m (service road) wide road • Number of Entry & Exit provided on approach road/s: Three gates will be provided. • Width of Entry & Exit provided on approach road/s: 6 m & 4.5 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 			

		<ul style="list-style-type: none"> • Width of all internal roads: minimum 6 m & 4.5 m. 												
17.	Details of Green Building measures proposed.	Maximum use of natural lighting through architectural design, energy efficient motors & pumps, water efficient taps, maximum use of RMC & aerated blocks, use of LED lighting fixtures and low voltage lighting, solar lighting in open and landscape areas- 12 numbers of solar lights, roof-top thermal insulation, water meters, rain water harvesting & ground water recharge through 5 nos. of percolating wells etc.												
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Maximum demand: 2,000 KVA Connected load: 2,200 KVA Source: UGVCL • % of saving with calculations: ~40% by use of LED lights, star rated energy efficient electronic consumer durables and solar lights. • Compliance of the ECBC guidelines (Yes / No), if yes, compliance in tabular form: only roof area • DG Sets: No. and capacity of the DG sets: 1 x 125 KVA Fuel & its quantity: HSD, 25 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: Fire extinguishers, hose reel, manually operated electric fire alarm system, wet riser, automatic sprinkler system, underground static water storage tank-300 KL capacity, terrace tank -60 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" style="margin-left: 20px;"> <thead> <tr> <th>Type & no. of buildings</th> <th>No. of floors</th> <th>Maximum 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>Commercial</td> <td>2B+G+11</td> <td>2,829.25</td> <td>2</td> <td>2.13 & 2.06</td> <td><30</td> </tr> </tbody> </table>		Type & no. of buildings	No. of floors	Maximum Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)	Commercial	2B+G+11	2,829.25	2	2.13 & 2.06	<30
Type & no. of buildings	No. of floors	Maximum Floor area m ²	No. of staircase	Width of the staircase (m)	Travel distance (m)									
Commercial	2B+G+11	2,829.25	2	2.13 & 2.06	<30									
21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 21 m • No. & dimensions of RWH tank(s) : 2 No and 2.5m X 2.0 m X 3.0 m • No. and depth of percolations wells : 2 no and 17 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) :250 • Area covered by shrubs and bushes (m²):200 • Lawn covered area (m²):211.28 • Total Green Area (m²):661.28 • Green Area % of plot area: 10% • No. of trees and species to be planted: 97 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. 14.5 lacs & Rs.8 lacs as capital cost & recurring cost respectively has been made for EMP & EMS including green belt development, rain water harvesting / ground water recharge, solid waste management, sewage treatment & management 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	Copy of village form no. 7/12 submitted for survey number 193 shows that the agricultural land is in the name of applicant & for 195/2 shows that the agricultural land is in the name of brother of the applicant. Notarized agreement letter from the brother of the applicant has been submitted. Copy application made for obtaining N.A permission for both the survey numbers has been submitted which shows that the application has been made by the applicant & others.

During the meeting, perspective view of the building was presented and it was mentioned that maximum efforts will be taken to maintain the U value of the materials being used on outer facades as well as Double Glazing unit will be used to minimize the heat island effect. Natural light & ventilation will be provided in basement through open to sky area in common plot & open ducts. Provision of mechanical ventilation system designed to provide 12 air changes per hour in normal condition & 30 air changes per hour in case of emergency like fire, CO sensors associated with the exhaust fans whose speed level will be automatically maintained as per the CO concentration levels, ductless jet nozzle fan system to push & pull the air in the car park area etc. will be provided in the basements. Limited traffic survey was carried out on a road connecting Visat Junction & Gandhinagar which shows that the road having total carrying capacity of 4400 PCU will be adequate enough to cater the total traffic load of 2561 PCU. It was presented that the project site is falling in the Residential zone – 1 and as per the revised GDCR the projects falling in the Residential zone – 1 within S.P. ring road can utilize maximum FSI upto 2.7. It was found that they have proposed to provide 2 layer mechanical parking in 2nd basement & 3 layer mechanical parking in the 1st level basement. The project proponent was asked to submit the details of the proposed mechanical parking which should include feasibility of 3 layer mechanical parking in the basement for such type of project, standard height requirement for it & height to be provided, operation & maintenance of 2 & 3 layer parking, cost effectiveness of the proposed mechanical parking etc. They were also suggested to explore the possibility of providing 3rd level basement for parking the vehicles instead of the proposed 3 layer mechanical parking. After detailed discussion, it was decided to consider the project further only after submission of the following:

1. A notarized undertaking stating that any kind of manufacturing activity will not be allowed in the commercial units of the proposed project and any commercial unit will not be sold / allotted for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.

2. Details on common amenities like drinking water facility, sanitary blocks, first aid facilities etc. to be provided on each floor.
3. Details of the proposed mechanical parking which should include feasibility of 3 layer mechanical parking in the basement of such type of project, standard height requirement for it & height to be provided, operation & maintenance of 2 & 3 layer parking, cost effectiveness of the proposed mechanical parking etc.
4. Explore the possibility of providing 3rd level basement for parking the vehicles. In case of provision of 3rd level basement, revised project plans & revised Form -1 & Form – 1A should also be submitted along with the revised parking area provision details.
5. Floor wise details on number of staircases to be provided and to the scale drawing showing that the travel distance to any of the staircase on the floor will be less than 30 m.

8	Building construction project by Mr. Hasmukh Dhaduk.	B.No.208, O.P.No.86, F.P.No.118, T.P.S.No.9 (Palanpore - Bhresan), Palanpore, Dist: Surat.	Screening/scoping & appraisal.
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Details of the proposed project as presented before the committee are described 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	Residential project by Mr. Hasmukh Dhaduk.															
5.	Name of Developer	Hasmukh Dhaduk															
6.	Estimated Project Cost (Rs. In Crores)	70															
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): 10,197.0 • FSI area (m²): 22,784.40 • Total BUA (m²): 31,086.74 <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>22,790.25</td> <td>22,784.40</td> </tr> <tr> <td>Ground Coverage (m²)</td> <td>2,906.10</td> <td>2,320.01</td> </tr> <tr> <td>Common Plot Area(m²)</td> <td>1,019.70</td> <td>1,020.00</td> </tr> <tr> <td>Max. building height (m)</td> <td>42.28</td> <td>42.28</td> </tr> </tbody> </table>		Permissible	Proposed	FSI Area(m ²)	22,790.25	22,784.40	Ground Coverage (m ²)	2,906.10	2,320.01	Common Plot Area(m ²)	1,019.70	1,020.00	Max. building height (m)	42.28	42.28
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Max. building height (m)	42.28	42.28															
9.	Building Details	<ul style="list-style-type: none"> • No. of Buildings:5 • No. of Blocks:6 • Scope of buildings/blocks: Basement + hollow plinth + 12 floors • No. & size of Residential Units: 288 Flats (2 & 3 BHK) • No. & type of Commercial Units: Not Applicable, • Details of amenities if any: None 															
10.	No. of expected	1536 residents															

	residents / users																																				
11.	Water & waste water details during construction phase	<ul style="list-style-type: none"> • Water requirement (KL/day): 19.95 • Source of water: Tanker/ SMC • Waste water generation quantity (KL/day):4.00 • Mode of disposal: Soak pit / Septic Tank system • Details of reuse of water, if any:- None 																																			
12.	Water & waste water details during operation phase	<ul style="list-style-type: none"> • Fresh water requirement (KL/day): 234.50 • Source of water: Surat Municipal Corporation (SMC) • Waste water generation quantity (KL/day): 184.40 • Mode of disposal: SMC Drainage line 																																			
13.	Status of water supply and drainage line	SMC will supply water and drainage.																																			
14.	Solid waste Management	<p>Construction Phase:</p> <table border="1"> <thead> <tr> <th></th> <th>Generation (m³)</th> <th>Quantity to be reused (m³)</th> <th>Mode of Disposal / Reuse</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>2,900</td> <td>2,900</td> <td>Will be used for greenbelt development within premises</td> </tr> <tr> <td>Other excavated earth</td> <td>5,900</td> <td>5,900</td> <td>Backfilling and disposed to low lying area</td> </tr> <tr> <td>Construction debris</td> <td>500</td> <td>500</td> <td>Premises</td> </tr> <tr> <td>Steel scrap</td> <td>1,500 – 1,800 kg</td> <td>-</td> <td>Sold to Scrap Vendor</td> </tr> <tr> <td>Discarded packing materials</td> <td>500 kg</td> <td>-</td> <td>Sold to Scrap 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</td> <td rowspan="2">768</td> <td>Bins</td> <td>SMC</td> </tr> <tr> <td>Wet waste</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Details of segregation if to be done: • Capacity and no. of community bins to be placed within premises: 36nos. of bins of 80 lit. capacity. • Landfill site where waste will be ultimately disposed by local authority: SMC 		Generation (m ³)	Quantity to be reused (m ³)	Mode of Disposal / Reuse	Top Soil	2,900	2,900	Will be used for greenbelt development within premises	Other excavated earth	5,900	5,900	Backfilling and disposed to low lying area	Construction debris	500	500	Premises	Steel scrap	1,500 – 1,800 kg	-	Sold to Scrap Vendor	Discarded packing materials	500 kg	-	Sold to Scrap Vendor	Type of waste	Generation Quantity (Kg/day)	Mode of waste collection	Mode of Disposal / Reuse	Dry waste	768	Bins	SMC	Wet waste	-	-
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15.	Parking Details	<ul style="list-style-type: none"> • Total parking area requirement for the project as per GDCR: 3,417.66 m² • Parking area requirement for residential units as per GDCR: 3,417.66 m² • Total number of CPS requirement for the project as per NBC :288 																																			

		<ul style="list-style-type: none"> • Number of CPS requirement for residential units as per NBC: 288 • Total Parking area provided (m²) & No. of ECS: 8,205.85 & 304 • Parking area provided in basement (m²) & No. of ECS:2,948.69 & 92 • Parking area provided in hollow plinth (m²) & No. of ECS: 2,125.56 & 76 • Parking area provided as open surface (m²) & No. of ECS: 3,131.60 & 136 																														
16.	Traffic Management	<ul style="list-style-type: none"> • Width of adjacent public roads:18.0 m • Number of Entry & Exit provided on approach road/s: 2 gates will be provided. • Width of Entry & Exit provided on approach road/s:6.0 m • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): 4 m • Width of all internal roads:6 m & 7.50 m 																														
17.	Details of Green Building measures proposed.	Solar lights in common sunlit areas, maximum use of LED lights, use of variable frequency drive motors, rain water harvesting through ground water recharge etc.																														
18.	Energy Requirement, Source and Conservation	<ul style="list-style-type: none"> • Power supply: Torrent Power Ltd. Maximum demand:1500 kw Connected load:1500 kw Source: DGVCL • DG Sets:- No. and capacity of the DG sets:2 & 250 KVA Fuel & its quantity:HSD; 100 lit/hr 																														
19.	Fire and Life Safety Measures	Fire extinguishers, hose reel, fire hydrants, sprinkler system on each floor, fire alarm call point at each floor with sounders capable of being heard all throughout the building, underground water tanks of 6 x 100 KL, terrace water tank of 25 KL on each building etc.																														
20.	Details on staircase																															
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21.	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table: 100 m • No. & dimensions of RWH tank(s) :3 m x 3 m x 3.0 • No. and depth of percolations wells :3 & 100 m • Details on Pre-treatment facilities :Filtration 																														
22.	Green area details	<ul style="list-style-type: none"> • Tree covered area (m²) : 420.0 • Area covered by shrubs and bushes (m²):- • Lawn covered area (m²): 1,020.0 • Total Green Area (m²): 1,440.0 • Green Area % of plot area: 10 																														

		• No. of trees and species to be planted:153
23.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)	---
24.	Proposed dust control measures during the construction phase	All the loose material either stacked or transported will be provided with suitable covering such as tarpaulin, water sprinkling at the locations where dust generation is anticipated and on the storage of sand and loose construction materials, provision of personal protective equipment for the workers, use of Ready Mix Concrete (RMC).
25.	Eco friendly building material usage details.	Fly ash bricks, fly ash cement (PPC), paving blocks, lead free paints, Ready Mix Concrete (RMC) will be used.
26.	Details of amenities to be provided to construction workers.	Sanitation & drinking water facilities, regular health check up of workers, shelter for rest etc.
27.	Documents related to land possession	Copy of N.A order submitted by them shows that the land for residential use is in the name of applicant & others.

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

1. Consent of other land owners regarding issuance of the Environmental Clearance in the name of applicant.
2. 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.

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

1. Building Construction Project at Plot No.1, S.No.26/P/5, Village Adhewada, Dist: Bhavnagar proposed by Mr. Kanubhai Nagjibhai Kakadia.
2. City Centre-2 (Jas Infracon LLP.),F.P.No.21&27, T.P.S.No.18 (Sarangpur), Rajpur, Ta.Hirpur, Ahmedabad.

it was decided to recommend the above project to SEIAA Gujarat for grant of Environmental Clearance with the proposed expansion in supersession of the earlier environmental clearance order no. SEIAA/GUJ/EC/ 8(a)/77/2008 dated 19/07/2008 with parking area provision of 62,509.08 m² [9,470.94 m² as open surface parking + 9,470.94 m² as mechanical parking at open surface + 19,353.60 m² in basement + 19,353.60 m² as mechanical parking in basement + 4,860.0 m² at terrace floor] which is equivalent to 2245 CPS as presented before the committee during the meeting held on 09/08/2016.

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9.	SIA/GJ/IND2/16686/2016	M/s: Nutraplus India Ltd. (Unit-2) Plot no. C-198, Sayakha industrial estate, Ta.: Vagra, Dist. Bharuch	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Nutraplus India Ltd., Unit-2 (herein after Project Proponent – PP) has submitted revised application vide their proposal no. SIA/GJ/IND2/17200/2016 dated 08/09/2016.
- Earlier PP was called for presentation in the SEAC meeting dated 03/08/2016.
- During the meeting, looking to the product profile, while concerning about the manufacturing of API drugs and Dyes manufacturing within the same premises, Project proponent could not replied satisfactorily. After detailed discussion, project proponent informed that they will remove the Dye manufacturing products from the proposed project. PP has requested to consider their project for TOR considering API drugs as products, which was not considered by the Committee and asked to submit Revised Form-1 with relevant details. After deliberation on various aspects, the committee unanimously decided to consider the case for TOR/Scoping only after submission of revised proposal.

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

This is a new unit proposes the manufacturing of Synthetic organic chemicals (Bulk drugs and Bulk drugs intermediates) as tabulated below:

Sr. no.	Name of the Products	Quantity MT/Month
1	IBUPROFEN	400
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	PHENYLEFFRINE 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	
1	ACID YELLOW	
2	ACID ORANGE	
3	ACID RED	
4	ACID GREEN	
5	ACID BROWN	
6	ACID BLACK	
7	ACID BLUE	
8	ACID VIOLET	
9	MIX DYES	
Total		400 MT/Month

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 16,067.36 sq. m & unit has proposed 5300 sq mtr area for the green belt development /Tree plantation. The capital cost of the project is INR. 50 Crores

Details of water consumption and waste water generation :

Source of Water Supply (GIDC, Bore well, Surface water etc...)	GIDC Water Supply
Water consumption (149 KL/day—89 Fresh & 60 Recycled)	Industrial: (Process, Washings, Utilities etc.) 125 KL/Day
	Domestic: 21 KL/Day , Gardening: 3 KL/day
Waste water generation (KL/day)	Industrial: (Process, Washings, Utilities etc.) 81 KL/Day
	Domestic: 21 KL/Day
Treatment facility with capacity (ETP, CETP, MEE, STP etc).	<u>Dilute Stream</u> ETP consisting primary , Secondary and Tertiary treatment followed by R.O. Plant <u>Concentrated Stream</u> High TDS stream will be treated in solvent stripper & distillation unit.

Mode of Disposal & Final meeting point	Industrial: Dilute stream will be treated in ETP consisting primary, secondary & tertiary treatment and R.O. Condensate will be reused. Concentrated stream shall be subjected to Solvent Stripper and reused or Sold outside after the distillation.
	Domestic: - Domestic wastewater will be treated in Septic Tank/Soak Pit.
Reuse/Recycle details	Out of 149 KL/Day, total 60 KL/Day of water will be reused in boiler and Cooling.

RO permeate stream (60 KL/day) will be reused and RO reject stream (25 KL/day) will be sent to spray dryer.

Details of stacks & vents (proposed)

1) Flue gas stack

SR. NO.	STACKS ATTACHED TO	STACK HEIGHT (m)	FUEL	STACK DIAMETER (m)	POLLUTANTS	AIR POLLUTION CONTROL SYSTEM
1.	BOILER (6 TPH x 2 Nos.)	30	Coal/Agro Waste	0.8	SPM SO ₂ NOx	Cyclone separator + Bag Filter + Scrubber
2.	Thermopack Boiler (1 Nos.)	30	Coal/Agro Waste	0.8		
3.	DG Set1	11	Diesel	0.1		

Total Coal/Agro waste consumption will be 18 MT/day for Boilers and TFH.

2) Process stack

SR. NO.	PROCESS STACK ATTACHED TO	STACK HEIGHT (m)	STACK DIAMETER (m)	AIR POLLUTION CONTROL SYSTEM	POLLUTANTS
1.	Process Vent-1	20	0.3	Two Stage Scrubber (Water + Alkali)	HCl SO ₂
2.	Process Vent-2	20	0.3	Two Stage Scrubber (Water + Alkali)	Cl ₂
3.	Process Vent-3	20	0.3	Two Stage Scrubber (Water + HCl)	NH ₃

Details of hazardous waste generation & disposal

SR. NO.	NAME OF WASTE	TOTAL QTY. MT/MONTH	MODE OF DISPOSAL
1	ETP Sludge	53	Collection, Storage, Transportation and Disposal at nearest TSDF site.
2	Discarded Containers	3	Collection, Storage, Decontamination & sold to GPCB authorize ed vendors.

3	HDPE Bags	1	Collection, Storage, Decontamination & sold to GPCB authorized vendor.
4	Distillation Residue	30	Collection, Storage, Transportation & Sent to Cement Industry for co-processing or Sent to nearest common Incineration Site.
5	Used Oil	0.5	Collection, Storage, Transportation & Sell to registered reprocessor.
6	Process Waste	40	Collection, Storage, Transportation & Sent to Cement Industry for co-processing or Sent to nearest common Incineration Site.
7	Spent Carbon	16	Collection, Storage, Transportation & sent to Cement Industry for co-processing or Sent to nearest common Incineration Site.
8	Iron Sludge	100	Collection, Storage, Transportation & Sent to Cement Industry.
9	Spent Catalyst	2	Collection, Storage, Transportation & return back to supplier for re-generation or Sent to nearest common Incineration Site.
10	Spray Dryer Salt	100	Collection, Storage, Transportation and Disposed at nearest TSDF site
11	HCl (32%)	400	Collection, Storage & Reuse in Roxarsone (400)
12	H ₂ SO ₄ (70%)	320	Collection, Storage & Reuse in , Metronidazole & Ornidazole (320)
13	Ammonium Chloride	56	Collection, Storage, Transportation and sell to Fertilizer Industry, Pharmaceutical Industry.
14	Sodium Sulphate	150	Collection, Storage, Transportation and sell to Detergent Industry, Pulp & Paper Industry or Glass Industry.
15	Sodium Bromide	68	Collection, Storage, recovery and sell to Pharmaceutical Industries & Petroleum Industries.
16	KCl Salt	24	Collection, Storage, recovery and sell to Fertilizer Industries, & Petroleum Industries.
17	Sodium Carbonate	100	Collection, Storage & Reuse in Mesalmine & Salbutamol Sulphate (100)
18	AlCl ₂	55	Collection, Storage and Reuse in Ibufrofen, Mebendazole, Salbutamol Sulphate etc.(55)
19	Al(OH) ₃	230	Collection, Storage, Transportation and sell to Pharmaceutical Industries & Aluminium Metal Manufacturing Industry.
20	NaOH	64	Collection, Storage & Reuse in Mesalmine (64)
21	MnO ₂	160	Collection, Storage, Transportation and sell to end users.

22	Methane Sulfonic Acid	180	Collection, Storage, Transportation and sell to end users.
23	Methyl Sodium Sulphate	255	Collection, Storage, Transportation and sell to end users.
24	MMA Solution	52	Collection, Storage, recovery and sell to Pesticide Industries, Animal Nutrient Mfg. Industries, Paper Industries & Resin Industries.
25	Ether	200	Collection, Storage, recovery and sell to Dimethyl Sulfate Mfg. Industries. & Chemical Industry as a Solvent.
1.	Fly Ash	30	Collection, Storage, Transportation and sell to brick manufacturer

Observations / Discussion:

Technical presentation made during the meeting by project proponent. Committee observed that project proponent has revised their proposal and submitted revised Form-1 & PFR. Project proponent has removed the Dye manufacturing products from the proposed project. Committee put emphasis on complete ZLD with sound environmental management system. 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 Saykha.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. Layout plan of the factory premises. (Show all the production plants including Raw material & Products storage area). Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
4. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
5. Details of manufacturing process / operations of each product along with chemical reactions, mass balance, consumption of raw materials etc. Details on strategy for the implementation of cleaner production activities.
6. Full name and chemical formula of all the raw materials and products. Details on end use of each product.
7. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
8. Action plan to reuse or consume entire quantity of Spent acids/waste streams within premises to convert into valuable products instead of sending such spent acids to outside premises.
9. Detailed mass balance and water balance (including reuse-recycle, if any) along with qualitative and quantitative analysis of the each waste stream from the processes.
10. Assessment of source of the water supply with adequacy of the same to meet with the

- requirements for the project. Permission obtained from the GIDC for supply of raw water. Undertaking stating that no bore well shall be dug within the premises.
11. Explore the possibility of reuse / recycle and other cleaner production options for reduction of wastes. Details of methods to be adopted for the water conservation.
 12. Qualitative and quantitative analysis of waste water to be generated from the manufacturing process of each product to be manufactured along with mass balance.
 13. Segregation of waste streams and details on specific treatment and disposal of each stream.
 14. Action plan for 'Zero' discharge of effluent shall be included. Notarized undertaking for assuring that underground drainage connection will not be taken in the unit.
 15. Details of ETP including dimensions of each unit along with schematic flow diagram. Inlet, transitional and treated effluent qualities with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Inlet effluent quality should be based on worst case scenario considering production of most polluting products that can be manufactured in the plant concurrently.
 16. 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/NF system.
 18. Undertaking stating that a separate electric meter will be provided for the ETP, RO system, Stripper & Spray Dryer.
 19. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
 20. Certification of adequacy of proposed ZLD scheme through credible institutes of National repute.
 21. To estimate & monitor ground water quality & its contamination status, piezometer wells, one one on up gradient of the groundwater flow and other three on the down gradient side of the ground water flow of the proposed project at different depth based on available ground water depth shall be established and all the parameters mentioned in IS 10:500 for potable water standard shall be monitored.
 22. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
 23. Application wise break-up of effluent quantity to be recycled / reused in various applications like sprinkling for dust control and green belt development etc. In case of land application, details on availability of sufficient open land for utilizing effluent for plantation / gardening. How it will be ensured that treated effluent won't flow outside the premises linked with storm water during high rainy days.
 24. Plans for management, collection and disposal of waste streams to be generated from spillage, leakages, vessel washing, used container washing etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.

25. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
26. Anticipated environmental impacts due to the proposed project/production may be evaluated for significance and based on corresponding likely impacts VECs (Valued Environmental Components) may be identified. Baseline studies may be conducted within the study area of 10 km for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
27. One complete season base line ambient air quality data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall be in accordance with the revised National Ambient Air Quality Standards as well as project specific parameters. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
28. Modeling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modeling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modeling should be superimposed on satellite Image / geographical area map.
29. Base line status of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
30. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution control measures for process gas emission, measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate from each utility (vii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (viii) List the sources of fugitive emission along with its quantification and proposed measures to control it.
31. Details on management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual handling of the hazardous wastes will be minimized. Methodology of de-contamination and disposal of discarded containers and its record keeping.
32. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, if any.
33. Name and quantity of each type of solvents to be used for proposed production. Details of solvent recovery system including mass balance, solvent loss, recovery efficiency feasibility of reusing the recovered solvents etc. for each type of solvent.
34. A detailed EMP including the protection and mitigation measures for impact on human health and

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

35. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
36. Occupational health impacts on the workers and mitigation measures proposed to avoid the human health hazards along with the personal protective equipment to be provided. Provision of industrial hygienist and monitoring of the occupational injury to workers as well as impact on the workers. Plan for periodic medical checkup of the workers exposed. Details of work place ambient air quality monitoring plan as per Gujarat Factories Rules.
37. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
38. Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios should be carried out. The worst-case scenario should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the facilities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures including On-Site / Off-Site Emergency Plan should be provided.
39. MSDS of all the products and raw materials.
40. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.
41. Details of quantity of each hazardous chemical (including solvents) to be stored, Material of Construction of major hazardous chemical storage tanks, dyke details, threshold storage quantity as per schedules of the Manufacture, Storage & Import of Hazardous Chemicals Rules of major hazardous chemicals, size of the biggest storage tank to be provided for each raw material & product etc. How the manual handling of the hazardous chemicals will be minimized?
42. Details of the separate isolated storage area for flammable chemicals. Details of flame proof electrical fittings, DCP extinguishers and other safety measures proposed. Detailed fire control plan for flammable substances and processes showing hydrant pipeline network, provision of DG Sets, fire pumps, jockey pump, toxic gas detectors etc.
43. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
44. Detailed five year greenbelt development program including annual budget, types & number of trees to be planted, area under green belt development [with map], budgetary outlay; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the nearby areas and elsewhere.
45. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment. Submit a detailed plan

for social corporate responsibilities, with appropriate budgetary provisions for the next five years and activities proposed to be carried out; specific to the current demographic status of the area.

46. A tabular chart for the issues raised and addressed during public hearing/consultation and commitment of the project proponent on the same should be provided. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same should be provided.
47. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA.
48. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
49. Does the company have a system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA Report.
50. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
51. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
52. A tabular chart with index for point-wise compliance of above TORs.

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

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 04/10/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

10	SIA/GJ/IND2/6629/2016	M/s: Asiatic Pharma Chem Plot No. 37, GIDC Industrial Estate, Village: Jhagdia, Ta. Jhagadia, Dist. Bharuch.	Appraisal
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Project / Activity No.: 5(f)

- M/s: Asiatic Pharma Chem (herein after Project Proponent – PP) has submitted an application vide their online proposal no. SIA/GJ/IND2/17245/2016 dated 13/09/2016 along with final EIA report regarding grant of Environmental Clearance.
- EIA Report is prepared by M/s: San Envirotech Pvt. Ltd. based on the ToR issued to the project proponent in the SEAC meeting dated 24/02/2016.

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

This is a new unit proposes for the manufacturing of Synthetic Organic Chemicals (Bulk drugs & Drugs Intermediates) as tabulated below:

Sr. no.	Name of Product/Activity	Quantity MT/Month
1.	2 Mercaptobenzimidazole	150 MT/Month
2.	5 Methoxy 2 Mercaptobenzimidazole	
3.	5 Methyl 2 Mercaptobenzimidazole	
4.	5 Difloromethoxy 2 Mercaptobenzimidazole	
5.	4 Hydroxy 3 Amino Chlorobenzene	
6.	4 Hydroxy 3 Chloro aniline	
7.	4 Hydroxy 3 Amino Benzene Sulphonamide	
8.	4 Hydroxy 3 Amino Benzene Methyl Sulphonamide	
9.	4 Hydroxy 3 Amino Benzene 2 Carboxy sulpho anilide	
10.	3,5 Dinitro benzoic acid	
11.	4 Amino 3 Nitro Anisole	
12.	4 Difloromethoxy 2 Nitro Aniline	
13.	4 Hydroxy 3 Amino Benzene Sulpho Anilide	

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 12800 sq. m & unit has proposed 4225 sq m area for the green belt development/Tree plantation. Expected project cost is Rs. 4.5 Crores. Total cost of the project is INR 4.5 Crores for the proposed expansion. Out of which INR 0.70 Crores will be earmarked towards environmental protection measures and INR 1.20 Crores will be invested towards recurring cost. Total water consumption for proposed project will be 199.5 KL/day. Unit has proposed 80 KL/day of condensate water from MEE. Hence, fresh water requirement will be 119.5 KL/day which will be sourced from GIDC water supply. Industrial waste water generation will be 138.5 KL/day. Wastewater

from process (120 KLD) will be taken in Multiple Effect Evaporator (MEE- Cap. 3 m³/hr) followed by Crystallizer (Cap. 850 Kg/hr). and condensate will be recycled in greenbelt & utility. Balance w/w will be disposed in GIDC drainage. W/w generation from washing, reject of water treatment and utilities will be treated in primary ETP and disposed to GIDC drainage. Total condensate generation will be 116.7 KL/day. Out of which 80 KL/day of condensate will be recycled in greenbelt & utility and balance quantity of condensate (36.7 KL/day) will be disposed in GIDC drainage with treated waste water of dilute stream. Unit has proposed separate ETP for w/w generation from washing and utilities (18.5 KL/day) which will be disposed to GIDC drainage. Hence, total disposal of effluent to GIDC drainage will be 55.2 KL/day (36.7 KL from MEE condensate & 18.5 from ETP of dilute stream). Domestic waste water (4.5 KL/day) will be disposed off into soak pit system. It is proposed to install one steam Boiler (2TPH) and one TFH (2 Lac Kcal/hr). Natural Gas@ 3000 SCM/day will be used in Boiler & 1000 SCM/day will be used in TFH. HSD - 30 Lit/hr. will be used in stand by D.G. Set (125 KVA).

No process gas emission is envisaged. Hazardous waste generated from the manufacturing activity will be ETP sludge & MEE salt (50 MT/Month), Discarded containers/Liners (1000 no.s/Month & 0.5 MT/Month), used activated carbon (0.2 MT/Month) and used oil (0.2 KL/Year). ETP waste & MEE salt 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. Used oil will be sold only to the registered recyclers. Used activated carbon will be sent to CHWIF for incineration.

Observations & Discussions:

Technical presentation made during the meeting by project proponent. The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic. The baseline environmental study has been conducted for the study area of 5 km radial distance from project site for the period March 2016 to May 2016. Ambient Air Quality monitoring was carried out for PM₁₀, PM_{2.5}, SO₂, NO_x, VOC and HC at five locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST – 3 model. The resultant concentrations are within the NAAQS. Committee noted that there are no by-products and no spent acids generated from the proposed project. There will be no use of any solvent. CS₂ is used as raw material/reactant and not as solvent and convert into their finish product. Committee observed that Risk assessment is prepared, however, they have not considered worst case scenario for CS₂. While discussing about the waste water management it was observed that condensate will be reused for gardening/plantation, which was not agreed by the Committee and asked to submit revised water balance with reuse of treated effluent for industrial purpose instead of use in gardening/plantation. After detailed deliberations the Committee sought following additional information for further consideration of the proposal:

1. Revised water balance considering reuse of treated waste water for industrial purpose instead of using it for gardening / plantation.
2. Risk assessment considering worst case scenario for CS₂.

11	SIA/GJ/IND2/15971/2016	M/s: Praharit Pigments LLP, Plot No. 38/11, Jhagadia GIDC, Dist. Bharuch	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Praharit Pigments LLp (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/15971/2015 dated 07/06/2016.
- Earlier, PP was called for presentation in the SEAC meeting dated 13/07/2016.
- Technical presentation made during the meeting by project proponent. PP has proposed that spent sulphuric acid , Spent hydrochloric acid and mother liquor containing high concentration of AlCl₃ will be sold out to actual users. Committee observed that the proposal for treatment of highly concentrated waste water & hazardous waste management are not adequate. Upon asking about the EMS for highly concentrated waste effluent and hazardous wastes, PP could not reply satisfactorily. Committee asked to reuse all the waste streams within premises to convert it into valuable products and not to send any waste streams outside premises. Looking to the product profile and its inadequate EMS, after deliberation, It was unanimously decided to consider the project for TOR/Scoping only after satisfactory submission of the following: (1) Revised proposal with Form-1 & PFR. (2) Sound management of all the hazardous waste streams generated from the proposed activities as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. (3) Technical justification for quantity of waste water (Stream wise) to be generated from each product and its specific treatment with mode of disposal. (4) Proposal for Zero Liquid Discharge (ZLD).
- PP has submitted additional details vide their letter on 06/09/2016.

Project status: New

Project / Activity Details:

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

Sr. no.	Name of the Products	Quantity MT/Month
1.	Pigment green-7/ Pigment green-36	150
2.	Pigment blue 15:3	100
3.	Pigment alpha blue 15:1	15

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 18129.82 sq. m & unit has proposed 5980 sq. m area for the green belt development/Tree plantation. Expected project cost is INR. 10 Crores. Water requirement for the proposed project will be 517 KL/day (10 KL for Domestic, 15 KL for Gardening, 492 KL for Industrial Purpose). Unit has proposed to recycle 275 KL/day of waste water, hence, fresh water requirement will be 242 KL/day and it will be met through GIDC water supply. Industrial waste water generation will be 395 KL/day. Unit has proposed to segregate industrial waste water into three parts viz. (1) Concentrated stream of Alpha Blue-High Acidic ML, (2) ML – High concentration of AlCl₃ and (3) Dilute Acidic effluent.

Highly acidic ML (Spent Sulphuric Acid) will be sent to authorized actual end-users. AlCl₃ solution will be treated/converted into valuable product within premises. Dilute stream will be taken to ETP having primary, secondary and tertiary treatment units and after treatment it will be passed through RO.

Permeate stream from RO system will be reused. Treated waste water will be drain off into GIDC drainage line after conforming GPCB norms. Domestic waste water (8 KL/day) will be disposed off into septic tank/soak pit system. NG to the tune of 6100 SCM/day for Steam Boiler (3.5 T/hr.), 2500 SCM/day for TFH (10 Lac Kcal/hr) and 3600 SCM/day for HAG will be used as fuel. Unit has proposed two stage water scrubber followed by alkali scrubber to control HCl, Cl₂ or HBr / Br₂ with reaction vessel system of CPC green – 7/ CPC green – 36 and Alkali scrubber for control of SO₂ with Reaction vessel system of Alpha Blue. Bag filter will be installed as APCM with Spin Flash Dryer as APCM for control of HCl, Cl₂, HBr /Br₂, PM, SO₂, NO_x. ETP waste (75 MT/Month) will be disposed off at the Common TSDF site. Discarded barrels / containers / bags / liners (5000 no.s/year) will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil (500 Lit./Year) will be sold only to the registered recyclers. Inorganic acid (H₂SO₄) (450 MT/Month) will be sent to their own unit for reuse in manufacturing of CPC Blue. Inorganic acid (HCl) (75 MT/Month) will be sold out to dyes manufacturers. Halogenated compounds (Aluminum Oxy Chloride) (800 MT/Month) will be converted to Aluminium Sulphate or Aluminium Chloride Solution.

Discussions & Observations:

Technical presentation made during the meeting by project proponent. PP has submitted point wise reply for additional details sought. PP stated that they are unable to convert all the waste streams into valuable products. However, they Committed to handle all their waste through “manifest’ mechanism to avoid any mislead of their generated waste. They also committed to sale out waste only to authorised pre-processing, recycling, reuse & recovery units. They agreed to follow sound management system of all the hazardous waste streams generated from the proposed activities as per the Hazardous and other wastes (Management and transboundary Movement) Rules 2016. PP stated that they have calculated all the stream of waste water based on the mass balance of process, which currently use by other manufacturer for producing the mentioned proposed products. PP requested to consider their proposal with effluent discharge into GIDC pipeline as ZLD is not viable for proposed project. Committee deliberated various issues regarding spent sulphuric acid, Aluminium Chloride solution and asked PP to treat all these waste streams within premises. PP informed that they will send spent Sulphuric Acid to their CPC Blue manufacturing unit at Ankleshwar and Aluminium Chloride solution will be converted to Aluminium Sulphate or Crystal Aluminium Chloride to which Committee agreed upon. After detailed deliberations on various aspects of the project following TORs were prescribed in addition to the draft TOR proposed, to carry out EIA study covering 5 km radius from the project boundary of the proposed site :

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

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

ensured that treated effluent won't flow outside the premises linked with storm water during high rainy days.

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

proposed measures to control it (ix) Details on tail gas treatment.

31. Action plan for odour control to be submitted.
32. Details on management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling, its utilization and disposal etc. How the manual handling of the hazardous wastes will be minimized. Methodology of de-contamination and disposal of discarded containers and its record keeping.
33. Membership of Common Environmental Infrastructure including the TSDF / Common Incineration Facility, Common effluent discharge pipeline etc.
34. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
35. Sound management for Spent Sulphuric acid, Spent HCl, effluent generated from scrubbing system etc.
36. Undertaking regarding in-house treatment of Aluminium Chloride solution and no disposal outside premises in any case.
37. 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.
38. 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.
39. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
40. 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.
41. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
42. 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.

43. MSDS of all the products and raw materials.
44. 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.
45. 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?
46. 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.
47. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
48. 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.
49. 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.
50. (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.
51. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
52. 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.
53. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
54. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
55. A tabular chart with index for point-wise compliance of above TORs.

The above mentioned project specific TORs/additional TORs and the model TORs available in the

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

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 04/10/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

12	SIA/GJ/IND2/10951/2016	M/s: Narayan Industries Plot no.1303/ 1&2, 1305/6 A+B, Phase-IV, GIDC Naroda, Ahmedabad,	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Narayan Industries (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/10951/2015 dated 06/04/2016.
- Earlier, PP was called for presentation in the SEAC meeting dated 04/05/2016.
- During the meeting, Committee discussed about the technology of the process, treatability of waste water, process emission & its control etc. At present waste water is being sent to CETP Naroda. PP has proposed to send 23 KL/day of effluent to CETP Naroda and remaining waste water to in-house MEE. Committee noted that the CETP of NEPL, Naroda is grossly non-compliant at present. Committee felt that dual mode of disposal for proposed project 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 should not go for further discharge to CETP. Considering the above facts, it was unanimously decided to consider the project for TOR/Scoping only after satisfactory submission of the following: (1) Revised proposal with sound environmental management system including Complete Zero discharge for existing as well as proposed products.
- PP has submitted additional details vide their letter on 28/07/2016.

Project status: Expansion

Project / Activity Details:

This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

Sr. No.	Name of Products	Existing Quantity as per CCA-AWH-61699 (MT/Month)	Proposed Quantity (MT/Month)	Total Quantity after Expansion (MT/Month)

1.	Pigment CPC Blue	35	265	300
2.	Pigment Alpha Blue	10	80	90
3.	Cuprous Chloride	25	-25	0
4.	Ammonium Sulphate	0	100	100
	Total	70	445	490

The proposal falls under project / activity no. 5(f) in the Schedule of the EIA Notification, 2006. As the unit is located in to the notified industrial estate of GIDC-Naroda it falls under category "B" of the schedule. Total plot area is 3193.92 sq. m & unit has proposed 150 sq mtr area for the green belt development/Tree plantation. Expected project cost is Rs. 2.5 Crores. This industry was established in the year 1991. Unit has obtained CC&A order no. AWH – 61699 dated 15/04/2014. Unit has proposed to discontinue Cuprous Chloride from the existing products. Water consumption and wastewater generation details is as tabulated below:

Details of water consumption

Sr. No.	Category	Existing Water Consumption As per CCA no. (KL/Day)	Proposed Water Consumption (KL/Day)	Total Proposed Water Consumption (KL/Day)
1	Domestic	3	5	8
2.	Industrial			
2.1	Process+ Washing	21.5	139.5(102.6 KLD recycle water+ 36.9 fresh water)	161
2.2	Scrubber	7	1	8
2.3	Floor Washing	2	0	2
2.4	Cooling Tower	1	5	6
2.5	Boiler	1	12	13
3.	Others (Gardening)	1	1	2
Total (Industrial)		33.5	158.5	192
Total (Domestic + Industrial)		36.5	163.5	200 (102.6 KLD recycle water+ 60.9 KLD fresh water)

Details of waste water generation

Sr. No.	Category	Existing Waste Water Generation	Proposed Waste Water Generation	Total Proposed Waste Water Generation
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		(KL/Day)	(KL/Day)	(KL/Day)
1	Domestic	3	5	8
2.	Industrial			
2.1	Process	20.6	118.9	139.5
2.2	Floor Washing	2	0	2
2.3	Cooling	0	2	2
2.4	Boiler	0.4	3.6	4
Total (Industrial)		23	124.5	147.5
Total (Domestic + Industrial)		26	129.5	155.5

At present industrial waste water generation is 23 KLD. Total effluent generation after expansion will be 124.5 KL/day. After expansion, unit will install new ETP, RO plant and MEE followed by ATFD for achieving Zero Liquid Discharge (ZLD) for existing as well as proposed products. Domestic waste water (8 KL/day) will be sent to soak pit/septic tank. No effluent will be discharge to CETP. Unit will surrender membership of CETP. Ammonium carbonate solution generated from the scrubbing system of CPC Blue will be recycle back for condensation with phthelic Anhydride and remaining will be converted to Ammonium Sulphate. Spent sulphuric acid generated from the product Alpha Blue will be recycled back in CPC Blue plant and remaining spent sulphuric acid sent to NOVEL spent acid management, GIDC, Vatva.

Details of flue gas emission & process gas emission is as tabulated below:

Existing Flue Gas Emission

Sr. No.	Stack attached to	Stack Height (m)	Type of fuel	Fuel consumption	Type of emission	APCM
1.	Steam Boiler (2 MT)	15 m	Imp. Coal	3 MT/Day	SPM SO ₂ NOx	Bag Filter followed by adequate stack height.
2.	Thermic Fluid Heater (20 Lac Kcal)	30 m	Imp. Coal	4 MT/Day	SPM SO ₂ NOx	Bag Filter followed by adequate stack height.

Proposed Flue Gas Emission

Sr. No.	Stack attached to	Stack Height (m)	Type of fuel	Fuel consumption	Type of emission	APCM
1.	Steam Boiler for MEE (3 MT) (1 No.)	18 m	Imported Coal	4 MT/Day	SPM SO ₂ NOx	APH + Cyclone separator + Water Scrubber Followed by adequate stack height.

2.	D.G.Set (250 KVA) (2 Nos.)	11 m	Diesel	50 Liter/Hr	SPM SO ₂ NOx	Adequate stack height
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Details of process gas emission

Existing

Sr. No.	Stack Attached To	Stack Height (m)	Air Pollution Control System	Parameter	Remark
1.	Reactor Vessel	30 m	Water Scrubber, Acid Scrubber	PM NOx	
2.	Spin Flash Dryer	30 m	Bag Filter	PM	

Proposed

Proposed Process Gas Emission					
Sr. No.	Stack Attached To	Stack Height (m)	Air Pollution Control System	Parameter	Permissible Limit
1.	Reactor Vessel CPC	30 m	Two stage Water Scrubber + Acid Scrubber	NH ₃	175 mg/Nm ³
2.	Spin Flash Dryer	30 m	Bag Filter	PM	150 mg/Nm ³

Hazardous waste generated from the existing as well as proposed project will be as tabulated below:

Sr. no.	Type of Waste	Existing Quality As per CCA No. AWH-61699	Proposed Quality	Method of Disposal
1.	ETP sludge/ Gypsum sludge	24 MT/Month	225 MT/Month	To Cement factory authorized by the GPCB.
2.	MEE residue	0	300 MT/Month	To TSDF site.
3.	Used oil	0.2 KG/Year	20 KG/Month	To registered refiners.
4.	Discarded containers/ Empty barrels	100 Nos./Month	350 Nos/Month	To authorize recycler.
5.	Empty bags / Liner	500 KG/Month	5000 KG/Month	To authorize recycler.

Discussions/Observations:

Technical presentation made during the meeting by project proponent. Committee observed that project proponent has revised their proposal and submitted revised Form-1 & PFR. Project proponent has proposed to discontinue waste water sending to CETP and complete zero liquid discharge will be maintained. Committee put emphasis on complete ZLD with sound environmental management system. 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 Naroda.
2. Present land use pattern of the study area shall be given based on satellite imagery.
3. Layout plan of the factory premises. (Show all the production plants including Raw material & Products storage area). Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
4. Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
5. All the details of project shall be in Totality i.e. Existing + Proposed = Total
6. Details of manufacturing process / operations of each product along with chemical reactions, mass balance, consumption of raw materials etc. Details on strategy for the implementation of cleaner production activities.
7. Full name and chemical formula of all the raw materials and products. Details on end use of each product. Complete management plan for By-products/Spent acids to be generated, along with the name and address of end consumers to whom the by-product/s will be sold. Copies of agreement / MoU / letter of intent from them, showing their willingness to purchase said by-products/Spent acids from the proposed project.
8. Feasibility report for use of spent sulphuric acid for manufacturing of CPC Blue and use of Ammonium Carbonate solution & Acidic ML from CPC plant for manufacturing of Ammonium sulphate.
9. Action plan to reuse or consume entire quantity of Spent acids/waste streams within premises to convert into valuable products instead of sending such spent acids to outside premises.
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. Notarized undertaking for assuring that underground drainage connection will not be taken in the unit.
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 RO/NF system.
 19. Undertaking stating that a separate electric meter will be provided for the ETP, RO, Incinerator/Spray Dryer & MEE.
 20. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD).
 21. Certification of adequacy of proposed ZLD scheme through credible institutes of National repute.
 22. To estimate & monitor ground water quality & its contamination status, piezometer wells, one one on up gradient of the groundwater flow and other three on the down gradient side of the ground water flow of the proposed project at different depth based on available ground water depth shall be established and all the parameters mentioned in IS 10:500 for potable water standard shall be monitored.
 23. Proposal to provide and maintain separate electric meter, operational logbook for effluent treatment systems, online meters for monitoring of flow, pH, TOC/COD, etc.
 24. 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.
 25. 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.
 26. One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
 27. 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.
 28. 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.
 29. 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.
30. 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.
 31. 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.
 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. 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.
 35. 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.
 36. Permission from PESO, Nagpur for storage of solvents, other toxic chemicals, if any.
 37. 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.
 38. Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures.
 39. 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.
 40. MSDS of all the products and raw materials.

41. 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.
42. 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?
43. 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.
44. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
45. 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.
46. 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.
47. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA.
48. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
49. Does the company have a system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA Report.
50. Phase wise project implementation schedule with bar chart and time frame, in terms of site development, infrastructure provision, EMS implementation etc.
51. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
52. Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for prevention of pollution.
53. Copies of Environmental Clearances obtained for the existing plant, its point wise compliance report.
54. Environmental audit reports for last 2 years and compliance of its recommendations/Suggestions. (Include latest audit report and its compliance.)
55. Copy of Consent to Operate (CC&A) obtained along with point wise compliance status of all the

conditions stipulated therein.

56. Being an expansion project, compliance of MoEF circulars vide No: J-11011/618/2010-IAII(I) dated 30/05/2012 and J-11013/41/2006-IA-II(I) dated 20/10/2009

57. Copies of XGN generated Inspection reports with analysis reports of the water/Air/Hazardous samples collected by GPCB (Last 2 years). Copies of instructions issued by GPCB in last 2 years and point wise compliance thereof.

58. A tabular chart with index for point-wise compliance of above TORs.

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

Validity of ToR:

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report accordingly, ToR will lapse after 04/10/2019.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.

13	SIA/GJ/IND2/17009/2016	M/s: Amarjyot Chemicals Ltd. Plot no.: 919, GIDC Jhagadia, Dist.: Bharuch.	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Amarjyot Chemicals Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17009/2016 dated 07/09/2016.

Project status: New

Project / Activity Details:

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

Sr.No.	Name of Products	Capacity (MT/Month)
1	Acetic Anhydride	3600
2	Easter of Organic acid like Ethyl Acetate etc	1800
3	Mono Chloro Acetic Acid(MCAA)	3000
4	Chloro Acetyl Chloride (CAC)	650
5	2 Ethylexyl Nitrates (2EHN)	3000
6	Nitro derivaties of hydrocarbon such as Nitro Xylene, Nitro Cumene .etc.	3000
7	Phenyl ethyl alcohol (PEA)	500
8	Sodium Monochloro Acetate (SMAC)	300
9	Methyl Chloro Acetate	
10	Ethyl Chloro Acetate	

11	Dichloro Acetic Acid	500
12	Trichlo Acetic Acid	
13	Calcium chloride	2500
	Total	18,850
14	In house Coal Based Power plant	4 MW
By Product		
1	Spent Acid	2373.453
2	Hydrochloric acid	6958
3	Sodium hypo chloride	808
4	Sodium Bi Sulphite (SBS)	7722
5	Mother liquor of MCAA	1400

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 32899 sq. m & unit has proposed 10628.48 sq m area for the green belt development/Tree plantation. Expected project cost is INR. 95.97 Crores.

Water consumption details:

Particulate	Proposed Total water consumption in KL/day
Domestic	10
Gardening	20
Industrial	
Process	563
Washing	10
DM plant	872
Softener	680
Cooling	673(softener permeate) + 458 (recycled)
Boiler	786 (DM permeate)
Total(Industrial)	2125(fresh)+ 458 (recycled)=2583
Total	2155(fresh)+458(recycled)=2613

Waste water generation details:

Particulate	Proposed wastewater generation in KL/day
Domestic	5
Industrial	
Process	256
washing	10
DM plant	86
Softener	7
Cooling	60
Boiler	40
Total(Industrial)	459
Total	464*

*Out of this 464 KLD, 271 KLD (256+10+5) will be sent to ETP followed by Process R.O., 193 KLD (from utility) will be sent to R.O.) and 135 KLD (from condensate of MEE) to reused in Cooling Tower. Unit will achieve Zero Liquid Discharge till it gets permission to discharge in common effluent conveyance project of M/s. Narmada

Clean Tech.

Domestic waste water (5 KL/day) will be disposed off into septic tank/soak pit system.

Air details is as below:

No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.	Boiler (78 TPH) & DG Sets -750 KVA (2 nos.)
Fuel consumption Solid Fuel: MT/Day Gaseous Fuel: SCM/day Liquid fuel: KL/day	Imported Coal: 387 MT/day Diesel- 300 Lit/hr
APCM for flue gas	Electrostatic precipitator
Process gas/Fugitive emission details i.e. Type of pollutant gases (SO ₂ , HCl, NH ₃ , Cl ₂ , NO _x etc.)	HCl, Cl and NO _x
APCM for process gas/fugitive gaseous emission details	Water Scrubber followed by Caustic scrubber for Chlorination process vessel Caustic scrubber for Nitration vessel

Details of Hazardous waste management:

Sr. No.	Type of Hazardous Waste	Quantity in MT/month	Hazardous Waste Category	Storage, Collection & Disposal
1	ETP Sludge	300	34.2	To TSDF or Sold to Actual Users (i.e. cement mfg. industries)
2	Distillation Residue	170	20.3	To CHWIF or sell to Actual Users (i.e. cement mfg. industries)
3	Used Oil/Spent Oil	200lit/month	5.1	Sell to GPCB Authorized Reprocessor
4	Empty Drums/Container	What so ever	33.1	Sell to GPCB Authorized Reprocessor
5	Empty Bags	What so ever	33.1	Sell to CPCB/GPCB Authorized Vendor
6	Salt from MEE	0.450 T/Month	34.2	Sell to authorized end Users

Details of Solid waste:

Sr. No.	Waste	Quantity	Mode of Disposal
1	Fly Ash	504 T/month	Collection, Storage, Transportation and disposal by selling to Brick manufacturing unit.

Observations / Discussion:

Technical presentation made during the meeting by project proponent. During the meeting, looking to the product profile, while concerning about the spent acid management, Project proponent could not reply satisfactorily and informed that they are ready to drop Nitration products from which spent sulphuric acid will be generated. Committee put emphasis on sound management of waste streams with complete zero liquid discharge and asked to submit Revised proposal with all relevant details.

After deliberation on various aspects, the committee unanimously decided to consider the case for TOR/Scoping only after submission of revised Form-1 and relevant details considering spent acid streams & ML as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

14	SIA/GJ/THE/16977/2016	M/s: Torrent Power Ltd. Plot no. 872,613,616, Sabarmati Dist.: Ahmedabad.	Screening & Scoping
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Project / Activity No.: 1(d)

- M/s: Torrent Power Ltd. (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/THE/16977/2016 dated 12/08/2016.

Project status: Modification/Modernisation

Project / Activity Details:

This is an existing Thermal Power plant and proposes for efficiency Increase and related generation Capacity Increase by replacement of old Turbine Rotors with new improved efficient Turbine Rotors. Capacity of the power generation will be increased from 390 MW to 422 MW as tabulated below:

Unit	Existing capacity in MW	New extra capacity in MW due to proposed modification	Final desired Generation capacity in MW
C	60	--	60
D	110	10	120
E	110	11	121
F	110	11	121
Total	390	32	422

The project falls under Category B of project activity 1(d) as per the schedule of EIA Notification 2006. This Sabarmati Thermal Power plant was established in 1934. Unit has obtained CC&A of the Board for existing capacity of power generation 390 MW. Total plot area is 506100 sq. m & unit has developed 306178 sq m area for the green belt/Tree plantation. For replacement of turbine expected project cost is INR. 179.66 Crores. At present total water consumption is 27918 KL/day. Source of fresh water is Sabarmati River French well & own Bore well. Total industrial waste water generation is 14000 KL/day. Total domestic waste water generation is 2000 KL/day. There is no increase in water consumption and waste water generation due to proposed increase in power generation. This Project is for efficiency improvement and related capacity increase by modernization without any increase in any pollution load. Reduction in daily requirement of water to the extent of 18% per day. Decrease in raw material i.e. coal requirement to the extent of 24% per day. Decrease in generation of ash to the extent of 39% per day. Unit has provided ESP as APCM with all the Boilers of station C, D, E & F. At present total Coal (blend of Indian and Imported Coal) consumption for the existing 4 no.s of Boilers is 3763 MT/Day. The entire ash handling system is operated through remote computerized control and monitoring system. The bottom ash is conveyed to ash pond by wet method. The fly ash collected in air pre-heater and electrostatic precipitator (ESP) hoppers are removed in dry form. All the hoppers are connected with pneumatic ash conveying system. The entire process of dry ash evacuation and conveying and distribution is through enclosed system. Ash conveyed from hopper in dry form to Ash

storage silo and from silo it distributed to end users. Total system is control through remote operation from control panel.

Observations / Discussion:

Technical presentation made during the meeting by project proponent. Committee noted that this Thermal Power plant was established in 1934 and whatever enhancement in power generation is due to retrofitting the existing turbine components with new state of the art efficient turbine components. While discussing about the compliance status of existing operation, PP informed that they have valid CC&A and presently they are operating their power generating station within overall CC&A permission i.e. 390 MW. A letter in this regard is submitted by PP. Unit has submitted ambient air quality monitoring results, which are found well within the NAAQS. Project authorities regularly carrying sampling of flue gas stack and results are submitted. PP has also submitted results of analysis report of flue gas samples collected by GPCB which are well within the prescribed norms. Committee noted that there is no increase in pollution load after proposed enhancement of power generation from 390 MW to 422 MW which is only due to renovation and modernisation activities at 110 MW units (For all three units). The proposed change in turbine is an initiative to produce power in a more environmental friendly and economic manner. During meeting Project proponent has requested to consider the project as B2 category project. Loking to the no increase in pollution potential, request was considered and the project was categorized as B2 and the additional information was sought for appraisal of the project.

1. Technical description of proposed system changes and justification with factual data for simultaneous decrease in pollution potential with respect to Air, Water and Hazardous wastes/Solid wastes/Fly Ash.
2. Complete water balance diagram for existing as well as proposed scenario.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.

8. Detailed 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.
 9. Details of 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.
 10. Records of any legal breach of Environmental laws i.e. details of show- cause notices, closure notices etc. served by the GPCB to the existing unit in last five years and actions taken then after for prevention of pollution.
 11. Environmental audit reports for last 2 years and compliance of its recommendations/Suggestions. (Include latest audit report and its compliance.)
 12. Copy of Consent to Operate (CC&A) obtained along with point wise compliance status of all the conditions stipulated therein.
 13. Compliance of MoEF circulars vide No: J-11011/618/2010-IAII(I) dated 30/05/2012 and J-11013/41/2006-IA-II(I) dated 20/10/2009.
 14. Copies of XGN generated Inspection reports with analysis reports of the water/Air/Hazardous samples collected by GPCB (Last 2 years). Copies of instructions issued by GPCB in last 2 years and point wise compliance thereof.
 15. Existing AAQM status.
 16. Detailed Compliance of the Notification of MoEF&CC vide S.O. 3305 (E) dated 07/12/2015 regarding amendment to EP Rules for Thermal Power Plant Norms is submitted.
 17. "Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 (E) dated 07/12/2015."
 18. A tabular chart with index for point-wise compliance of above details.
- The project shall be appraised on satisfactory submission of the above.

15	SIA/GJ/IND2/17064/2016	M/s: Jadar Resins & Polymers Block No. 68, Plot No. 01, At - & Po - Dhanot, Ta - Kalol, Dist - Gandhinagar.	Screening & Scoping
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Project / Activity No.: 5(f)

- M/s: Jadar Resins & Polymers (herein after Project Proponent – PP) has submitted application vide their proposal no. SIA/GJ/IND2/17064/2016 dated 05/09/2016.

Project status: New

Project / Activity Details:

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

Sr. No.	Name of the Products	Quantity MT/Month
1	Polyamide resin	

		• Non Reactive Polyamide Resin	50
		• Reactive Polyamide Resin	50
2	Epoxy resin		400
3	Amino resin:		
	Melamine formaldehyde resin		400
	Urea formaldehyde resin		200
4	Alkyd resin		400
5	Polyester resin(un saturated)		300
6	Polyester resin(saturated)		300
7	Acrylic resin		100
8	Vinyl ester resin		100
9	Printing ink & coating		100
10	Resin solution and modification		1000
		Total	3400

The project falls under Category B of project activity 5(f) as per the schedule of EIA Notification 2006. Total plot area is 8361 sq. m & unit has proposed 2500 sq m area for the green belt development/ Tree plantation. Expected project cost is INR. 4.19 Crores. Water requirement for the proposed project will be 15 KL/day. (8 KL for Domestic & Gardening, 7 KL for Industrial Purpose). Industrial waste water generation will be 7.7 KL/day, which will be treated in proposed Primary treatment plant and treated waste water will be sent to common spray dryer facility namely Chhatral Environment Management System Pvt. Ltd. for spray drying. Domestic waste water (2 KL/day) will be disposed off into septic tank/soak pit system.

Flue gas emission details is as tabulated below:

No.	Stack attached To	Stack Height (m)	Fuel Details		APC System
			Name	Consumption Lit/Day	
1.	Thermic fluid Heater-I 6 Lacs kcal/hr	30	Natural Gas or Coal	1200 SCM/Day or 2 MT/Day	Cyclone Separator followed by Wet Scrubber
2.	Thermic fluid Heater-II 4 Lacs kcal/hr	30			Cyclone Separator followed by Wet Scrubber
3	D.G.Set 83 KVA	11	Diesel	1200 SCM/Day or 2 MT/Day	---

No process gaseous emission is envisaged. ETP waste (5 MT/Month) will be disposed off at the Common TSD site. Discarded barrels / containers / bags / liners (30 MT/Month) will be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination. Used oil (0.5 KL/Yr) will be sold only to the registered recyclers.

Observations & Discussions:

Technical presentation made during the meeting by project proponent. While discussing about the waste water management, PP informed that the common spray dryer facility of CEMSPL will be operative within short time and entire quantity of waste water will be sent to CEMSPL through

dedicated tankers. Common facility of CEMSPL is @ 40 km from the proposed site. Committee noted that there is no process gas emission from the proposed project. During meeting Project proponent has requested to consider the project as B2 category project. Looking to the low pollution potential, the request was considered and the project was categorized as B2 and the additional information was sought for appraisal of the project.

1. Land Possession Documents of the proposed site. NA permission letter from concern authority.
2. Demarcation of proposed project activities in lay out plan.
3. Exact details about infrastructural facilities, plant machineries etc. required for the proposed project.
4. Details of surrounding industrial units within 2 km radius with details like Name and address of the unit, type and nature of industrial activity etc.
5. Project site specific details such as aerial distance of the project site from the nearest (1) Village-Nearest residential area (2) Water Body: Creek / Nallah / Lake / Pond / Reservoir / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) Aanganwadi/School/College/Institute etc. and likely impact on them due to the proposed project along with the mitigation measures proposed to minimize the likely impact. Give satellite image of 2 km radius.
6. Ensure that there is no National Park / Wild Life Sanctuary/Eco Sensitive area etc. Within 10 km radius of the proposed project.
7. Legal Undertaking stating that unit is complying the three conditions [i.e. water consumption less than 25 M3/day; Fuel consumption less than 25 TPD; and not covered in the category of MAH units as per the Management, Storage, Import of Hazardous Chemical Rules (MSIHC Rules), 1989] as per the amendment to EIA Notification, 2006 vide SO 1599 (E) dated 25.06.2014.
8. Layout plan of the factory premises. Provision of separate entry & exit and adequate margin all round the periphery for unobstructed easy movement of the emergency vehicle / fire tenders without reversing back. Mark the same in the plant layout.
9. Proposed monthly production of each product and product wise monthly consumption of each raw material.
10. Chemical name of each proposed product to be manufactured. Details on end use of each product. Manufacturing process along with chemical reactions, mass balance for each product.
11. Water balance diagram (including reuse-recycle, if any) along with qualitative and quantitative analysis of each waste stream to be generated from the manufacturing process of each product to be manufactured along with mass balance.
12. Stream wise qualitative & quantitative analysis of each waste stream (including process water, cooling tower blow down, boiler blow down, washing effluent etc.) to be generated. Give segregation scheme at source. Characteristics of untreated and treated wastewater. A detailed effluent treat ability study vis-à-vis the adequacy and efficacy of the treatment facilities proposed for the wastewater to be generated. The characteristic on which treatability is based shall also be stated.
13. Details of the ETP units including its capacity, size of each unit, retention time and other technical parameters. Commitment for achieving inlet norms of the common facility with technical details.
14. Membership of Common Environmental Infrastructure facility i.e. Common spray dryer CEMSPL.
15. Plans for management and disposal of waste streams to be generated from spillage, leakages, vessel washing, used container washing etc. Measures proposed for preventing effluent discharge during unforeseen circumstances.
16. Specific details of (i) Process gas emission from each unit process with its quantification, (ii) Air pollution Control Measures proposed for process gas emission, (iii) Adequacy of the air pollution

- control measures for process gas emission, measures to achieve the GPCB norms (iv) Details of the utilities required (v) Type and quantity of fuel to be used for each utility (vi) Flue gas emission rate from each utility (vii) Air Pollution Control Measures proposed to each of the utility along with its adequacy (viii) List the sources of fugitive emission along with its quantification and proposed measures to control it.
17. Specific details of fugitive emission from the unit along with its quantification and proposed measures to control it along with measures proposed to monitor VOC within work area. Details of ventilation system proposed in the work area. Measures proposed to keep the work area environment as per the norms of GFR.
 18. Details of measures proposed for noise pollution abatement & its monitoring.
 19. Details of management of the hazardous wastes to be generated from the project stating detail of storage area for each type of waste, its handling and its disposal. How the manual handling of the hazardous wastes will be minimized?
 20. Methodology of de-contamination and disposal of discarded containers and its record keeping.
 21. Measures proposed to be taken for the work area ambient air quality monitoring as per Gujarat Factories Rules.
 22. A detailed EMP including the protection and mitigation measures for preventing impacts on human health and environment as well as detailed monitoring plan with respect to various parameters and responsible head for the environmental management cell and environmental management cell proposed for implementation and monitoring of EMP.
 23. Detailed socio-economic development measures including community welfare program most useful in the project area for the overall improvement of the environment.
 24. A detailed Green Belt Development Program including annual budget, types & number of trees to be planted, area under green belt development [with map]; along with commitment of the management to carry out the tree plantation activities outside the premises at appropriate places in the Industrial estate and elsewhere.
 25. Details of hazardous characteristics and toxicity of raw materials and products to be handled and the control measures proposed to ensure safety and avoid the human health impacts. This shall include the details of Antidotes also.
 26. Details of quantity of each hazardous chemical to be stored, Material of Construction of major hazardous chemical storage tanks, threshold storage quantity as per schedules of the Manufacture, Storage & Import of Hazardous Chemicals Rules of major hazardous chemicals. How the manual handling of the hazardous chemicals will be minimized?
 27. Details of the separate isolated storage area for chemicals. Details of fire extinguishers, flame proof electrical fittings, DCP extinguishers and other safety measures proposed.
 28. Specific safety details / provisions for various hazardous chemicals and detailed fire control plan for flammable substances.
 29. Details of possibilities of occupational health hazards from the proposed manufacturing activities and proposed measures to prevent them.
 30. Detailed risk assessment report including prediction of the worst-case scenario and maximum credible accident scenario along with damage distances and preparedness plan to combat such situation and risk mitigation measures. Vulnerable zone demarcation.
 31. Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, mfg utility staff for safety related measures.
 32. A tabular chart with index for point-wise compliance of above details.
- The project shall be appraised on satisfactory submission of the above.

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

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

1. Sun Industries, Plot no. 1207 to 1213, GIDC-Sarigam, Ta.: Umbergaon, Dist. Valsad.
2. Heni drugs, Plot no. 1901/1901A, Phansa Char Rasta, GIDC, Sarigam, Tal. Umargam, Dist.-Valsad.
3. Sun Industries, C-1/6, GIDC Antalia, Bilimora, Taluka: Gandevi, District: Navsari,
4. Paradise healthcare, Plot No.: C-1/42/15, GIDC, Nandesari, Dist.: Vadodara.

The additional information received from the project proponents M/s: Sainath Industries for setting up of manufacturing of Synthetic Organic Chemicals at plot no. 3529, Phase-IV, GIDC estate, Chhatral, Ta.: Kalol, Dist. Gandhinagar., which was sought during earlier SEAC meeting for further consideration of the proposal. The said information submitted by the project proponent was considered by the committee during the SEAC meeting and as it was found that the reply regarding the quality of Mother Liquer (ML) generated from the manufacturing of 3,5 Di-Amino Benzoic Acid and its feasibility to reuse in next batch was not satisfactory.

After detailed deliberations, the Committee decided to consider the project on satisfactory submission of the following:

1. Certification of adequacy of proposed Zero Liquid (ZLD) scheme approved by Schedule-I auditor including Feasibility report for complete reuse of Mother Liquer (ML) generated from the manufacturing of 3,5 Di-Amino Benzoic Acid.

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.	<i>Shri Rajesh Shah, Member, SEAC.</i>	
6.	<i>Shri Hardik Shah, IAS, Secretary, SEAC</i>	