

1.	A tabular with index for point-wise compliance of below mentioned TORs. Chart.
2.	Executive summary of the project - giving a prima facie idea of the objectives of the proposal, use of resources, justification, etc. In addition, it should provide a compilation of EIA report, including EMP and the post-project monitoring plan in brief.
3.	Justification for selecting the proposed product and unit size.
4.	Land requirement for the project including its break up for various purposes, its availability and optimization.
5.	Land possession documents. Copy of NA permission to use the project land for industrial purpose. If located in GIDC, copy of plot holding certificate obtained from GIDC Authority.
6.	Location of the project site and nearest habitats with distances from the project site to be demarcated on a toposheet (1: 50000 scale).
7.	Topography details of the project area.
8.	Geological features and geo-hydrological status of the study area.
9.	Present land use pattern of the study area shall be given based on satellite imagery
10.	Layout plan of the factory premises clearly demarcating various units within the plant. 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.
11.	Technical details of the plant/s along with details on best available technologies (BAT), proposed technology and reasons for selecting the same.
12.	Product spectrum (Proposed products along with production Capacity) and processes.
13.	Chemical name of each proposed product to be manufactured. Details on end use of each product. (Provide CAS number of all the products & raw materials. In case of Dyes, CI number).
14.	Details on raw materials, source and storage within the premises
15.	Details of complete manufacturing process / operations of each product along with chemical reactions, process flow diagram describing each unit processes and unit operations along with material balance, consumption of raw materials etc.
16.	Details on strategy for the implementation of cleaner production activities.
17.	Assessment of source of the water supply with adequacy of the same to meet with the requirements for the project. Permission obtained from the concern authority for supply of raw water.

18.	Undertaking stating that no bore well shall be dug within the premises (If project is located within the Industrial estate).
19.	Details on water balance including quantity of effluent generated, recycled & reused. Details of methods to be adopted for the water conservation.
20.	Efforts to minimize effluent discharge and to maintain quality of receiving water body.
21.	Explore the possibilities for Zero Liquid Discharge (ZLD) option for the proposed project.
22.	Segregation of waste streams, characterization and quality with specific treatment and disposal of each stream including action plan for maximum recycle of treated waste water and minimum discharge for effluent.
23.	Capacity of ETP in KL/day. 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.
24.	<u>In case of ZeroLiquidDischarge(ZLD):</u>  I. Action plan for 'Zero' discharge of effluent shall be included. Notarized premises. II. Economical and technical viability of the effluent treatment system to achieve Zero Liquid Discharge (ZLD). III. Certification of adequacy of proposed ZLD scheme through credible institutes of National repute. IV. To estimate & monitor ground water quality & its contamination status, piezometer wells, 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.
25.	Technical details of Evaporation system.
26.	Undertaking stating that a separate electric meter will be provided for the waste water treatment plan (ETP).
27.	Economical and technical viability of the effluent treatment system.
28.	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.
29.	Adequacy of the proposed EMS with respect to the pollution load envisaged in terms of Air, Water and hazardous waste.
30.	One season Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be incorporated.
31.	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 for all the concerned/identified VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
32.	One complete season base line ambient air quality data (except monsoon season) 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 (NAAQS) as well as project specific parameters like VOC etc. Locations of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors. There should be at least one monitoring station in the upwind direction. There should be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.
33.	Modelling indicating the likely impact on ambient air quality due to proposed activities. The details of model used and input parameters used for modelling should be provided. The air quality contours may be shown on location map clearly indicating the location of sensitive receptors, if any, and the habitation. The wind rose showing pre-dominant wind direction should also be indicated on the map. Impact due to vehicular movement shall also be included into the prediction using suitable model. Results of Air dispersion modelling should be superimposed on satellite Image / geographical area map.
34.	Base line status ( <b>October - 2019 to December - 2019</b> ) of the noise environment, impact of noise on present environment due to the project and proposed measures for noise reduction including engineering controls.
35.	Specific details of a) Process gas emission from each unit process with its quantification.

	<p>b) Air pollution Control Measures (APCM) proposed for process gas emission. Adequacy of the air pollution control measures (APCM) for process gas emission measures to achieve the GPCB norms.</p> <p>c) Details of the utilities required.</p> <p>d) Type and quantity of fuel to be used for each utility</p> <p>e) Flue gas emission rate emission from each utility.</p> <p>f) Air Pollution Control Measures (APCM) proposed to each of the utility along with its adequacy</p> <p>g) List the project specific sources of fugitive emission along with its quantification and proposed measures to control it.</p> <p>h) Details on tail gas treatment.(If any)</p>
36.	Action plan for odour control to be submitted.
37.	Management plan for hazardous/Solid waste including storage, handling, utilization and safe disposal as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016. CPCB guidelines in respect of specific treatment, such as solar evaporation, incineration, etc., need to be followed.
38.	How the manual handling of the hazardous wastes will be minimized? Methodology of de- contamination and disposal of discarded containers and its record keeping.
39.	Membership of Common Environmental Infrastructure like TSDF.
40.	Appropriate monitoring network has to be designed and proposed, to assess the possible residual impacts on VECs.
41.	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.
42.	Details of in-house monitoring capabilities and the recognized agencies if proposed for conducting monitoring.
43.	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 check-up of the workers exposed. Details of work place ambient air quality monitoring plan as per Gujarat Factories Rules

44.	Details on volatile organic compounds (VOCs) from the plant operations and occupational safety and health protection measures. Proposal for Leak Detection and Repair (LDAR) program as per the CPCB guidelines.
45.	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.
46.	MSDS of all the products and raw materials.
47.	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.
48.	Details of quantity of each hazardous chemical (including solvents) to be stored, Material of Construction (MOC) 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?
49.	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.
50.	Submit checklist in the form of Do's & Don'ts of preventive maintenance, strengthening of HSE, manufacturing utility staff for safety related measures.
51.	Specify safety precautions to be taken for Chemical storage, process, handling & transportation hazard.
52.	Details on workers training before engaging work, periodical, in-house, outside etc.
53.	Details on various SOP to be prepared.
54.	Details on safety audit to be carried out and their compliance status.
55.	Specific safety measures to be taken for general Public living in the vicinity.

56.	Details on hazard identification i.e. HAZOP, HAZAN, Fault tree analysis, Event tree analysis, Checklist, Audit etc. to be adopted for the safety operation of the plant.
57.	Detection and monitoring of VOC's / gases.
58.	Detailed five year greenbelt development program including annual budget, planning schedule, species, width of plantations, number of trees to be planted, area under green belt development [with map], budgetary outlay etc. 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.
59.	Action plan for the greenbelt development - species, width of plantations, planning schedule, etc., in accordance to CPCB published guidelines.
60.	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.
61.	(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.
62.	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.
63.	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.
64.	Phase wise project implementation schedule with bar chart and time frame, in terms offsite development, infrastructure provision, EMS implementation etc.
65.	Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
66.	An undertaking by the Project Proponent on the ownership of the EIA report as per the MoEF & CC OM dated 05/210/2011 and an undertaking by the Consultant regarding the prescribed TORs have been complied with and the data submitted is factually correct as per the MoEF & CC

	OM dated 04/08/2009.
67.	All documents to be properly referenced with index and continuous page numbering.
68.	Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
69.	Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.