



No. SEIAA/GUJ/EC/5(f)/678/2018

Date: 30 JUN 2018 By R P A D

Sub: Environment Clearance to M/s: Gharda Chemicals Limited for setting up of expansion in manufacturing of 'Synthetic Organic Chemicals(Pigments, Intermediate and Polymers)' plant at Plot No. 3525 & 3512-A, Notified GIDC Industrial Estate, Panoli, Dist- Bharuch. In Category 5(f) of Schedule annexed with EIA Notification dated 14/09/2006. Time Limit

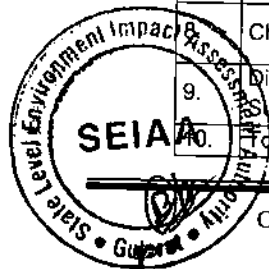
Ref: Your Proposal No. SIA/GJ/IND2/18123/2017.

Dear Sir,

This has reference to your application along with EIA report dated 17/01/2017 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 17/03/2018 to the SEAC.

The proposal is for Environmental Clearance to M/s: Gharda Chemicals Limited for setting up of expansion in manufacturing of 'Synthetic Organic Chemicals(Pigments, Intermediate and Polymers)' plant at Plot No. 3525 & 3512-A, Notified GIDC Industrial Estate, Panoli, Dist - Bharuch. It is an existing unit for manufacturing following products, which falls in the category - 5(f) of the schedule of the EIA Notification-2006:

Sr. No.	Name of Product	CTO Available	Additional	Total: After Expansion	End Use	CAS No.	Remarks
		MT/Month					
1.	Gafast Pigment Violet 23	30	70	100	Paints, Plastic and ink	215247-95-3	Expansion
	Gafast Pigment Yellow 138					30125-47-4	
	Gafast Pigment Violet 19					1047-16-1	
	Gafast Pigment Red 122					980-26-7	
	Gafast Pigment Red 254 / 255					84632-65-5/	
	Gafast Pigment Yellow 139					120500-90-5	
	Gafast Pigment Yellow 151 / 154					36888-99-0	
2.	Pigment Violet-23	30	0	30	Paint, Plastic and ink	0006358-30-1	No change
3.	Pigment Red	5.8	0	5.8	Paint, Plastic and ink	84632-65-5/0000980-26-7	No change
4.	Pigment Yellow	2.5	0	2.5	Paint, Plastic and ink	31837-42-0	No change
5.	Poly Ether Ketone(PEK)	0	50	50	Engineering Plastic	27380-27-4	New Product
	Poly Ether Ketone(PEKK)					74970-25-5	
	Polybenzimidazole (ABPBI)					25928-81-8	
6.	Poly Ether Imide (PEI)	0	500	500	Engineering Plastic	61128-46-9	New Product
7.	Poly ether sulfone (PES)	0	200	200	Engineering Plastic	25667-42-9	
	Poly Sulfone (PSU)					25154-01-2	
	Polyphenyl Sulfone (PPSU)					25608-64-4	
	Chloranil	0	100	100	Intermediate for pigments	118-75-2	New Product
9.	Methyl Succinyl Succinate(DMSS)	0	100	100	Intermediate for pigments	6289-46-9	New Product
	Total	68.3	1020	1088.3			



11.	Gas based Genset (stand-by)	1000 kVA (600 kVA +400 kVA)	1000 kVA	2000 kVA	--	--	--
12.	D.G Set (stand-by)	250 kVA	750 kVA	1000 kVA	--	--	--
13.	3 MW Power Plant	--	3 MW	3 MW	--	--	Proposed

The project activity is covered in 5(f) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated **01/06/2018** had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on **05/04/2018**. The proposal was considered by SEIAA, Gujarat in its meeting held on **30/06/2018** at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

#### A. CONDITIONS :

##### A. 1 SPECIFIC CONDITION :

- Spent solvents (59595.15 MT/Month) shall be recovered by in-house distillation in such a manner that recovery shall not be less than 95 percent and recovered solvent shall be completely reused in the process.
- Unit shall comply all the conditions & recommendations mentioned in the guidelines for the management of the spent solvents published by GPCB in letter and spirit.
- Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.
- Entire quantity of Spent Acetic acid (360 MT/Annum), spent phosphoric acid (25848 MT/Annum), Ammonium acetate (510 MT/Annum), Sodium sulphate-10% (1372 MT/Annum), Sodium bisulfite (25-30%) (3386 MT/Annum), Calcium chloride-20-30 % (3832 MT/Annum), Aluminium Chloride 22% (4143 MT/Annum) and Calcium sulphate- 92% (11917 MT/Annum) generated from the manufacturing process shall be sold only to the potential users who are authorized under Rule 9 of the Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and its amendment time to time.
- The unit shall submit the list of authorized end users of above mentioned wastes along with MoU signed with them at least two months in advance prior to commencement of production. In absence of potential buyers of these items, the unit shall restrict the production of respective item.
- Unit shall provide Continuous Emission Monitoring System [CEMS] and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.
- All measures shall be taken to prevent soil and ground water contamination.
- Unit shall not exceed waste water discharge quantity into CETP - FETP of M/s: NCT as mentioned in the existing CC&A.

##### A. 2 WATER :

- Total water requirement for the project shall not exceed 3515 KLD. Unit shall reuse 2065 KLD of waste water (source of waste water are domestic, processing + APCM, boiler, cooling and washing and its utilization area is processing and gardening) and hence, fresh water requirement shall not exceed 1450 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
- The industrial effluent generation from the project shall not exceed 2338 KL/day after proposed expansion.
- Unit shall segregate industrial waste water as follows:

Effluent stream	Qty. in KLD	Treatment	Disposal
Effluent from pigment plant - for existing production capacity	286	Existing ETP	Treated effluent conforming to inlet norms of FETP as mentioned in CTO to be discharged a/g pipeline of GIDC for conveying to FETP of M/s. NCT, Ankleshwar. Treated effluent from FETP to be finally disposed into deep sea through u/g pipeline of NCT.
Additional wastewater from utilities after expansion	102	To be reused for washing and then sent to new ETP	Treatment in ETP
Effluent from pigment plant - for additional production capacity	213	To be treated in new ETP	Treated effluent to be subjected to Reverse Osmosis treatment in 2 nos. RO plant @ 50 m3/h capacity. RO permeate to be used in process and RO reject to be sent to MEE
Low COD effluent	749	to be subjected to	RO permeate to be used in process and RO



streams		Reverse Osmosis treatment in 1 no. RO plant @ 50 m3/h capacity + 1 no. 10 m3/h RO polisher	reject to be sent to MEE
Treated effluent from new ETP	1303 (213 + 102 + 988)	to be subjected to Reverse Osmosis treatment in 2 nos. RO plant @ 50 m3/h capacity.	RO permeate to be used in process and RO reject to be sent to MEE
RO rejects	382	To be evaporated in Multi Effect Evaporator (MEE) @ 20 m3/h	Distillate from MEE plant to be used in process. Residue from MEE to be disposed off at TSDf site of M/s. BEIL, Ankleshwar.

12. Domestic wastewater generation shall not exceed 40 KLD after proposed expansion and it shall be treated in STP (Cap. 50 KLD).
13. Treated sewage shall be utilized for gardening and plantation within premises after achieving prescribed GPCB norms.
14. During monsoon season when treated sewage effluent may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.
15. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.
16. Unit shall provide adequate STP, ETP, RO & MEE system to achieve norms prescribed by GPCB for discharge into FETP of M/s: NCT.
17. Proper logbooks of ETP, Chemical consumption, quantities and qualities of effluent discharge to CETP, power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.

**A. 3 AIR:**

18. Unit shall not exceed fuel consumption as mentioned below.

Sr. No.	Stack ID / Stack Attached to	Capacity / Remarks	Quantity of fuel used	Air Pollution Control Measures	Stack Height in Meter	Parameters	Permissible Limits	Unit
As per Existing CTO.								
1	36658 - Boiler	Boiler (Cap. : 5 TPH)	NG-325 Sm <sup>3</sup> /h OR FO-300 kg/h OR	Not Applicable	20	PM SO <sub>2</sub> Nox	150 100 50	mg/Nm <sup>3</sup> ppm ppm
	72362 - Boiler	Boiler (Cap. : 6 TPH) Stand By	NG-325 Sm <sup>3</sup> /h OR FO-300 kg/h OR					
2	72953 -Fuel Heater (Thermic)	Thermic Fluid Heater-I (Cap. : 4 lakh kcal/h)	NG-325 Sm <sup>3</sup> /h OR FO-300 kg/h	Not Applicable	11	PM SO <sub>2</sub> NOx	150 100 50	mg/Nm <sup>3</sup> ppm ppm
	72952 -Fuel Heater (Thermic)	Thermic Fluid Heater-II (Cap. : 4 lakh kcal/h) Stand By	NG-325 Sm <sup>3</sup> /h OR FO-300 kg/h					
3	63544 - D.G. Sets	D.G set (Cap. : 400 + 600 = 1000 KVA)	NG-250 Nm <sup>3</sup> /h OR HSD-180 l/h	Not Applicable	12	PM SO <sub>2</sub> NOx	150 100 50	mg/Nm <sup>3</sup> ppm ppm
	36659 - D.G. Sets	D.G set (Cap. : 250KVA) Standby	Diesel- 40 Liter/h	Not Applicable				
EC applied for New Additional products								
4	Boiler	Boiler (Cap. : 25 TPH)**	Crushed Coal - 5000 kg/h	ESP + Water Scrubber** (one for each boiler)	33	PM SO <sub>2</sub> NOx	100 100 50	mg/Nm <sup>3</sup> ppm ppm
		Boiler (Cap. : 15 TPH) (Stand By)**	Crushed Coal - 3000 kg/h					
5	Fuel Heater (Thermic)	Thermic Fluid Heater-	NG-60 Nm <sup>3</sup> /h OR FO-50 kg/h	Since	30	PM SO <sub>2</sub>	150 100	mg/Nm <sup>3</sup> ppm



		6 lakh kcal/h		Natural Gas is used as fuel no APCM required		NOx	50	ppm
		Thermic Fluid Heater- 6 lakh kcal/h (Stand By)	NG-60 Nm <sup>3</sup> /h OR FO-50 kg/h					
6	D.G. Sets	Gas based Genset (1000 kVA) (Stand By)	NG-225 Nm <sup>3</sup> /h OR HSD-180 l/h	Not Applicable	15	PM SO <sub>2</sub> NOx	150 100 50	mg/Nm <sup>3</sup> ppm ppm
		DG set (750 kVA) (stand by)	HSD- 200 l/h	Not Applicable				

19. Unit shall provide adequate APCM for flue gas generation sources as mentioned above:

20. Unit shall provide adequate APCM for process gas generation sources as mentioned below:

Stack Sr. No.	Stack Attached to reactor of	Air Pollution Control System	Height (m)	Air Emission	
				Pollutant	Permissible Limit
Existing as per CTO					
1.	36661 - Reaction Vessels	Alkali Scrubber, Water Scrubber	12	HCL Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 09 mg/Nm <sup>3</sup>
2.	36660- Reaction Vessels	Alkali Scrubber, Water Scrubber			
Proposed Additional					
3.	Scrubber System-1 (HCL + SO <sub>2</sub> )	Water + Caustic scrubber	20	HCL SO <sub>2</sub>	20 mg/NM3 40 mg/NM3
4.	Scrubber System-2 (HCL + SO <sub>2</sub> )	Water + Caustic scrubber	20	HCL SO <sub>2</sub>	20 mg/NM3 40 mg/NM3
5.	Scrubber System-3 (HCL + SO <sub>2</sub> )	Water + Caustic scrubber	20	HCL SO <sub>2</sub>	20 mg/NM3 40 mg/NM3
6.	Scrubber System-4	Two stage Water + Caustic trap	20	HCL Cl <sub>2</sub>	20 mg/NM3 09 mg/NM3
7.	Scrubber System-5	Two stage Water + Caustic trap	20	HCL	20 mg/NM3

21. Measures shall be taken to reduce the process vapors emissions as far as possible.

22. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.

- Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
- Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
- A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.

23. Solvent management shall be carried out as follows :

- 1) Reactor shall be connected to chilled brine condenser system to condensate solvent vapors and reduce solvent losses.
- 2) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
- 3) Solvents shall be stored in a separate space specified with all safety measures.
- 4) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- 5) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.

24. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.

25. For control of fugitive emission, VOCs, following steps shall be followed :

- a. Closed handling and charging system shall be provided for chemicals.
- b. Reflux condenser shall be provided over Reactors / Vessels.
- c. Pumps shall be provided with mechanical seals to prevent leakages.

26. Airborne dust at all transfers operations/ points shall be controlled either by spraying water or providing enclosures.

27. Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx, HCl, Cl2 and VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

**A. 4 SOLID / HAZARDOUS WASTE:**

28. Hazardous / Solid waste management shall be as below:

Sr. No.	Type of Waste	Category (As Per Sc)- 2016	Mode of Treatment & Disposal
1.	Process waste sludge/ residue containing acid, Toxic metal, Organic compound	26.1	Co-processing at cement industry or nearby CHWIF.
2.	Empty barrels/ containers/ liners/ contaminated with hazardous chemicals/ waste	33.1	Authorized decontamination facility/ recyclers or reuse or send back to supplier or sent it to nearby TSDF.
3.	Chemical containing residue arising from decontamination	34.1	TSDF site.
4.	Chemical sludge from waste water treatment	35.3	TSDF site.
5.	Oil and grease skimming	35.4	Co-processing at cement industry or nearby CHWIF.
6.	Used or Spent Oil	5.1	Reuse in plant & machinery as lubricant or sell it to authorized re-refiners/ recycler.
7.	Inorganic Acids (Spent Acids)	B15	Sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
8.	Process Residue	36.1	Co-processing at cement industry or nearby CHWIF.
9.	Spent Carbon or filter media	36.2	Co-processing at cement industry or nearby CHWIF.
10.	Ammonium	A10	Sell out to authorize users who are having authorization with valid CCA and rule 9 permission to receive this waste.
11.	Sodium sulphate-10%	---	Sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste..
12.	Metal hydrogen sulphates	B23	Sell out to authorize users who are having authorization with valid CCA and rule 9 permission to receive this waste.
13.	Halogen- containing compounds which produce acidic vapor on contact with humid air or water e.g. silicon tetrachloride, aluminium chloride, titanium tetrachloride	B10	Sell out to authorize users who are having authorization with valid CCA and rule 9 permission to receive this waste.
			Aluminium Chloride-22%- Disposed by Sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
14.	Calcium sulfate-92%	---	Sell out to authorize users who are having authorization with valid CCA and rule 9 permission to receive this waste.

29. Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

**A. 5 OTHER:**

30. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s: Siddhi Green Excellence Pvt. Ltd., Ankleshwar and submitted by project proponent vide letter no. NIL dated 16/12/2017 and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.



**B. GENERAL CONDITIONS:****B.1 CONSTRUCTION PHASE:**

31. Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
32. Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
33. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
34. First Aid Box shall be made readily available in adequate quantity at all the times.
35. The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit.
36. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
37. Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
38. Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
39. All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.
40. Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.
41. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.
42. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the Environment Act, 1986 and its subsequent amendments from time to time.

**B.2 OPERATION PHASE:****B.2.1 WATER:**

43. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
44. All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.

**B.2.2 AIR:**

45. Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
46. Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
47. Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by the GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.
48. All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

**B.2.3 HAZARDOUS/SOLID WASTE:**

49. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
50. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
51. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
52. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
53. The design of the Trucks/tankers shall be such that there is no spillage during transportation
54. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
55. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.



#### **B.2.4 SAFETY:**

56. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963
  57. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
  58. Main entry and exit shall be separate and clearly marked in the facility.
  59. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
  60. Storage of flammable chemicals shall be sufficiently away from the production area.
  61. Sufficient number of fire extinguishers shall be provided near the plant and storage area.
  62. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
  63. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
  64. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
  65. Only flame proof electrical fittings shall be provided in the plant premises.
  66. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.
  67. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
  68. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
  69. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
  70. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
  71. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
- Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
- Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
74. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
  75. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
  76. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.



#### **B.2.5 NOISE:**

77. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

#### **B.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION:**

78. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
79. The company shall undertake various waste minimization measures such as :
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw materials substitutes.
  - c. Use of automated and close filling to minimize spillages.
  - d. Use of close feed system into batch reactors.
  - e. Venting equipment through vapour recovery system.
  - f. Use of high pressure hoses for cleaning to reduce wastewater generation.
  - g. Recycling of washes to subsequent batches.

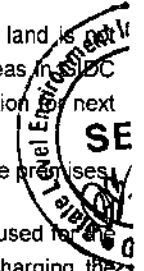
- h. Recycling of steam condensate.
- i. Sweeping / mopping of floor instead of floor washing to avoid effluent generation.
- j. Regular preventive maintenance for avoiding leakage, spillage etc.

**B.2.7 GREEN BELT AND OTHER PLANTATION:**

- 80. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.
- 81. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

**B.3 OTHER CONDITION:**

- 82. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
- 83. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.
- 84. Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.
- 85. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
- 86. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
- 87. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
- 88. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 89. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
- 90. During material transfer there shall be no spillages and gullies shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
- 91. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- 92. Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
- 93. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
- 94. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 95. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
- 96. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
- 97. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- 98. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
- 99. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- 100. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned





above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

101. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
102. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
103. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
104. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
105. This environmental clearance is valid for seven years from the date of issue.
106. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
107. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application, makes this environment clearance cancelled.

With regards,  
Yours sincerely,

  
(ANJANA CHRISTIAN)  
Member Secretary



Issued to:

M/s: Gharda Chemicals  
Mr. Sanjay K Gandhi  
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