

# **Gujarat Alkalies and Chemicals Limited**

(Promoted by Govt. of Gujarat)

Regd. Office & Works: P.O. Petrochemicals - 391 346, Dist. Vadodara(Gujarat) INDtA

Phone: +91-265-2232681, 3061200 Fax: +91-265-2232130 Website: www.gad.com CIN NO: L24110GJ1973PLC002247

# GACL/S&E/Env-17/25

November 26, 2025

To,

Deputy Director General of Forest (C), Integrated Regional Office – Gandhinagar, Karmayogi Bhawan, Block -3, F-2 Wing, 5<sup>th</sup> Floor, Near CH-3 Circle, Sector-10A, Gandhinagar-382010 Ministry of Environment Forest and Climate Change (email: iro.gandhingr-mefcc@gov.in)

Subject : Half-yearly compliance report to the conditions of Environment Clearance for the

period of April 2025 to September 2025

Reference : EC order no. SEIAA/GUJ/EC/4(d) & 5 (f)/4037/2015 dated 30/11/2015 granted by

SEIAA.

Respected Sir,

With reference to the subject mentioned above and in accordance with the condition no. 87 of B. other conditions stipulated in the aforementioned Environment Clearance (EC) order, we are hereby submitting the half-yearly Environmental Clearance Compliance Report along with details with respect to out unit for the period of April 2025 to September 2025 for your kind perusal and record.

Please find enclosed the detailed compliance report outlining our adherence to the EC conditions for the reporting period. We have also uploaded this compliance report on our company website at the following link: <a href="https://gacl.com/safety-compliance/">https://gacl.com/safety-compliance/</a>.

Submitted for your kind information, please.

Thanking you,

For Gujarat Alkalies and Chemicals Ltd.

Mr. Vishnukumar Patel
Complex Head / Occupier

Copy To:

- 1) The Regional Director, CPCB, Vadodara, Gujarat (ec-rdw.cpcb@gujarat.gov.in)
- 2) SEIAA, Gujarat (seiaa.gujarat@gmail.com)
- 3) The Member Secretory, GPCB, Gandhinagar (ms-gpcb@gujarat.gov.in)



Dahej Completi: P.O. Dahej - 392130. Tal. Vayra, Dist. Bharuch (Gujarat) INDIA. Phone : +93-2641-256315/ 677. Fax : +91.2043-256220.

Sr. No.	EC Condition	Compliance Status		
A. SP	ECIFIC CONDITIONS:			
A. 1 -	- Water:			
1.	No ground water shall be used for the project. Entire Water	Complied.  There is no use of ground water within industry premises.	Month	Water Consumption, KL/D (Avg)
	requirement of 6245 KLD after the proposed expansion shall be met	Existing water requirement is fulfilled from Mahi River	Apr'25	4978
	through the own joint water	bank called JWSS Pumping station.	May'25	4737
	supply scheme with GIPCL. No new borewell shall be dug within	Average water consumption during the period April 2025 to September 2025 is lower than permitted quantity as	Jun'25	4564
	the premises as per the undertaking submitted in EIA	mentioned in the table.	Jul'25	4509
			Aug'25	4390
	report.		Sept'25	4451
2.	The industrial effluent generation from salt washery unit shall not exceed from existing 30 KLD due to proposed expansion and it shall be disposed into estuary of river mahi as per consent given by GPCB.	As we are procuring washed salt, effluent generation from salt washery unit is Nil.		nit is Nil.
3.	The other industrial effluent generation (except from salt washery unit) shall reduce from	Complied.  Average industrial wastewater discharge during the period April 2025 to September 2025 is lower than	Month	Industrial Effluent Discharge to VECL, KL/D (Avg)
	existing 2470 KLD to 2461 KLD after the proposed expansion due	permitted quantity as mentioned in the table.	Apr'25	1432
	to recycle / reuse of effluent		May'25	1538

Sr. No.	EC Condition	Compliance Status		
			Jun'25	1538
			Jul'25	1638
			Aug'25	1421
			Sept'25	1620
4.	Various measures shall be implemented as proposed for reducing the industrial effluent generation viz existing practices as well as reuse of condensate generated from the caustic evaporation unit into chemical preparation in the brine system.	All the identified measures are implemented.		
5.	The industrial effluent shall be treated in existing ETP. ETP shall be operated regularly and efficiently so as to achieve the GPCB norms at the ETP outlet.	Effluent is treated in our ETP for achieving effluent GPCB nor		Accredited laboratory
6.	The treated wastewater confirming to GPCB norms shall be discharged into ECP channel for its final disposal into estuary of river mahi.	Complied.  The treated wastewater confirming to GPCB norms is disposed to estuary of river mahi through ECP channel (Now VECL).		

Sr. No.	EC Condition	Compliance Status	s	
7.	The unit shall provide online system for monitoring of treated effluent quantity and quality, with an arrangement for reflecting the same on company's server, which can be assessed by GPCB on real time basis.	Complied.  Continuous online monitoring system at the outlet of the ETP system has been installed and connected required OCEMS to server of CPCB and GPCB for continuous monitoring of effluent discharge. Please refer attached screenshot of connectivity with GPCB-GLense Server.	goth gov in death-own frijudis Coarbourd (grothine; 2791 Guijarra F Pollution Parch bourse themicals Ltd  get Final_Outlet-755 Final_Outlet-COD Final_Outlet-BOD Final_Outlet-BO	Active Period: 01/01/2016 TO 02/05/2025  Active Period: 01/01/2016 TO 02/05/2025
8.	The domestic wastewater generation shall not exceed from existing 280 KLD due to proposed  Complied.  Average domestic wastewater generation during the period April 2025 to September 2025 is lower than		Month	Treated sewage Discharge to VECL, KL/D (Avg.)
	expansion. Domestic www shall be sent to STP for its further	permitted quantity as mentioned in the table.  Treated sewage is discharged to VECL along with	Apr'25	35
	treatment and finally disposed at	industrial effluent.	May'25	53
	VECL along with industrial effluent		Jun'25	51
			Jul'25	56
			Aug'25	28
			Sept'25	54
9.	Proper logbooks of ETP operation and also showing the quantity of effluent generated, discharged into ECP channel, utilized for plantation/gardening, reused/recycled etc. shall be maintained and furnished to GPCB	Complied.  ETP logbook is being maintained with respect to ETP operation. All the data of effluent and recycle water are submitted to GPCB as and when required.		of effluent and recycled

Sr. No.	EC Condition	Compliance Status	
	from time to time.		
10.	Regular performance evaluation of ETP shall be undertaken every year to check its adequacy through credible institutes like LD college of Engg, NPC or such other institute of similar repute and its records shall be maintained.	Complied.  Performance evaluation of ETP has been analyzed by GPCB appointed Environmental auditors; through Environmental audit every year.  DDIT (Department of Civil Engineering), Nadiad has been appointed by GPCB as Environment auditor for FY:2024-25. Adequacy certificate issued by them is attached herewith.  ***Ha ADGORGE CERTIFICATION TO MONITORINA MANAGOMAN   Managor of the complete of the	
11.	Rain water harvesting of surface	Complied.	
	as well as of 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 runoff,	Unit has a groundwater recharging system at its captive TSDF site (Vadodara Complex), where tot rainfall and surface run off is being recharged into the ground after pre-treatment.	

Sr. No.	EC Condition	Compliance Status		
	pretreatment must be done to remove suspended matters.			
12.	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 GIDC or GPCB or any such authority created for this purpose by Govt./GIDC	<ul> <li>Complied.</li> <li>We shall do as and when such directives will be notified.</li> <li>GACL is one of the promoters of effluent conveyance channel (ECP) managed by Vadodara Enviro Channel Ltd (VECL) which is developed in Vadodara for disposal of treated effluent.</li> <li>GACL has planned to purify the sewage water of Vadodara Municipal Corporation and use it in the plant. A Special Purpose Vehicle / Joint Venture Company named Vadodara Jal Sanchay Private Limited (VJSPL) was incorporated on 22.07.2020 for the establishment of a new secondary treated waste water plant (STP) of 50 MLD at Vadodara, Gujarat. This joint venture includes GACL, Gujarat State Petroleum Corporation (GSPC), and Vadodara Municipal Corporation (VMC). The objective is for this treated water to be used in the plant.C</li> </ul>		
A. 2 -	- Air:			
13.	Out of total 5 boilers, three boilers shall be kept as standby and two boilers shall be running. Existing 3 DG sets shall be kept as standby.	Complied.  Boilers and D.G. sets are being operated as per latest CC&A Order issued by GPCB.		
14.	Natural gas to the tune of 2483 SCM/hr shall be used as a fuel for boilers.	Complied.  Average natural gas consumption during the period April 2025 to September 2025 is 2383 SCM/Hr which is less	Month	Natural Gas Consumption, SCM/Day (Avg.)
		than 164904 SCM/day (6871 SCM/Hr) as mentioned in valid CC&A Order issued by GPCB.	Apr'25	2437
			May'25	2401
			Jun'25	2344
			Jul'25	2411

Sr. No.	EC Condition	Compliance Status		
			Aug'25	2394
			Sept'25	2309
15.	No additional process vent shall be provided for the proposed expansion	Complied.  No additional vent has been provided for proposed expansion.		
16.	At present, Alkali scrubber is provided with process stack attached to CS hypo plant to scrub the HCl and Cl <sub>2</sub> gases. Water scrubbers are provided with process stack attached to HCl plant, CLM I & 2 plant to scrub the HCl gas. A stack for H2O2 is also provided at the solvent recovery unit where the charcoal bed is provided.	Unit has provided and efficiently operating APCM's as mentioned in authorization vide Consent Order issued by GPCB.		
17.	Existing APCM shall be used for the proposed process emission from Hypo tower, HCl section of CS plant, HCl section of old and new CLM plant and solvent recovery plant.	No additional APCM is installed for the mentioned process	stacks.	
18.	The existing air pollution control equipments shall be operated efficiently and effectively to achieve the norms prescribed by	Complied.  Unit has provided adequate APCMs in the existing flue sources wherever required & achieving the norms as per GP	_	. 5 5

Sr. No.	EC Condition	Compliance Status	
	the GPCB at stack outlets.	Flue gas and process gas emission monitoring are being monitored/checked on monthly basis through NABL Accredited laboratory as well as GPCB appointed Environmental auditors; through Environmental audit. Results were observed well within the limit.	
19.	Online monitoring system shall be installed at the process vents of Hypo tower – Caustic Soda plant and Chloromethanes plant for monitoring of HCl and Cl <sub>2</sub> parameters. Arrangement shall be made for reflecting the monitored values on the company's server, which can be assessed by GPCB on real time basis.	The unit has installed and connected required OCEMS to CPCB & GPCB for continuous monitoring	
20.	The company shall prepare schedule, carry regular preventive maintenance of air pollution control equipments and assign responsibility of preventive maintenance to the senior officer	<u>-</u>	

Sr. No.	EC Condition	Complian	ice Status
	of the company.		
21.	The fugitive emission in work zone environment shall be monitored. The emission shall conform to the standards prescribed by concerned authority from time to time (e.g Directors of industrial safety and health)	Complied.  Work zone environment is being monitored reglocation of plants. The emission observed well wit are maintained in Form No. 37.  HCl sensor  Cl <sub>2</sub> sensor  Cl <sub>2</sub> sensor	gularly through online sensors placed at various hin the standards prescribed by DISH and records  Wether the standards prescribed by DISH and records  Methane sensor  Methyl Chloride sensor  From No. 27  (Procrote Join Methyl Chloride sensor  Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Register containing particular of working environment required under section ? (a) (a).  Toma No074 Extra 175  1. Section of Contraction mentioning particular of working in the containing in the co
		Sensor value display and monitoring at DCS panel	7. Compressor Chlorine on dated 022/07/25 022 4 4 Chlorine 2/2/07/25 022 4 Form 37 - Work place monitoring report

Sr. No.	EC Condition	Compliance Status
22.	Regular performance evaluation of air pollution control systems shall be undertaken every year to check its adequacy through credible institutes like LD college of Engg, NPC or such other institute of similar repute and its records shall be maintained	Performance evaluation of APCM's has been analyzed by GPCB appointed Environmental auditors; through Environmental audit every year.  DDIT (Department of Civil Engineering), Nadiad has been appointed by GPCB as Environment auditor for FY:2024-25. Adequacy certificate issued by them is attached in compliance status of condition no. 10.  The GPCB appointed Global University, Siddhpur to conduct the Environment Audit for FY 2025-26, and that audit is now underway.
23.	Airborne dust at all transfers operations/points shall be controlled either by spraying water or providing enclosures.	Complied.  No such aspect (air borne dusty operation) is there in our plant. All the processes are being carried out in closed vessels.
24.	Solvent management shall be carried out as follows	Complied.
	1. Reactor shall be connected to chilled brine condenser system to condensate solvent vapors and reduce solvent losses.	There is no reactor from where solvent losses occur. However, distillation column and methanol storage tank have trap cooler with chilled brine to prevent material losses.
	Reactor and solvent handling pump shall have mechanical seals to prevent leakages	All the pumps for handling of methanol are having mechanical seal, coupling guard and motor guard. Preventive maintenance is also carried out regularly to prevent leakage/break-down.
	3. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95 %	All the condenser of CLM distillation column are available with sufficient HTA and residence time as a part of design feature by the technology suppliers.

Sr. No.	EC Condition	Compliance Status	
	solvent recovery.		
	4. Solvents shall be stored in a separate space specified with all safety measures	Methanol is stored in PESO approved storage tank with safety measures.	
	5. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.	Earthing Provided in methanol handling electrical equipment.	
	6. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	Trap condenser with safety valve and Nitrogen purging system is available on methanol tank to prevent vapor losses.	
25.	Regular monitoring of VOCs shall be carried out in the work zone area and ambient air.	Complied.  The unit is conducting regular monitoring of VOC.	
26.	For control of fugitive emission, VOCs following steps shall be followed:  a. Closed handling and charging	a. Close handling and charging	
	<ul><li>system shall be provided for chemicals.</li><li>b. Reflux condenser shall be provided over reactors/vessels.</li><li>c. Pumps shall be provided with</li></ul>	b. Not applicable	

Sr. No.	EC Condition		Compliance Status
	mechanical seals to prevent leakages.  d. System of leak detection and repair of pump/pipeline based on preventive maintenance.	canned motor pump are available	Pump having mechanical seal, coupling guard and motor guard
27.	Regular monitoring of ground level concentrations of SO <sub>2</sub> , NOx, Cl <sub>2</sub> , HCl, PM <sub>10</sub> & PM <sub>2.5</sub> shall be carried out in impact zone and its record shall be maintained. Ambient air quality shall not exceed the standards stipulated by GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be undertaken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.	Complied.  Ground level concentrations of SO <sub>2</sub> , NOx, Cl <sub>2</sub> , HCl, PM <sub>10</sub> & PM <sub>2.5</sub> in ambient air are being monitored/checked on monthly basis through NABL Accredited laboratory as well as GPCB appointed Environmental auditors; through Environmental audit.  Results were observed well within the limit.	
A. 3 -	: Solid/Hazardous waste		
28.	The company must strictly comply with the rules and regulations with regards to handling and disposal of hazardous waste in accordance with the Hazardous waste (M,	handling and disposal of Hazardous	ulatory norms and maintaining the records with regards to waste in accordance with the Hazardous & Other Waste ement) Rules 2016, as may be amended from time to time.

Sr. No.	EC Condition	Compliance Status
	H&TM) Rules 2008 as may be amended from time to time. Authorization from GPCB must be obtained for collection/storage/treatment/disp osal of hazardous waste.	Unit has been granted authorization vide consent order no AWH-131094 valid upto 31.12.2028.
29.	The hazardous waste shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility before its disposal.	Complied.  Hazardous waste is packed in HDPE barrel and stored in separate storage facility with pucca bottom before its disposal.
30.	Used heating salt shall be sold to authorized recyclers or disposed at own landfill site. Salt washery and brine purification sludge, ETP sludge, incineration ash and used heating salt shall be disposed in company"s own TSDF.	Heating salt, salt / brine sludge, ETP sludge are being disposed at captive landfill site.
31.	Organic waste from H2O2 plant, activated charcoal and waste mixed chloromethane (Hi boilers) shall be sent to the common hazardous waste incineration facility (CHWIF)	•

Sr. No.	EC Condition	Compliance Status	
32.	Spent catalyst and molecular sieves shall be sent to authorized regeneration units or shall be disposed off at TSDF or CHWIF depending on its characteristics.	Spent catalyst / molecular sieves are being disposed at captive landfill site.	
33.	Discarded containers / barrels/ bags/liner shall be either reused or sold only to authorized recyclers after decontamination.	Discarded containers / barrels/ bags/liner are sold only to authorized recyclers.	
34.	Used oil, discarded lead acid batteries, lead acid battery plates and other lead scrap and insulated copper wire scrap/copper with PVC sheathing shall be sold only to registered reprocessors.	Used oil, discarded lead acid batteries, lead acid battery plates and other lead scrap and insul copper wire scrap/copper with PVC sheathing are sold only to registered re-processors.	

Sr. No.	EC Condition	Compliance Status	
35.	The unit shall obtain membership of the common TSDF/CHWIF (whichever is applicable)	Complied.  Unit have already obtained membership of Banas Resources LLP for pre-processing/co-processing of waste and SEPPL for incineration of waste.  **To, Gigent Alailes and Obericals Ltd, Proteomorphy Certificate for Recoiving pre-processing for waste and SEPPL for incineration of waste.  **To, Gigent Alailes and Obericals Ltd, Proteomorphy Certificate for Recoiving pre-processing floor incineration of waste.  **Solit Membership Certificate for Recoiving pre-processing floor processing floor incineration of waste.  **Solit Membership Certificate for Recoiving pre-processing floor processing	
36.	Vehicles used for transportation of hazardous waste shall be in accordance with the provisions under the motor vehicle act 1988 and rules made there under.	Complied.  Unit is following the Motor Vehicle Act, 1988 and rules for the vehicles transporting hazardous waste. Hazardous waste is being sent by Manifest System through Dedicated Hazardous waste vehicle with AIS-140 GPS system.	
37.	All possible efforts shall be made for co-processing of the hazardous waste prior to disposal into TSDF/CHWIF.	Complied.  Organic waste and waste carbon are being sent to pre-processors.	

Sr. No.	EC Condition	Сотр	liance Status	
38.	The company shall provide additional ground water monitoring wells (three well clusters) around the captive TSDF as per the "Criteria of Hazardous Waste landfills" published by CPCB. Quality of ground water in saturated zone beneath and around the landfills as well as other parameters like leachate quality, air quality etc. shall be monitored regularly as per the "Criteria of Hazardous Waste landfills" published by CPCB	Complied.  We have provided 3 ground water monitoring wells one upstream and two downstream at our captive TSDF. Quality of water in borewells and leachate well as well as ambient air quality is monitored/checked on regular basis through NABL Accredited laboratory. Please refer attached photographs herewith.	One of the Borewell water Monitoring Well	Lechate Collection Well
A. 4 -	- Safety:			
39.	Provision of Manufacture, Storage and Import of hazardous chemicals rules 1986 and The Factories Act 1948 shall be strictly complied with.	Complied.  The company is strictly complying with the rules and regulations under MSIHC Rules, 1989 and Factory Act 1948 as amended. Following measures are taken:  Valid Factory license obtained from DISH.  Execution of Mock drill and Fire drill  Quarterly safety committee meeting  Internal safety audits at periodic intervals  Periodic testing and compliance of lifting tools and tackles, pressure equipment and piping, cylinders and storage vessels  Developed and keep updated On-site Emergency Plan (Last revised in Jan-2025)		

Sr. No.	EC Condition	Compliance Status
		There is a mutual aid scheme in off Site Industrial Emergency Control Room (OIECR) situated in materials bhavan of Reliance Industries of which GACL, Vadodara is one of the promoters. This is headed by Collector and District Magistrate, Vadodara and is manned round the clock.
40.	The project authorities shall strictly comply with the provisions made in manufacture, storage and import of hazardous chemicals rules 1989, as amended in 2000 and the public liability insurance act for handling of hazardous chemicals etc. Necessary approvals from the CCE and concerned govt. authorities shall be obtained before commissioning of the project. Requisite onsite and offsite disaster management plans have to be prepared and implemented.	Complied.  We are complying with the provisions made in manufacture, storage and import of hazardous chemicals rules 1989, as amended in 2000 and the public liability insurance act for handling of hazardous chemicals etc. Necessary approvals from the CCE and concerned govt. authorities have been obtained before commissioning of the project. Unit has also obtained valid PLI Policy.  Please refer to the compliance status of the condition no. 41 for CCE approval details.
41.	The unit shall obtain requisite permission from PESO, nagpur for storage of chlorine, hydrogen etc. before commissioning of expansion project.	Complied.  We have already obtained requisite permission from PESO, Nagpur for storage of chlorine, hydrogen etc.  Licenses obtained for petroleum product, gas cylinders, poison/toxic chemicals:  ✓ To fill compressed H2 gas in cylinder: License no. G/HO/GJ/05/509(G18632)  ✓ To fill compressed Methyl Chloride gas in cylinder: License no. G/HO/GJ/06/115(G1269)  ✓ To fill compressed Chlorine gas in cylinder: License no. G/HO/GJ/05/13(G1158)  ✓ To store Methanol: License no. P/HQ/GJ/11/5488(P365971)

Sr. No.	EC Condition	Compliance Status
		✓ To store Ammonium Nitrate: License no. A/HQ/GJ/P3/22(A3832)
42.	All the necessary precautions measures shall be taken to avoid any kind of accident during storage and handling of toxic/hazardous chemicals, especially Cl <sub>2</sub> & H <sub>2</sub> .	Complied.  All the required measures are being taken to avoid any accidents as mentioned below:  Regular plant healthiness survey and internal safety audits  Sensors (Chlorine, HCI, Hydrogen, Methane, Methyl Chloride) placed at critical locations for continuous monitoring  Sensor values displayed online at control rooms with alarm  DCS operation with alarms & interlocks  Adequate lightening arrestors  Electrical, instrument and other fittings as per area classifications.  Full-fledged Hypo System with 03 nos. of High-capacity blowers having emergency power supply  Out of five nos. Cl <sub>2</sub> tanks, one is always kept empty.  Foam Pourer System for Methanol storage  Provision of safety valves & rupture discs  Predictive maintenance of equipment and piping for hazardous chemicals as per schedule

Sr. No.	EC Condition		Compliance Status		
		Cl2 tonner handling	MINIATELY AFTER OPENING SMIFE VALVE OF ADDR. CLOSE THE FILLING VALVE. SOONECT THE FILLING VALVE. SOONECT THE FILLING VALVE. SOONECT THE FILLING VALVE. FILLED TONNER AFFA.  Law hover of for safe Clases.	i i i i i i i i i i i i i i i i i i i	
			nner/cylinder filling a well-vent dedicate	handling of Ha hottling	
43.	Storage of hazardous chemicals shall be sufficiently away from the production area.	Complied.  Dedicated storage facility of production area.	nazardous/flammable chemicals	provided at safer distance from	
		PESO Approved dedicated storage for Methanol	PESO Approved dedicated storage for Ammonium Nitrate	PESO Approved dedicated storage for Methyl Chloride	

Sr. No.	EC Condition	Compliance Status	
		Dedicated storage tanks for Cl <sub>2</sub>	
44.	Sufficient no. of fire extinguishers shall be provided near the plant and storage area.	Complied.	

Sr. No.	EC Condition	Compliance Status	
		Foam Bla	ader Tank  Water Monitor
		Central Fire Station	Fire tender
45.	All the necessary precautions	Complied.	
	measures shall be taken to avoid	All necessary precautionary measures are taken t	o avoid any kind of accident during storage and

Sr. No.	EC Condition	Compliance Status	
	any kind of accident during storage and handling of toxic / hazardous chemicals	handling of toxic/hazardous chemicals.  PPE Matrix is displayed at various locations.	
46.	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.	Complied.  All the toxic/hazardous chemicals are stored in optimum quantity and all necessary permissions in this regard are obtained before commencing the expansion activities. Maintaining the storage concept.	
47.	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the risk assessment report.	HIRA/QRA/HAZOP/Disaster Management Audit/Environment audit (by GPCB appointed Sch-I Auditor) etc. is being carried out regularly to comply with all risk mitigation measures and environment protection measures.	
48.	Only flame proof electrical fittings shall be provided in the plant premises.	Complied.  Electrical Flame Proof fittings have been provided in plant area, wherever required.	
49.	Storage and use of hazardous chemicals shall be minimized to	Complied.  Necessary precautions and mitigation measures are in place to address potential risks associated	

Sr. No.	EC Condition	Compliance Status	
	the extend possible and all necessary precautions shall be taken to mitigate the risk generated out of it. Storage of hazardous chemicals shall be in multiple small capacity tanks/containers instead of one single large capacity tank for safety purpose.	with these chemicals, aligning with safety protocols.	
50.	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. Close handling system for chemicals shall be provided.	<ul> <li>Complied.</li> <li>Dyke walls have been provided for all storage tanks.</li> <li>Closed loops systems to transfer the materials to avoid leakage/ spillage.</li> <li>Level transmitter/Level gauge provided to hazardous chemical storage tanks to avoid overflow.</li> <li>safety valve/flame arrestor provided to hazardous chemical storage tanks as appropriate.</li> </ul>	
51.	Handling and charging of chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.	Charging of chemicals is conducted through closed systems, utilizing pumping or vacuum transfer methods. This infrastructure minimizes the potential for human exposure during these operations,	
52.	Tie up shall be done with nearby health care unit/doctor for seeking immediate medical attention in case of emergency.	Complied. Unit has tie-up with more than 30 empaneled hospitals. Further, unit have 4 bedded in-house OHC with round the clock availability of doctors and 1 ambulance. Please refer below photographs.	

Sr. No.	EC Condition	Compliance Status		
		OCCUPATIONAL HEALTH CENTRE		
53.	Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.	Complied.  Suitable Personal Protective Equipments (PPEs) such as safety goggles, helmets, gloves, respirators etc. are provided to all workers. Usage of PPEs is strictly enforced through regular supervision and training programs to ensure worker safety. Records of PPE issuance and training are maintained.  PPE Matrix display board		
54.	First aid box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	Complied.  Approx. 50 Nos. of First Aid Boxes placed with necessary required first aid medical items at various locations in plant in such a way that first aid treatment can be readily available in emergency.  Regular inspections ensure the availability and unexpired status of all items. Personnel are trained in first aid and the use of these antidotes.  Antidotes i.e. Inj. Methylene Blue is available at OHC along with medical oxygen and Emergency drugs.		
55.	Training shall be given to all workers on safety and health aspects of handling chemicals.	Complied.  Dedicated Safety & Environment team is recruited with qualified safety officers. Regular training is being provided on handling of chemicals to all workers. Induction / Refresher / specific topic		

Sr. No.	EC Condition	Compliance Status		
		<ul> <li>Importance of PPEs</li> <li>Behavior Base Safety (BBS)</li> <li>Work Permit System</li> <li>Safe Working Practice</li> <li>Materia</li> <li>Safety</li> <li>Confines</li> <li>MSDS</li> </ul>	cs as below: s safety Management al Handling in chemical industry e space during work at Height	
56.	Occupational health surveillance of the workers shall be done and records shall be maintained. Preemployment and periodical medical examination for all workers shall be undertaken as per Factories Act & Rules	Complied.  Pre-employment and periodic medical examinations as p conducted & records of the same are maintained in Form Rules, 1962 respectively.  Subsection of the first of the same are maintained in Form Rules, 1962 respectively.  CHEMICALS LTD., VADODARA  1. Subsection of the first of the stand to the same are maintained in Form Rules, 1966 and the same are mai	, .	
		Form No. 32	Form No. 33	

Sr. No.	EC Condition	Compliance Status
57.	Transportation of hazardous chemicals shall be done as per the provisions of Motor Vehicle Act and Rules	The transportation of hazardous chemicals is strictly conducted as per the provisions outlined in the Motor Vehicles Act and relevant Rules. This includes:  • Vehicles having valid registration and permits for transporting hazardous goods.  • Display of EIP labels on vehicles.  • Equipping vehicles with necessary safety equipment, first-aid, and spill control measures.  • Training of drivers  HCI Tanker  Methanol Tanker
58.	The company shall implement all preventive and mitigation measures suggested in the risk assessment report	Complied.  HIRA/QRA/HAZOP/Disaster Management Audit/Environment audit (by GPCB appointed Sch-Auditor) etc. is being carried out regularly to comply with all risk mitigation measures and environment protection measures.

Sr. No.	EC Condition	Compliance Status
A. 5 -	- Noise :	
59.	To minimize the noise pollution the following noise control measures shall be implemented:  • Selection of any new plant equipment shall be made with specifications of low noise levels  • Manufacturers/suppliers of major noise generating machines / equipments like air compressors, feeder pumps, turbine generators etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with national/international regulatory norms with respect to noise generation for individual units  • Regular maintenance of machinery and vehicles shall be undertaken to reduce noise	<ul> <li>Complied.</li> <li>All new plant equipment selections for the plant prioritize low noise level specifications.</li> <li>A regular maintenance schedule is in place for all machinery. This includes periodic checks, lubrication, and repairs to ensure optimal operating conditions and minimize noise generation. Records of maintenance activities are diligently maintained and are available for inspection. This proactive approach effectively reduces the noise impact from plant operations.</li> <li>Noise suppression measures, including enclosures around high-noise equipment (e.g., compressors, pumps), acoustic buffers (e.g., green belts, barriers), and personal protective equipment (e.g., earplugs and muffs for workers), have been provided across the plant.</li> </ul>

Sr. No.	EC Condition	Compliance Status
	<ul> <li>impact</li> <li>Noise suppression measures such as enclosures, buffers and /or protective measures shall be provided</li> <li>Employees shall be provided with ear protection measures</li> </ul>	
	like ear muff or ear plug.  • Proper oiling, lubrications and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation	
	Construction equipments generating minimum noise and vibration shall be chosen.	
	Ear plugs and muffs shall be made compulsory for the construction workers working near the noise generating activities/machines /equipments	
	Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate	

Sr. No.	EC Condition	Compliance Status
	<ul> <li>Construction equipment meeting the norms specified by EP act 1986 shall be used</li> </ul>	
	<ul> <li>Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.</li> <li>Noise levels shall be reduced</li> </ul>	
	by the use of adequate mufflers on all motorized equipment.	
60.	The overall noise level in and around the plant area shall be well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.	Complied.  Adequate measures are being taken and regular monitoring of ambient noise level is being carried out. Ambient noise is observed well within the prescribed limits.

Sr. No.	EC Condition	Compliance Status	
A. 6 -	- Energy Conservation :		
61.	The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency norms.	Complied.  Unit has installed energy-efficient devices and appliances, adhering to the Bureau of Energy Efficiency (BEE) norms to minimize energy consumption.	
62.	The energy audit shall be conducted at regular intervals and recommendations of the audit report shall be implemented.	Energy audit is conducted at every three year and recommendations of the audit report are	
63.	The project proponent shall implement the application of solar energy which shall be utilized as solar lighting for illumination of common areas, lighting of internal roads and passages in addition to utilsation of solar water heating systems	Unit has installed 563 KW Solar Rooftop Power Plant for captive use at various location of plants.  Photographs are attached berewith	

Sr. No.	EC Condition	Compliance Status
		MECH WORKSHOPHELD
64.	The transformers and motors shall have minimum efficiency of 85 %.	Noted.
65.	Variable frequency drives shall be installed	Complied.  VFD are installed at specific identified locations for conserving energy and improving efficiency.
66.	Energy conservation measures shall include use of electronic lighting system, use of CFL tubes to minimize energy use, use of programmable times for pumping system and lighting, water level controllers for water pumps, centralized cooling etc.	Complied.  Identified energy conservation measures are being implemented across our operations.
67.	Energy saving practices as follows shall be practiced:  • Constant monitoring of	<ul> <li>Complied.</li> <li>Unit has controls and procedures in place to monitor and control energy consumption across its</li> </ul>

Sr. No.	EC Condition	Compliance Status
	energy consumption and defining targets for energy conservation  Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level  Use of solar cells for lighting  Use of solar water heater for canteen and washing area  Proper load factor shall be maintained  Provision of day light roof to maximize natural light in the production plant instead of electrical lighting  Use of electronic ballast to save energy  Automatic switching system for lighting and water tank pumping shall be used.  To the maximum extent possible and technically feasible, energy efficient motors, pumps, air conditioning systems shall be	<ul> <li>operations.</li> <li>Adjusting settings and illumination levels to minimize energy use aligns with energy efficiency best practices and potential regulatory requirements.</li> <li>Solar installation are outlined in compliance status of condition no. 63.</li> <li>Load factor is monitored regularly.</li> <li>Day light roofing has been incorporated into the production plant design and construction, maximizing natural light and reducing reliance on electrical illumination.</li> <li>Installed LED lights to save energy</li> <li>To the maximum extent possible and technically feasible, following measures already taken;</li> <li>Automatic switching for lighting/pumping has been implemented and regularly maintained as per specifications.</li> <li>Procurement of BEE Star-rated or equivalent systems for motors/pumps/AC.</li> <li>Assessed and implemented gravity flow system to minimize pumping energy.</li> </ul>

Sr. No.	EC Condition	Compliance Status
	<ul> <li>selected.</li> <li>Gravity flow shall be preferred wherever possible to save pumping energy.</li> <li>Promoting awareness on energy conservation</li> <li>Training to the staff on methods of energy conservation and to be vigilant for this</li> </ul>	
A. 7 -	Cleaner Production and Waste Mi	nimization:
68.	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 GPCB	

Sr. No.	EC Condition	Compliance Status	
		<ul> <li>Technology in 1989.</li> <li>275 kW capacity Back Pressure Turbines (BPT) have been installed, which help in recovering energy from high-pressure steam in the form of electric power.</li> <li>Significant capital investments in Energy Conservation Equipments.</li> </ul>	
		2. Transition to Renewable Energy:	
		<ul> <li>Solar installations include a 563 KW Solar Rooftop Power Plant for captive use.</li> </ul>	
		<ul> <li>In FY 2024-25, we entered into Power Purchase Agreements (PPA) with Tata Power for renewable power supply from a 70 MW solar plant and with NVVNL for supply from a 50 MW solar plant.</li> </ul>	
		<ul> <li>Achieved 40% of its total power from renewable sources in FY 2024-25.</li> </ul>	
		3. Emission Reduction:	
		• Captures CO <sub>2</sub> from flue gas to produce Potassium Carbonate, a value-added product.	
		• Remembraning various cell elements, Installation of VFD in CCU combustion air blower and for Hydrogenator feed pump in $H_2O_2$ plant, Replacement of Air Preheater in Caustic Concentration unit, and Utilization of hydrogen as a fuel.	
		4. Water Conservation and Management:	
		<ul> <li>Responsible usage of water by tracking withdrawal, consumption, and discharge. A part of the water is recycled and reused.</li> </ul>	
		• RO Plant has been installed for converting 400 to 500 M³ of wastewater daily into reusable water that is recycled back to the Plant.	
		A ground water recharging system is in place at the TSDF site.	
		<ul> <li>R&amp;D efforts include in-house cooling water treatment for corrosion and microbiological growth monitoring, resulting in appreciable savings and water conservation.</li> </ul>	
		Investment in Vadodara Jal Sanchay is aiding company to purify the sewage water from	

Sr. No.	EC Condition	Compliance Status
		<ul> <li>VMC for reuse in plant.</li> <li>5. Sustainable Sourcing: <ul> <li>Established practices and a Procurement Policy for sustainable sourcing of key raw materials. This policy considers economical aspects, environmentally friendly processes, and social aspects.</li> <li>Appealed to major suppliers to adopt sustainable sourcing. Examples include using washed Salt which reduces chemical consumption and sludge generation, and using eco-friendly transportation like Rail rakes for bulk materials.</li> </ul> </li> </ul>
69.	<ul> <li>The company shall undertake following waste minimization measures:</li> <li>Metering and control of quantities of active ingredients to minimize waste</li> <li>Reuse of byproducts from the process as raw materials or raw materials substitutes in other process</li> <li>Use of automated and enclosed filling to minimize spillages</li> <li>Use of close feed system into batch reactors</li> <li>Dry cleaning /mopping of floor instead of floor washing</li> <li>Use of high-pressure hoses for cleaning to reduce wastewater</li> </ul>	Complied.  Unit has undertaken following measures for waste minimization:  Metering and control of quantities of active ingredients to minimize waste.  Improving raw material quality like Salt (NaCl).  Installed sulphate recovery system to reduce sludge quantity.  Provision of close feed system, wherever feasible.  Regular preventive maintenance.  Provision of adequate dyke for chemical storage.

#### Period: April 2025 to September 2025

Sr. No.	EC Condition	Compliance Status
	<ul> <li>generation</li> <li>Regular preventive maintenance for avoiding leakage, spillage etc.</li> </ul>	

#### A. 8 – Green Belt and Other Plantation:

70. 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.

#### Complied.

Unit has developed green belt within premises having total area of 1 lac square meters which amount to greenbelt area of 35 %.





Sr. No.	EC Condition	Compliance Status	
71.	Drip irrigation /low volume, low angle sprinkler system shall be used for green belt development	The green belt development within the premises is being done through low-angle sprinkler	

Sr. No.	EC Condition	Compliance Status
	within premises.	systems. This ensures efficient water usage, minimizes water loss through evaporation, and promotes sustainable irrigation practices.
B. GE	NERAL CONDITIONS	
72.	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.	
73.	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s San Envirotech Pvt. Ltd. And	Complied.  All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report have been already implemented.

Sr. No.	EC Condition	Compliance Status
	submitted vide letter no. Nil dtd. 07.07.2015 and commitments made during presentation before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.	
74.	A separate Environment management cell equipped with full-fledged laboratory facilities and qualified personnel shall be set up to carry out Environment management and monitoring functions and a separate budget shall be allocated for this purpose.	Complied.  Unit has recruited two environment engineers and equipped with a fully functional laboratory and staffed with qualified personnel. The team is actively engaged in environment management and regular monitoring activities as mandated. A separate budget has been allocated to support the operations and maintenance of this cell, including the laboratory facilities and Environment monitoring etc, thus ensuring continuous and effective environmental stewardship.
75.	The company shall strictly follow all the recommendations mentioned the charter on corporate responsibility for Environment Protection (CREP) published by CPCB as may be applicable.	Complied.  Company have strictly followed all the recommendations mentioned the charter on Corporate Responsibility for Environment Protection (CREP) published by CPCB as applicable.
76.	The funds earmarked for environmental protection measures shall be maintained in a separate account and there shall not be any diversion of these funds for any other purpose. A	Complied.  Separate provision of fund has been earmarked as part of the annual budget planning and allocation. The fund is being exclusively used for implementing the Safety & Environment activities as per conditions stipulated by authorities.

Sr. No.	EC Condition	Compliance Status	
	year wise expenditure on environmental safeguards shall be reported		
77.	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board, state government and any statutory authority.	Unit is adhering to stipulations of Gujarat Pollution Control Board.	
78.	During material transfer, spillage shall be avoided and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water	<b>Noted &amp; complied.</b> Liquid material transfer is done in closed system (pipelines) or closed containers/ barrels. Drain is provided surrounding each process plant to collect the spillage material if any and to avoid mixing of accidental spillages with domestic wastewater or storm water.	
79.	Pucca flooring/impervious layer shall be provided in the work areas, chemicals storage areas and chemical handling areas to minimize soil contamination.	Complied.  Pucca flooring/impervious layer are provided in the work areas, chemicals storage areas and chemical handling areas to minimize soil contamination. Regular inspections and maintenance of this flooring are conducted to ensure its integrity and effectiveness.  Caustic Storage Dyke having impervious flooring in & around area  HCI Storage area having acid proof tile lining and dyke	

Sr. No.	EC Condition	Compliance Status
80.	Leakages from pumps, pipes shall be minimal and if occurs shall be arrested promptly.	Complied.  Unit is using only mechanical seal pumps in order to avoid the leakages. Any identified leakages are addressed promptly through immediate repair or replacement procedures. Regular monitoring and maintenance protocols are in place for pumps and pipelines to minimize leakages.
81.	No further expansions or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior environment clearance from the concerned authority.	Complied.  The unit will take EC amendment if further expansion or modifications in the plant.
82.	The above conditions shall 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 Transbouandary Movement) Rules, 2008 and the Public	Noted and Complied.

Sr. No.	EC Condition		Compliance Status		
	Liability Insurance Act, 1991 along with their amendments and rules.				
83.	comply all the conditions mentioned in "The companies	Complied.  The Unit is doing socioeconomic developmental/community welfare activities in surrounding areas.  List of CSR activities that were conducted from April 25 to September 25, including the costs incurred for each activity and its location are given below:			
	a letter and spirit	Sr. No.	Name of project	Amount ₹	Location
		1	Financial Assistance to Bal Bhavan Society for Organizing Recreation Educational activities to Promote the overall development of Children	52,500	Vadodara
		2	HMDC Project	26,91,513	Vadodara
		3	Financial Assistance to Ghumati Gori for Organizing Folk Dance Show - Gujarat No Lok Nrityo	50,000	Vadodara
		4	Development of 09 Animal Havada in surrounding villages of GACL Dahej and Vadodara Plants.	4,77,433	Dahej/Ranoli
		5	Support for procurement of bags of celebration of world environment day	1,53,400	Vadodara
		6	Animal Husbandry & Agriculture Trainning at Vadodara	1,40,220	Vadodara Rural
		7	Financial assistance to Shree Maharani Chimnabai Stree Udyogalaya for promoting cultural activities in Vadodara.	1,00,000	Vadodara
		8	Conducted 08 Medical Health Campus inclusive of Diagnostic and Drug Support at GACL Dahej Plant, Vadodara Plant and Surrounding areas.	2,19,605	Dahej/Ranoli
		9	Support for procurement of AC 2 Nos in Jawaharnagar Police Station, Vadodara	99,090	Ranoli

Sr. No.	EC Condition	Compliance Status			
		10	Financial Support for mass recruitment of youth in Airforce Agni veer through collector office Vadodara.	1,00,000	Vadodara
		11	Financial assistance to United Way of Baroda for Garba Mahostav (Navratri ) 2025	1,00,000	Vadodara
		12	Tree Plantation in Ranoli with Dev Foundation Trust	8,26,500	Ranoli
			Total	50,1	.0,261
84.	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA or GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Unit ensure to comply with all the environment protection measures risk mitigation measures and safeguarding recommended in the EMP report and risk assessment study report.			
85.	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and the copies of the clearance letter are available with GPCB and may also be send at website of SEIAA/SEAC/GPCB. This shall be advertised within seven days from the date of clearance letter, in at least two local news paper that are widely circulated in the region one of	Unit had already informed 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.			

Sr. No.	EC Condition	Compliance Status
	which shall be in Gujarati language and other in English. A copy each of the same shall be forwarded to the concerned regional office of the ministry.	
86.	The applicant shall also comply with any additional condition that may be imposed by SEAC or SEIAA or any other competent authority for the purpose of environmental protection and management	
87.	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.	<u> </u>
88.	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	Noted.  Unit assures the authority that no False/Fabricated data has been submitted herewith.

Sr. No.	EC Condition	Compliance Status
	under the provisions of Environment Act 1986.	
89.	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Complied. Unit is adhering to stipulations of Gujarat Pollution Control Board.
90.	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted.
91.	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.	Complied. Unit is implementing these conditions in a time bound manner.
92.	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.	<b>Not Applicable</b> as the Unit has not taken any loan from any bank. The project was self-financed.
93.	This environmental clearance is valid for seven years from the date of issue	Noted.

Sr. No.	EC Condition	Compliance Status
94.	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.	