



**ENVIRONMENTAL CLEARANCE
COMPLIANCE REPORT**

For

OCTOBER 2022 TO MARCH 2023

By:

**GULBRANDSEN SPECIALITY CHEMICALS LLP
Plot No.D-3/5, + D/3/6/1, G.I.D.C Industrial Estate, Dahej-III, Dahej-
Amod Road , Taluka : Vagra, District : Bharuch: 392130**

HALF YEARLY ENVIRONMENT CLEARANCE COMPLIANCE REPORT

NO. SEIAA/GU/EC/5(f)/845/2021 dt 10.06.2021

FOR PERIOD FROM OCTOBER 2022 TO MARCH 2023

Sr. No.	Conditions	Compliance Status
A.1	SPECIFIC CONDITIONS	
1	Project proponent (PP) shall obtain clarification from MoEF & CC for claiming that Aluminium Chloride (AlCl ₃) solution to be considered as a product and not hazardous waste before commencement of production activity at proposed site as per assurance submitted by PP.	Permission letter obtained from MoEFCC vide letter dated 05.08.2021 regarding AlCl ₃ solution as a product as per HOWM Rules 2016.
2	PP shall provide secure and flame proof area for storage, manufacturing and handling of Triethylaluminum (TEAI), looking to property of Highly flammable liquid and catches fire spontaneously if exposed to air and shall keep minimum inventory of TEAI and other metal alkyls at site as per assurance submitted by PP.	Secure and flame proof area for storage, manufacturing and handling of Triethylaluminum (TEAI) has been provided. We shall keep minimum inventory of TEAI and other metal alkyls at site.
3	(a) R & D products shall be of similar chemistry in line with the EIA Notification vide S.O. 1223 (E) dated 27/03/2020 and the pollution load shall remain the same as committed. (b) Project proponent shall not take continuous/commercial production of the R & D materials. Necessary approvals shall be obtained from the concern authorities prior to commercial production of R & D materials. (c) Unit shall submit relevant details of R & D products like raw materials, its safety measures to the regulatory authority well before R & D activity. (d) Unit shall submit relevant details of R & D products like different wastes generated (Quantity & Quality) and its management to the regulatory authority within a month of R&D activity.	(a)&(b) We have not manufactured R&D products till date. (c) We shall submit relevant details of R&D products like raw materials, its safety measures to the regulatory authority well before R&D activity. (d) We shall submit relevant details of R&D products like different wastes generated (Quantity & Quality) and its management to the regulatory authority within a month of R&D activity.
4	Unit shall install CEMS in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05.02.2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project 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/CPCB on real time basis. [Whichever (Air emission & Effluent discharge) is applicable as per the prevailing guidelines of GPCB/CPCB].	Not applicable. Because CEMS is not applicable to Chemical Industries as per CPCB directions and as per letter no. B-29016/04/06PCI-1/5401 dated 05.02.2014.
5	The PP shall develop green belt [45384 m ² (33 %) inside plant premises] as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used	Green Belt development will be implemented within 3 years of operation phase in consultation with GPCB. Till date we have planted ~900 trees.

Sr. No.	Conditions	Compliance Status																																								
	for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.																																									
6	Close loop solvent recovery system with an adequate condenser system shall be provided to recover solvent vapours in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.	Trial productions have been initiated. Close loop solvent recovery system with adequate condenser system shall be provided and recovered solvent shall be reused in the process within premises once solvent is used.																																								
7	Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines. LDAR Logbooks shall be maintained.	Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.																																								
8	All measures shall be taken to prevent soil and groundwater contamination.	All measures are taken to prevent soil and groundwater contamination during the construction phase. Dykes are provided for all storage tanks, concrete floor is provided in process areas and storage areas. Spill control procedure in place.																																								
9	The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.	<p>Ambient Air Quality Monitoring is carried out at site through a third party NABL accredited laboratory and all the results are within permissible limit.</p> <p>Summary of AAQM data for Oct-22 to Mar-23:</p> <table border="1" data-bbox="960 1115 1505 1832"> <thead> <tr> <th>Parameter</th> <th>Unit</th> <th>Norms</th> <th>Result (Min.)</th> <th>Result (Max.)</th> </tr> </thead> <tbody> <tr> <td>Particulate Matter (PM10)</td> <td>µg/m³</td> <td>100</td> <td>63</td> <td>72</td> </tr> <tr> <td>Particulate Matter (PM2.5)</td> <td>µg/m³</td> <td>60</td> <td>19</td> <td>25</td> </tr> <tr> <td>Oxides of Sulphur as SO₂</td> <td>µg/m³</td> <td>80</td> <td>10.6</td> <td>13.7</td> </tr> <tr> <td>Oxides of Nitrogen as NO₂</td> <td>µg/m³</td> <td>80</td> <td>15.2</td> <td>18.8</td> </tr> <tr> <td>HCl</td> <td>µg/m³</td> <td>200</td> <td>BDL</td> <td>BDL</td> </tr> <tr> <td>Cl₂</td> <td>µg/m³</td> <td>100</td> <td>BDL</td> <td>BDL</td> </tr> <tr> <td>VOC</td> <td>µg/m³</td> <td>-</td> <td>BDL</td> <td>BDL</td> </tr> </tbody> </table> <p>Ambient Air Quality Monitoring Results are attached as Annexure-1.</p>	Parameter	Unit	Norms	Result (Min.)	Result (Max.)	Particulate Matter (PM10)	µg/m ³	100	63	72	Particulate Matter (PM2.5)	µg/m ³	60	19	25	Oxides of Sulphur as SO ₂	µg/m ³	80	10.6	13.7	Oxides of Nitrogen as NO ₂	µg/m ³	80	15.2	18.8	HCl	µg/m ³	200	BDL	BDL	Cl ₂	µg/m ³	100	BDL	BDL	VOC	µg/m ³	-	BDL	BDL
Parameter	Unit	Norms	Result (Min.)	Result (Max.)																																						
Particulate Matter (PM10)	µg/m ³	100	63	72																																						
Particulate Matter (PM2.5)	µg/m ³	60	19	25																																						
Oxides of Sulphur as SO ₂	µg/m ³	80	10.6	13.7																																						
Oxides of Nitrogen as NO ₂	µg/m ³	80	15.2	18.8																																						
HCl	µg/m ³	200	BDL	BDL																																						
Cl ₂	µg/m ³	100	BDL	BDL																																						
VOC	µg/m ³	-	BDL	BDL																																						

Sr. No.	Conditions	Compliance Status
10	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G. S. R. 608 (E) dated 21/07/2010 and amended from time to time shall be followed.	National Emission Standards for Organic Chemicals Manufacturing Industry shall be followed.
11	Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.	Noted and complied with.
12	The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.	Noted and complied with.
13	The PP shall develop green belt [1650 Sq. m (33%) of total plot area] within premises as committed before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.	Green Belt development will be implemented within 3 years of operation phase in consultation with GPCB and as per CPCB guideline.
14	<p>Safety & Health:</p> <p>(a) PP shall obtain PESO permission for the storage and handling of hazardous chemicals.</p> <p>(b) PP shall provide Occupational Health Center (OHC) as per the provisions under the Gujarat Factories Rule 68-U.</p> <p>(c) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concerned authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.</p> <p>(d) Unit shall adopt a functional operations/process automation system including emergency response to eliminate risk associated with the hazardous processes.</p> <p>(e) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.</p> <p>(f) PP shall install an adequate fire hydrant system with foam trolley attachment within premises and separate storage of water for the same shall be ensured by PP.</p> <p>(g) PP shall take all the necessary steps for control of storage hazards within premises ensuring incompatibility of storage raw material and ensure the storage keeping safe distance as per the prevailing guidelines of the concerned authority.</p> <p>(h) PP shall take all the necessary steps for human safety within premises to ensure that no any harm</p>	<p>Trial productions have been initiated.</p> <p>(a) PESO Permission obtained.</p> <p>(b) Full fledged OHC is operational.</p> <p>(c) Fire NOC is not applicable.</p> <p>(d) Process automation system in place.</p> <p>(e) Mock drill conducted as per plan.</p> <p>(f) Fire hydrant system with separate storage tank in place.</p> <p>(g) Storage done based on compatibility and with safe distance.</p> <p>(h) Necessary steps for human safety in place.</p>

Sr. No.	Conditions	Compliance Status
	<p>is caused to any worker/employee or labor within premises.</p> <p>(i) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.</p> <p>(j) PP shall provide double earthing to solvent storage tanks.</p> <p>(k) Unit shall never store drum/barrels/carboys of incompatible material/chemical together.</p> <p>(l) Unit shall provide effective Isolation for the Process area and storage of hazardous chemicals.</p> <p>(m) PP shall provide safety valve & rupture disc to the Hydrogenation vessel.</p> <p>(n) PP shall provide all pyrophoric chemicals, storage tanks with high & low level alarms systems and level shall be measured through radar based technology and all storage tanks shall be provided with a dyke and dyke wall be connected to the burning pit for safe burning away from the process area.</p> <p>(o) Unit shall provide safety valve and rupture disc, as well as auto dump or auto quenches/suppresses system for alkylation vessel safety.</p> <p>(p) Unit shall provide a spare tank with emergency transfer system and bund/ dyke wall to Ethylene oxide storage tank.</p> <p>(q) Unit shall strictly follow up Hydrogen gas storage and its handling standard operating Procedure (SOP) as submitted by PP.</p> <p>(r) Unit shall provide effective fire hydrants, water monitors & foam application system at solvent storage tank farm area and unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. to restrict cascade fire emergencies in solvent tank and pyrophoric chemicals storage tank farm area.</p>	<p>(i) Flame proof electrical fittings provided, wherever applicable.</p> <p>(j) Double earthing will be provided to solvent storage tanks.</p> <p>(k) Incompatible materials will not be stored together.</p> <p>(l) Effective Isolation ensured for the Process area and storage of hazardous chemicals.</p> <p>(m) Safety valve & rupture disc provided in autoclave.</p> <p>(n) All pyrophoric chemicals, storage tanks provided with high & low level alarms systems with radar based technology and all storage tanks provided with a dyke and dyke wall be connected to the burning pit for safe burning away from the process area.</p> <p>(o) Safety valve and rupture disc, as well as auto dump or auto quenching system provided for alkylation vessel safety.</p> <p>(p) We will provide a spare tank with emergency transfer system and bund/ dyke wall to Ethylene oxide storage tank. As of now, EO is not stored.</p> <p>(q) Compliance with Hydrogen gas storage and its handling standard operating Procedure (SOP) ensured.</p> <p>(r) Effective fire hydrants, water monitors & foam application system will be provided at solvent storage tank farm area with required safety system to restrict cascade fire emergencies in solvent tank and pyrophoric chemicals storage tank farm area.</p>
A.2	WATER	
15	Total water requirement for the project shall not exceed 1141.09 KLD. Unit shall reuse 642.09 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 499 KLD and it shall be met through GIDC water supply only. Prior permission from concerned authority shall be obtained for withdrawal of water.	We shall meet fresh water requirements through GIDC as per phase wise implementation of the project. Prior permission from GIDC has been obtained for fresh water.
16	The industrial effluent generation from the project shall not exceed 605.50 KLD.	Trial productions have been initiated. It will be ensured that effluent generation will be within the permissible quantity.
17	<p>Industrial effluent shall be segregated into two streams</p> <ul style="list-style-type: none"> ● <u>High COD and TDS effluent (270 KLD):</u> ➢ 270 KLD, High COD and TDS effluent from process shall be treated in MEE. 262 KLD, MEE condensate shall be reused within premises. 	Trial productions have been initiated. It will be ensured that effluent generation will be within the permissible quantity.

Sr. No.	Conditions	Compliance Status														
	<ul style="list-style-type: none"> ● <u>Low COD and TDS effluent (335.50 KLD):</u> <ul style="list-style-type: none"> ➤ 183.61 KLD, Low COD effluent from process, washing, utilities and scrubber shall be treated in ETP consists of primary treatment units and sent to CETP-Dahej for further treatment & disposal. ➤ 151.89 KLD, industrial effluent from process shall be recovered and reused back in process. 															
18	Treated wastewater shall be sent to CETP-Dahej only after complying with the inlet norms of common facilities prescribed by GPCB to ensure no adverse impact on Human Health and Environment.	Trial productions have been initiated. It will be ensured that effluent will meet the inlet quality standards of CETP Dahej.														
19	Unit shall feed wastewater to in-house MEE only after ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.	Noted and shall be complied.														
20	Domestic wastewater generation shall not exceed 43.50 KL/day for proposed project and it shall be treated in STP. It shall not be disposed off through soak pit/ septic tank. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.	Domestic wastewater is treated in STP and utilized for gardening.														
21	During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of wastewater outside the premises in any case.	Domestic wastewater is treated in STP. It will be ensured that domestic effluent will not be discharged outside the plant premises.														
22	Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.	At present, there is no waste water generation. Buffer water storage tank of adequate capacity will be provided for storage of treated waste water during rainy days.														
23	The unit shall provide metering facility at the inlet and outlet of ETP & MEE and maintain records for the same.	Flow meters are provided at Inlet-Outlet of ETP. MEE is not yet installed at site.														
24	Proper logbooks of ETP & MEE; recycle/ reuse of treated/ untreated effluent; chemical consumption in effluent treatment; quantity & quality of treated effluent; power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.	Noted and shall be complied with.														
A.3	AIR															
25	<p>Unit shall not exceed fuel consumption for boilers, TFH, tin melter and D G Sets as mentioned below:</p> <table border="1" data-bbox="212 1832 943 2087"> <thead> <tr> <th data-bbox="212 1832 264 1962">Sr. No.</th> <th data-bbox="264 1832 443 1962">Source of emission with capacity</th> <th data-bbox="443 1832 517 1962">Height (meter)</th> <th data-bbox="517 1832 632 1962">Type of Fuel</th> <th data-bbox="632 1832 759 1962">Quantity of Fuel MT/Day</th> <th data-bbox="759 1832 833 1962">Type of Emission</th> <th data-bbox="833 1832 943 1962">Air pollution control equipment</th> </tr> </thead> <tbody> <tr> <td data-bbox="212 1962 264 2087">1</td> <td data-bbox="264 1962 443 2087">Boiler (5.0 TPH - 3 Nos.) (Common stack)</td> <td data-bbox="443 1962 517 2087">40</td> <td data-bbox="517 1962 632 2087">Natural Gas or LDO*</td> <td data-bbox="632 1962 759 2087">25525 scm/Day 21 MT/Day</td> <td data-bbox="759 1962 833 2087">PM SO2 NOx</td> <td data-bbox="833 1962 943 2087">Adequate stack Height</td> </tr> </tbody> </table>	Sr. No.	Source of emission with capacity	Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of Emission	Air pollution control equipment	1	Boiler (5.0 TPH - 3 Nos.) (Common stack)	40	Natural Gas or LDO*	25525 scm/Day 21 MT/Day	PM SO2 NOx	Adequate stack Height	Manufacturing activity has not yet started at site.
Sr. No.	Source of emission with capacity	Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of Emission	Air pollution control equipment										
1	Boiler (5.0 TPH - 3 Nos.) (Common stack)	40	Natural Gas or LDO*	25525 scm/Day 21 MT/Day	PM SO2 NOx	Adequate stack Height										

Sr. No.	Conditions							Compliance Status
	2	Thermic Fluid Heater (1 & 2) (Capacity - 8 lac Kcal/hr. each) (Common stack)	30	Natural Gas or LDO*	3.84 MT/ Day 4.2 MT/Day	PM SO2 NOx	Adequate stack Height	
	3	Thermic Fluid Heater (3 & 4) (Capacity - 8 lac Kcal/hr. each) (Common stack)	30	Natural Gas or LDO*	3.84 MT/ Day 4.2 MT/Day	PM SO2 NOx	Adequate stack Height	
	4	Tin melter (Capacity - 5 MT/hr.)	11	Natural Gas	0.015 MT/Day	PM SO2 NOx	Adequate stack Height	
	5	DG Set (750 KVA) No. 1	11	HDS	3.07 MT/Day	PM SO2 NOx	Adequate stack Height	
	6	DG Set (750 KVA) No.2	11	HDS	3.07 MT/Day	PM SO2 NOx	Adequate stack Height	
	7	DG Set (750 KVA) No.3	11	HDS	3.07 MT/Day	PM SO2 NOx	Adequate stack Height	
	8	DG Set (750 KVA) No. 4	11	HDS	3.07 MT/Day	PM SO2 NOx	Adequate stack Height	
	9	DG Set (750 KVA) No. 5	11	HDS	3.07 MT/Day	PM SO2 NOx	Adequate stack Height	
26	Unit shall provide adequate APCM with flue gas generation sources as mentioned above:							Adequate APCM for flue gas generation sources has been provided.
27	Unit shall provide adequate APCM with process gas generation sources as mentioned below:							Adequate APCM as per EC conditions will be provided.
	Process Vent	Stack attached to	Stack/ Vent Height (meter)	APCM	Pollutants			
	Process Vent-1	TBTH scrubber, TOT, SO, P-1062, UV-1164, TBT, MBTC & DBTC derivatives scrubber, Pilot plant-1	21.0	HCl scrubber to scrub HCl generated in P-1062 process in water Caustic scrubber with packed for HCl scrubber outlet and other plant vents Scrubber for respective gases from Pilot Plant-1	HCl			
	Process Vent-2	PEWax & PE Ethoxylate scrubber	21.0	Caustic scrubber to scrub HCl & EO	HCl			
	Process Vent-3	Alkyl, Alkyl derivatives, TMAL, MAO, MMAO, DiBAL-H,	21.0	Water scrubbers followed by caustic scrubber columns to scrub acidic vapors from vents	HCl			

Sr. No.	Conditions					Compliance Status																			
		DEZ, DEALOX plant scrubber																							
	Process Vent-4	Activated carbon bed	21.0	Vent from different plants containing Hydrocarbon is adsorbed in Activated carbon bed	HC																				
28	Unit shall provide adequate APCM with flare stacks as mentioned below:					Adequate APCM with flare stack has been provided.																			
	<table border="1"> <thead> <tr> <th data-bbox="212 488 295 577">Flare stack no.</th> <th data-bbox="295 488 432 577">Plant</th> <th data-bbox="432 488 708 577">Flare stack attached to</th> <th data-bbox="708 488 801 577">Height (meter)</th> <th data-bbox="801 488 944 577">Air pollution control System</th> </tr> </thead> <tbody> <tr> <td data-bbox="212 577 295 1104">Flare :1</td> <td data-bbox="295 577 432 1104">Alkyl Plant & Other (Product: TEAL, TnBaI, TiBaI, TnHaI, TnOaI, EADC, EASC, DEAC, DIBAC, IBDAC, MASC, TMAL, MAO, MMAO, DEALOX, DEZ, DIBALH, Metallocene) , Pilot plant-2</td> <td data-bbox="432 577 708 1104">Organometallic manufacturing activities for burning of vent gas like Ethane, Ethylene, Hydrogen, Butane, Butene etc during normal and continuous operation as well as during abnormal and emergency situations. Vent gas from R & D pilot plant activities</td> <td data-bbox="708 577 801 1104">30 meter</td> <td data-bbox="801 577 944 1104">Air assisted flare, Excess air is supplied for complete combustion of gas</td> </tr> <tr> <td data-bbox="212 1104 295 1406">Flare :2</td> <td data-bbox="295 1104 432 1406">Alkyl Product : TEAL, TnBaI, TiBaI, EADC,EASC ,DEAC,DIBA C,IBDAC,T MAL,MAO, MMAO,DEA LOX,DEZ, DIBALH)</td> <td data-bbox="432 1104 708 1406">Process vent from HCl treatment sent to Water scrubber, followed by caustic scrubber. Final Vent of scrubber vent connected to flare for normal and continuous operation as well as during abnormal and emergency situations.</td> <td data-bbox="708 1104 801 1406">30 meter</td> <td data-bbox="801 1104 944 1406"></td> </tr> <tr> <td data-bbox="212 1406 295 1615">Flare :3</td> <td data-bbox="295 1406 432 1615">PE wax Plant & Other (Product: PE Wax, PE Alcohol, PE Ethoxylate, TBT,TBTCL)</td> <td data-bbox="432 1406 708 1615">Polyethylene wax & TBT manufacturing activities for burning of vent gas like Ethylene, Ethane, Butane etc during normal and continuous operation as well as during abnormal and emergency situations.</td> <td data-bbox="708 1406 801 1615">30 meter</td> <td data-bbox="801 1406 944 1615"></td> </tr> </tbody> </table>					Flare stack no.	Plant	Flare stack attached to	Height (meter)	Air pollution control System	Flare :1	Alkyl Plant & Other (Product: TEAL, TnBaI, TiBaI, TnHaI, TnOaI, EADC, EASC, DEAC, DIBAC, IBDAC, MASC, TMAL, MAO, MMAO, DEALOX, DEZ, DIBALH, Metallocene) , Pilot plant-2	Organometallic manufacturing activities for burning of vent gas like Ethane, Ethylene, Hydrogen, Butane, Butene etc during normal and continuous operation as well as during abnormal and emergency situations. Vent gas from R & D pilot plant activities	30 meter	Air assisted flare, Excess air is supplied for complete combustion of gas	Flare :2	Alkyl Product : TEAL, TnBaI, TiBaI, EADC,EASC ,DEAC,DIBA C,IBDAC,T MAL,MAO, MMAO,DEA LOX,DEZ, DIBALH)	Process vent from HCl treatment sent to Water scrubber, followed by caustic scrubber. Final Vent of scrubber vent connected to flare for normal and continuous operation as well as during abnormal and emergency situations.	30 meter		Flare :3	PE wax Plant & Other (Product: PE Wax, PE Alcohol, PE Ethoxylate, TBT,TBTCL)	Polyethylene wax & TBT manufacturing activities for burning of vent gas like Ethylene, Ethane, Butane etc during normal and continuous operation as well as during abnormal and emergency situations.	30 meter	
Flare stack no.	Plant	Flare stack attached to	Height (meter)	Air pollution control System																					
Flare :1	Alkyl Plant & Other (Product: TEAL, TnBaI, TiBaI, TnHaI, TnOaI, EADC, EASC, DEAC, DIBAC, IBDAC, MASC, TMAL, MAO, MMAO, DEALOX, DEZ, DIBALH, Metallocene) , Pilot plant-2	Organometallic manufacturing activities for burning of vent gas like Ethane, Ethylene, Hydrogen, Butane, Butene etc during normal and continuous operation as well as during abnormal and emergency situations. Vent gas from R & D pilot plant activities	30 meter	Air assisted flare, Excess air is supplied for complete combustion of gas																					
Flare :2	Alkyl Product : TEAL, TnBaI, TiBaI, EADC,EASC ,DEAC,DIBA C,IBDAC,T MAL,MAO, MMAO,DEA LOX,DEZ, DIBALH)	Process vent from HCl treatment sent to Water scrubber, followed by caustic scrubber. Final Vent of scrubber vent connected to flare for normal and continuous operation as well as during abnormal and emergency situations.	30 meter																						
Flare :3	PE wax Plant & Other (Product: PE Wax, PE Alcohol, PE Ethoxylate, TBT,TBTCL)	Polyethylene wax & TBT manufacturing activities for burning of vent gas like Ethylene, Ethane, Butane etc during normal and continuous operation as well as during abnormal and emergency situations.	30 meter																						
29	<p>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:</p> <ul style="list-style-type: none"> ➤ 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. 					<p>We have installed HC sensors and monitor fugitive emissions if any through the sensors.</p> <p>Measures to reduce fugitive emissions shall be followed as per EC condition.</p>																			

Sr. No.	Conditions	Compliance Status																																								
	➤ A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.																																									
30	Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.	Regular monitoring of Volatile Organic Compounds (VOCs) is carried out in Ambient Air. Same will be carried out in the work zone area.																																								
31	Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx, HCl, HC and VOCs 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.	<p>Ambient Air Quality Monitoring carried out at site through a third party NABL accredited laboratory and all the results are within permissible limit.</p> <p>Summary of AAQM data for Oct-22 to Mar-23:</p> <table border="1" data-bbox="960 618 1509 1339"> <thead> <tr> <th>Parameter</th> <th>Unit</th> <th>Norms</th> <th>Result (Min.)</th> <th>Result (Max.)</th> </tr> </thead> <tbody> <tr> <td>Particulate Matter (PM10)</td> <td>µg/m³</td> <td>100</td> <td>63</td> <td>72</td> </tr> <tr> <td>Particulate Matter (PM2.5)</td> <td>µg/m³</td> <td>60</td> <td>19</td> <td>25</td> </tr> <tr> <td>Oxides of Sulphur as SO₂</td> <td>µg/m³</td> <td>80</td> <td>10.6</td> <td>13.7</td> </tr> <tr> <td>Oxides of Nitrogen as NO₂</td> <td>µg/m³</td> <td>80</td> <td>15.2</td> <td>18.8</td> </tr> <tr> <td>HCl</td> <td>µg/m³</td> <td>200</td> <td>BDL</td> <td>BDL</td> </tr> <tr> <td>Cl₂</td> <td>µg/m³</td> <td>100</td> <td>BDL</td> <td>BDL</td> </tr> <tr> <td>VOC</td> <td>µg/m³</td> <td>-</td> <td>BDL</td> <td>BDL</td> </tr> </tbody> </table> <p>Ambient Air Quality Monitoring Results are attached as Annexure-1.</p>	Parameter	Unit	Norms	Result (Min.)	Result (Max.)	Particulate Matter (PM10)	µg/m ³	100	63	72	Particulate Matter (PM2.5)	µg/m ³	60	19	25	Oxides of Sulphur as SO ₂	µg/m ³	80	10.6	13.7	Oxides of Nitrogen as NO ₂	µg/m ³	80	15.2	18.8	HCl	µg/m ³	200	BDL	BDL	Cl ₂	µg/m ³	100	BDL	BDL	VOC	µg/m ³	-	BDL	BDL
Parameter	Unit	Norms	Result (Min.)	Result (Max.)																																						
Particulate Matter (PM10)	µg/m ³	100	63	72																																						
Particulate Matter (PM2.5)	µg/m ³	60	19	25																																						
Oxides of Sulphur as SO ₂	µg/m ³	80	10.6	13.7																																						
Oxides of Nitrogen as NO ₂	µg/m ³	80	15.2	18.8																																						
HCl	µg/m ³	200	BDL	BDL																																						
Cl ₂	µg/m ³	100	BDL	BDL																																						
VOC	µg/m ³	-	BDL	BDL																																						
A.4	SOLID/HAZARDOUS WASTE																																									
32	<p>All the hazardous/ solid waste management shall be taken care as mentioned below:</p> <table border="1" data-bbox="210 1592 930 2067"> <thead> <tr> <th>Sr. No.</th> <th>Type/Name of Hazardous waste</th> <th>Specific Source of generation (Name of the Activity, Product etc.)</th> <th>Category and Schedule as per HW Rules</th> <th>Quantity (MT/Annually)</th> <th>Management of Hazardous Waste</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Chemical sludge from wastewater treatment (ETP Sludge)</td> <td>ETP Plant</td> <td>35.3 Schedule -I</td> <td>800</td> <td rowspan="2">Collection, storage, transportation and disposal at TSDF of M/s. BEIL Infrastructure Limited</td> </tr> <tr> <td>2</td> <td>MEE Sludge (Chemical Sludge)</td> <td>MEE Plant</td> <td>37.1 Schedule -I</td> <td>2893.5</td> </tr> </tbody> </table>	Sr. No.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules	Quantity (MT/Annually)	Management of Hazardous Waste	1	Chemical sludge from wastewater treatment (ETP Sludge)	ETP Plant	35.3 Schedule -I	800	Collection, storage, transportation and disposal at TSDF of M/s. BEIL Infrastructure Limited	2	MEE Sludge (Chemical Sludge)	MEE Plant	37.1 Schedule -I	2893.5	<p>Trial productions have been initiated. Hazardous/solid waste management shall be taken care as per ENVIRONMENTAL CLEARANCE conditions.</p>																							
Sr. No.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules	Quantity (MT/Annually)	Management of Hazardous Waste																																					
1	Chemical sludge from wastewater treatment (ETP Sludge)	ETP Plant	35.3 Schedule -I	800	Collection, storage, transportation and disposal at TSDF of M/s. BEIL Infrastructure Limited																																					
2	MEE Sludge (Chemical Sludge)	MEE Plant	37.1 Schedule -I	2893.5																																						

Sr. No.	Conditions					Compliance Status
3	Spent Solvent	TMAL, DEZ, Magnesium Ethoxide, Polyethylene wax & derivatives, UHMWPAO, DRA, Triazine derivatives, Metallocene, Activated carbon bed regeneration	20.2 Schedule -I	2024	Collection, storage, transportation and sell it to authorized recycler & re user &/or collection, storage, transportation and send it to authorized	
4	Distillation Residue	Monobutyltin Trichloride (MBTC) / Dibutyltin Dichloride (DBTC) / Mixed Butyl Tin Chloride (5% to 95%, TOT, MBTC derivatives, Polyethylene wax & derivatives, UHMWPAO, R&D	20.3 Schedule -I	431.4	solvent distillation facility for reuse after Distillation &/or Disposal to M/s. Recycling Solution Private Ltd (RSPL) Panoli & Cement industries for Co processing of waste. &/or by incineration at CHWI site of M/s. BEIL Infrastructure Limited	
5	Spent carbon	Stannous Octoate & Activated carbon bed scrubbers	36.2 Schedule -I	33.2	Collection, storage, transportation and disposal at M/s. Recycling Solution Private Ltd. (RSPL) Panoli for Co-processing &/or disposal by Incineration at approved CHWI site M/s. BEIL Infrastructure Limited.	
6	Discarded containers/ barrels/ liners used for hazardous waste/ chemicals	All plant discarded container & bags	33.1 Schedule -I	1)Jumbo bags: 10,790 nos, 32.37 MTPA 2)Barrels :22310 nos, 334 MTPA 3) Liners / bags: 1,29,560 nos, 12.95 MTPA	Collection, storage, transportation and disposal by selling to M/s. Hindustan Environ Life Protective Services Ltd. for decontamination at their site.	
7	Contaminated cotton rags or other cleaning material	TBT plant filter aid & Other plant spill Powder	33.2 Schedule -I	83.0	Collection, storage, transportation and disposal at M/s. Recycling Solution	

Sr. No.	Conditions					Compliance Status
	(Spill Control Powder)				Private Ltd. (RSPL) Panoli for Co-processing &/ disposal by Incineration at approved CHWI site M/s. BEIL Infrastructure Limited	
8	Used/Spent Oil	Alkyl, Alkyl derivatives, TMAL, MAO, MMAO, DEALOX, DEZ, DiBAL-H, TBT	5.1 Schedule -I	2696	Collection, storage, transportation and disposal by selling to registered re-recyclers.	
9	Waste / Residue containing oil	Alkyl, Alkyl derivatives, TMAL, MAO, MMAO, DEALOX, DiBAL-H, MTX, DBM, Polyethylene Wax & derivatives, R&D	5.2 Schedule -I	5175	Collection, storage, transportation and disposal at M/s. Recycling Solution Private Ltd. (RSPL) Panoli for Co-processing &/ disposal by Incineration at approved CHWI site M/s. BEIL Infrastructure Limited	
10	Inorganic acids (Spent HCl 10 to 30 %)	Scrubber (TBTCI & Triazine derivatives)	B15 Schedule -II	933 KL/A nnum	Collection, storage and reuse within premises in process.	
11	Other solid waste, ceramic wool having hazardous constituents	All plants	36.1 Schedule -I	20.0	Collection, storage, transportation and disposal at TSDF of M/s. BEIL Infrastructure Limited	
12	Anhydrous Magnesium Chloride / Magnesium Chloride Solution (10% to 50%)	Process (5 % to 50 % di butyl magnesium (DBM) in hexane/ heptane /iso-pentane /pentene/ toluene)	36.1 Schedule -I	100.0	Collection, storage, transportation and sell to end user under Rule-9 permission	
13	Aluminum Sulphate	Residue Treatment of Alkyl & Alkyl Derivatives	36.1 Schedule -I	620.4		
14	Sodium Aluminate	Residue Treatment of Alkyl & Alkyl Derivatives	36.1 Schedule -I	620.4		
15	Diborane in Tetrahydrofuran	Process (Tetra Butyl Tin Hydride (TBTH))	36.1 Schedule -I	5.2		
16	Sodium Chloride	Scrubber	36.1	13144	Collection, Storage and	

Sr. No.	Conditions	Compliance Status						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;">(1-2%)</td> <td style="width: 15%;"></td> <td style="width: 15%;">Schedule -I</td> <td style="width: 15%;"></td> <td style="width: 15%;">Send to ETP for further treatment</td> </tr> </table>		(1-2%)		Schedule -I		Send to ETP for further treatment	
	(1-2%)		Schedule -I		Send to ETP for further treatment			
33	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.	Noted and shall be complied.						
34	Unit shall explore the possibilities for environment friendly methods like co-processing of hazardous waste for disposal of Incinerable & land fillable wastes before sending to CHWIF & TSDF sites respectively.	Noted and shall be complied.						
35	The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.	List of authorized CHWIF & TSDF along with provisional membership certificates have been submitted to GPCB.						
A.5	OTHER							
36	The project proponent shall allocate the separate fund of Rs. 6.01 Crore as committed before SEAC. The entire activities proposed under CER shall be part of the Environment Management Plan (EMP) as per the MoEF&CC's OM no. F. No. 22- 65/2017-IA.III dated 30.09.2020. This shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to the District Collector. The monitoring report shall be posted on the website of the project proponent.	A separate fund will be allocated as committed before SEAC. The entire activities proposed under CER is a part of the Environment Management Plan (EMP) as per the MoEF&CC's OM no. F. No. 22- 65/2017-IA.III dated 30.09.2020. This will be monitored and the monitoring report will be submitted to the regional office of MoEF&CC and to the District Collector. The monitoring report will be posted on the company website.						
37	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s Aqua Air Environmental Engineers Pvt. Ltd and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.	Noted and shall be complied with.						

Sr. No	Conditions	Compliance Status
B	GENERAL CONDITIONS	
B.1	CONSTRUCTION PHASE	
38	Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.	Curing agents and super plasticizers are being used to reduce water demand during the construction phase.
39	Project proponent shall ensure that the 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.	Water sprinklers are used regularly to avoid dusting. In addition pucca road has been constructed to avoid dusting. Trucks supplying Grit, Rubble, sand, etc. are always covered.
40	All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.	Sewage Treatment Plant of 10 KLD capacity is installed at the site.
41	First Aid Box shall be made readily available in adequate quantity at all the times.	First Aid Box is made readily available in adequate quantities at all times.
42	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.	We have taken BOCW license/registration.
43	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 the construction phase.	Ambient air and noise quality monitoring is carried out on a monthly basis from NABL accredited laboratory. All the results are within the permissible limits. Results are enclosed as Annexure-1 .
44	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.	DG set is equipped with acoustic enclosures and according to EPA regulations.
45	Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.	Domestic wastewater is treated in STP.
46	All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.	Excavated soil will be reused for green belt/ landscape development.
47	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.	Excavated soil will be reused for green belt/ landscape development.
48	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.	We are using Fly Ash bricks and using RMC which contains Fly Ash.
49	Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification	We are using Fly Ash bricks and using RMC which contains Fly Ash.

Sr. No	Conditions	Compliance Status
	under the E.P. Act, 1986 and its subsequent amendments from time to time.	
50	Wind – breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual building within the project site shall also be provided with barricades.	Appropriate protection from the wind will be taken care of in all buildings.
51	"No uncovered vehicles carrying construction material and waste shall be permitted."	No uncovered vehicles carrying construction material and waste are permitted.
52	"No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered. Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured."	No loose soil or sand or waste or any other construction material that cause dust is left uncovered. Uniform piling and proper storage of sand is ensured to avoid fugitive emissions.
53	Roads leading to or at construction site must be paved and blacktopped (i.e. – metallic roads).	Roads leading to the construction site are paved and blacktopped.
54	No excavation of soil shall be carried out without adequate dust mitigation measures in place.	No excavation of soil is carried out without adequate dust mitigation measures.
55	Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.	Regular Water Sprinkling is done at site to control dust and every vehicular transportation with construction material is ensured covered.
56	Grinding and cutting of building materials in open area shall be prohibited.	Grinding and cutting of building materials is prohibited in open area.
57	Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.	Road side storage of construction material is prohibited. There is no waste generation.
58	Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures notified at the site. (If applicable).	This is a green field project so demolition waste will not be generated.
B.2	OPERATION PHASE	
B.2.1	WATER	
59	The water meter shall be installed and records of daily and monthly water consumption shall be maintained.	Water meter is installed in GIDC water supply line and record is maintained. Water consumption report is being submitted to GIDC on a monthly basis. Water consumption details are attached as Annexure-2.
60	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.	The unit continuously strives to reduce, recycle and reuse the treated effluent. Treated domestic wastewater is reused for gardening purposes.
B.2.2	AIR	
61	In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM	Spray dryer is not available at site.

Sr. No	Conditions	Compliance Status
	through the credible institutes and study report for impacts on Environment and human Health shall be submitted to GPCB every year along with half yearly compliance report.	
62	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.	Acoustic enclosure is provided to the DG set.
63	Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.	Stack/Vents (Whichever is applicable) of adequate height are provided for flue gas and flare stack. There are no process gas emissions.
64	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.	Noted and complied.
65	All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	All reactors/ vessels are closed.
B.2.3	HAZARDOUS/ SOLID WASTE	
66	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.	Noted and shall be complied with. Manufacturing has not started at full scale, only trials have been taken.
67	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.	Noted and shall be complied with.
68	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable).	We have obtained necessary permission from TSDF and CHWIF and submitted the details to GPCB.
69	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.	Noted and shall be complied with.
70	The design of the Trucks/tankers shall be such that there is no spillage during transportation.	Noted and shall be complied with.
71	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.	Noted and shall be complied with.
72	Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment from time to	Not applicable as fly ash is not generated.

Sr. No	Conditions	Compliance Status
	time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	
B.2.4	SAFETY	
73	The occupier/manager shall strictly comply with the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963.	Noted and complied with.
74	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.	Noted and shall be complied with. Public Liability Insurance has been obtained for the year 2023 vide policy no. L0222432. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities have been obtained.
75	Main entry and exit shall be separate and clearly marked in the facility.	Main entry and exit are clearly marked in the facility.
76	Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.	Sufficient peripheral open passage is kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
77	Storage of flammable chemicals shall be sufficiently away from the production area.	Noted and shall be complied with.
78	Sufficient number of fire extinguishers shall be provided near the plant and storage area.	Sufficient number of fire extinguishers have been provided near the plant and storage area.
79	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.	Noted and shall be complied with.
80	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.	Noted and shall be complied with.
81	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.	Noted and shall be complied with.
82	Only flame proof electrical fittings shall be provided in the plant premises	Flame proof electrical fittings have been provided in the plant premises as per HAC.
83	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	Noted and shall be complied with.

Sr. No	Conditions	Compliance Status
84	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.	All the storage tanks have been fitted with appropriate controls to avoid any leakages. Bund/dyke walls have been provided for storage tanks for Hazardous Chemicals.
85	Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.	Noted and shall be complied with.
86	Tie up shall be done with a nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.	<p>Tie up has been made with the following Hospitals for seeking immediate medical attention in the case of emergency.</p> <ol style="list-style-type: none"> 1. 7-X Multispeciality Hospital Paanchbatti, Bharuch 2. Amax Medical Centre, Rahiyad, Dahej Road, Bharuch 3. Orchid Multispeciality Hospital Sevashram Road, Nr. Reliance Fresh Mall, Bharuch 4. Apex Multispeciality Hospital Station Road, Panchbatti, Bharuch 5. A & V Trauma Centre Nr. Welspun Company, Dahej
87	Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.	Personal Protective Equipments (PPEs) are provided to workers and its usage shall be ensured and supervised.
88	First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	First Aid Box is made available and Antidotes will be made available during the operation phase.
89	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	Training is imparted to all the workers on safety and health aspects.
90	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.	Occupational health surveillance of the workers is done and its records are maintained.
91	Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	Noted and shall be complied with once manufacturing activity starts.
92	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	Noted and shall be complied with once manufacturing activity starts.
93	Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.	Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others have been

Sr. No	Conditions	Compliance Status												
		obtained.												
B.2.5	NOISE													
94	<p>The overall noise level in and round 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.</p>	<p>Noise level monitoring has been carried out through an NABL approved laboratory for the construction phase. Results of the same are attached as Annexure-1.</p> <table border="1" data-bbox="967 477 1501 790"> <thead> <tr> <th>Noise Level</th> <th>Permissible Limit</th> <th>Min (dB(A))</th> <th>Max (dB(A))</th> </tr> </thead> <tbody> <tr> <td>Day Time</td> <td>75</td> <td>56.9</td> <td>65.8</td> </tr> <tr> <td>Night Time</td> <td>70</td> <td>50.4</td> <td>57.3</td> </tr> </tbody> </table> <p>Noise level monitoring shall be carried out on a monthly basis for the operation phase upon start of the operation activity.</p>	Noise Level	Permissible Limit	Min (dB(A))	Max (dB(A))	Day Time	75	56.9	65.8	Night Time	70	50.4	57.3
Noise Level	Permissible Limit	Min (dB(A))	Max (dB(A))											
Day Time	75	56.9	65.8											
Night Time	70	50.4	57.3											
B.2.6	CLEANER PRODUCTION AND WASTE MINIMISATION													
95	<p>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.</p>	Noted and shall be complied with.												
96	<p>The company shall undertake various waste minimization measures such as :</p> <ol style="list-style-type: none"> Metering and control of quantities of active ingredients to minimize waste. Reuse of by-products from the process as raw materials or as raw materials substitutes. Use of automated and close filling to minimize spillages. Use of close feed system into batch reactors. Venting equipment through vapour recovery system. Use of high pressure hoses for cleaning to reduce wastewater generation. Recycling of washes to subsequent batches. Recycling of steam condensate. Sweeping / mopping the floor instead of floor washing to avoid effluent generation. Regular preventive maintenance for avoiding leakage, spillage etc. 	Noted and shall be complied with.												
B.2.7	GREENBELT AND OTHER PLANTATION													

Sr. No	Conditions	Compliance Status
97	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.	We will develop a green belt as per the requirements.
98	Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises	Drip Irrigation/low volume sprinkler system or similar measures will be implemented for the green belt development.
B.3	OTHER CONDITIONS	
99	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No 22-34/2018-IA.III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no. XX).	Noted and shall be complied with.
100	The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.	A separate fund will be allocated as committed before SEAC. The entire activities proposed under CER is a part of the Environment Management Plan (EMP) as per the MoEF&CC's OM no. F. No. 22- 65/2017-IA.III dated 30.09.2020. This will be monitored and the monitoring report will be submitted to the regional office of MoEF&CC and to the District Collector. The monitoring report will be posted on the company website.
101	Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the 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.	Noted and shall be complied with.
102	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.	Noted and shall be complied with.
103	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.	Noted and shall be complied with.
104	The area earmarked as green area shall be used only	Noted and shall be complied with.

Sr. No	Conditions	Compliance Status
	for plantation and shall not be altered for any other purpose.	
105	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.	Noted and shall be complied with.
106	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 of environmental protection and management.	Noted and shall be complied with.
107	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.	Noted and shall be complied with.
108	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Noted and shall be complied with.
109	During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or stormwater.	Noted and shall be complied with.
110	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	Pucca flooring has been provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
111	Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.	Noted and shall be complied with.
112	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.	Based on EC No. SEIAA/GUJ/EC/5(f) 845.2021 dtd. 10.06.2021, obtained CTE order no: 15819 dated 08.09.2020 & CTE Amendment vide order no 118186 dated 24.06.2022. Company has taken permission through CTE amendment from GPCB as per prevailing rules and regulations.
113	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.	Noted and shall be complied with.

Sr. No	Conditions	Compliance Status
114	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.	Noted and shall be complied with.
115	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.	Noted and shall be complied with.
116	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.	Noted and shall be complied with.
117	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.	EC approval was advertised in local newspaper "Divya Bhaskar" as well as "Times of India" on 16.06.2021. Copies of the same were forwarded to Gram Panchayat, GPCB, SEIAA & RO MoEFCC.
118	It shall be mandatory for the project management to submit a half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	Noted and being complied with.
119	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.	Noted
120	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Noted and shall be complied with.
121	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted
122	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.	Noted and shall be complied with.
123	The project authorities shall inform the GPCB,	Company is not taking any financial

Sr. No	Conditions	Compliance Status
	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.	support from the bank so financial approval/closure for the project is not applicable. Information about initiation of construction work given to the GPCB vide letter GSCL/DAHEJ/GPCB/ID 76102/2021/01 dtd. 20/08/2021.
124	This environmental clearance is valid for seven years from the date of issue.	Noted
125	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.	Noted
126	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.	Noted

ANNEXURE : 1
AAQM ANALYSIS REPORT
(October 2022 to March 2023)

Location	PARAMETER	Unit	Norms	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Min.	Max.
				Results							
Project Site	Particulate Matter (PM 10)	µg/m3	100	63	68	64	69	72	76	63	72
	Particulate Matter (PM 2.5)	µg/m3	60	19	22	23	24	25	27	19	25
	Oxides of Sulphur as SO2	µg/m3	80	10.6	12.2	13.4	12.7	13.7	15.8	10.6	13.7
	Oxides of Nitrogen as NO2	µg/m3	80	15.2	17.1	18.6	17.3	18.8	20.6	15.2	18.8
	HCl	µg/m3	200	BDL	BDL (DL	BDL	BDL	BDL (DL	BDL (DL	BDL	BDL
	Cl2	µg/m3	100	BDL	BDL (DL	BDL	BDL	BDL (DL	BDL (DL	BDL	BDL
	VOC	µg/m3	-	BDL	BDL (DL	BDL	BDL	BDL (DL	BDL (DL	BDL	BDL

Note :

Monitoring by Unistar Environment & Research Labs Pvt. Ltd. (NABL Approved lab)

ANNEXURE :1

NOISE LEVEL MONITORING REPORT
(October 2022 to March 2023)

Month Location	Oct-22		Nov-22		Dec-22		Jan-23		Feb-23		Mar-23		Min.		Max.	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
East	63.2	56.8	65.8	57.2	64.1	55.6	62.7	54.3	60.7	52.1	62.7	55.3	62.7	54.3	65.8	57.2
West	61.9	53.5	58.6	52.7	57.6	51.8	56.9	50.5	57.9	51.8	58.3	54.1	56.9	50.5	61.9	54.1
North	60.5	52.7	62.7	55.4	62.8	54.2	60.1	53.7	58.6	54.6	60.1	55.9	60.1	52.7	62.8	55.9
South	58.4	50.4	60.1	52.1	59.5	53.6	58.5	52.9	61.3	55	63.5	57.3	58.4	50.4	63.5	57.3

NOTE: All Results are in dB (A)

Noise level limits 75.0 dB (A) During day time (6.00 am to 10.00 pm) and 70 dB (A) During night hours (10.00 pm to 6.00 am).

Monitoring by Unistar Environment & Research Labs Pvt. Ltd. (NABL Approved lab)

Frequency of Monitoring : Once in a month

ANNEXURE :2

WATER CONSUMPTION DETAILS FOR OCTOBER:2022 TO MARCH:2023

MONTH	UTILITIES KL	DOMESTIC & GARDENING KL	PROCESS KL	Road Construction & Project Activities KL	TOTAL KL
Oct-22	0.0	0.0	0.0	0.0	0.0
Nov-22	0.0	0.0	0.0	0.0	0
Dec-22	0.0	0.0	0.0	0.0	0
Jan-23	0.0	698.8	0.0	357.2	1056
Feb-23	0.0	422.7	0.0	216.1	639
Mar-23	338.0	237.0	0.0	24.2	599
T O T A L	338.0	1358.5	0.0	597.6	2294.1
Average KL/Month	56.3	226.4	0.0	99.6	382.4
Average KL/Day	1.9	7.5	0.0	3.3	12.6