



Gujarat Alkalies and Chemicals Limited

(Promoted by Govt. of Gujarat)

Dahej Complex : P.O. Dahej - 392130. Tal. Vagra, Dist. Bharuch (Gujarat) INDIA

Phone : +91-2641- 613200

CIN NO : L24110GJ1973PLC002247

S&E/DHJ/E-28A/24-25/Plot D-II/9(01)

Date- 12.11.2024

To,
Ministry of Environment, Forest and Climate Change,
Integrated Regional Office,
Gandhi Nagar, A-Wing – 407 & 409,
Aranya Bhawan,
Near CH-3 Circle, Sector-10A,
Gandhi Nagar – 382010

Sub: Submission of half yearly compliance report of EC(Period for report- 1st April 2024 to 30th September 2024)

Ref: - EC issued vide letter no. - SEIAA/GUJ/EC/4(d),5(f)&1(d)/649/2020 Dated 09/06/2020

Dear Sir,

With reference to above, we are enclosing herewith six-monthly compliance report of above EC for the period of 1st April 2024 to 30th September 2024.

Thanking you,
Yours faithfully,

For Gujarat Alkalies and Chemicals Limited-Dahej


S. N. PATEL
DGM (S, E & F)



Encl: As Above



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

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EC Compliance Report of Gujarat Alkalies and Chemicals Ltd, Plot D-II/9 – Dahej
Period: (April 2024 to September 2024)

Status of Six-Monthly Compliance of the stipulated conditions of the Environment Clearance no SEIAA/GUJ/EC/4(d),5(f)&1(d)/6492020 Dated 9 th June 2020		
Period: 1 st April 2024 to 30 th September 2024.		
Sr. No.	EC CONDITIONS	COMPLIANCE STATUS
A.1	Specific Condition	
1	Leak Detection and Repair (LDAR) program shall be prepared and, implemented as per the CPCB guidelines.	Noted and complied
2	Intermediate products/by-products mentioned in the product list qualifying the hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and its amendment time to time shall be sold only to the potential users who are authorized by the competent authority (MoEFCC/CPCB/SPCB) and provisions of said rules shall be complied in letter and spirit.	Complied. At present only chloromethane plant is commissioned. There is no any intermediate products/by-products mentioned in the product list (a per CCA duly grant by GPCB) qualifying the hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
3	The company shall submit the list of authorized end users of above-mentioned wastes along with MoU signed with them at least two months in advance prior to commencement of Production. In absence of potential buyers of these items, the unit shall restrict the production of respective item.	Complied.
4	Continuous Emission Monitoring System (CEMS) shall be provided for monitoring of air pollutants and waste water discharge.	Noted. Continuous Emission Monitoring System (CEMS) for monitoring of air pollutants and waste water discharge in not applicable for existing installation i.e. chloromethane plant.
5	-	-
6	-	-
7	Unit shall comply all the conditions & recommendations mentioned in the guidelines	Noted
8	All measures shall be taken to prevent soil and ground water contamination.	Noted
9	The project proponent shall submit the detailed study report to Gujarat Pollution Control Board (GPCB) at least once in a year comprising details of percolation rate of surface water, ground water analysis and observations of contamination to soil & ground water (If any) and mitigation measures to curb ground water & Soil contamination.	Noted for compliance.
10	Necessary approvals from PESO and concerned Govt. Authorities shall be obtained before commissioning of the project.	Complied. Necessary approvals from PESO and concerned Govt. Authorities have been obtained before commissioning of the project.
11	Unit shall provide captive incinerator for ECH plant as per the CPCB guide lines.	Noted for compliance. ECH plant is not installed yet.
12	Unit shall comply the emission standards mentioned in the Notification by MOEF&CC vide no. S.D. 3305 I dated 07/12/2015.	Noted. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.

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13	The Unit shall comply with the provisions with reference to stack height for power plant as and when the draft Notification vide No. S.O. 3337 I dated 16 th October, 2017 is duly finalized and enforced.	Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
14	Unit shall use Imported Coal having Sulphur content less than 0.5 % in Captive Power Plant.	Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
15	Unit shall provide Online Emission and Effluent Monitoring System and an arrangement shall also be done for reflecting the online monitoring results on the company's server which can be assessable by the GPCB on real time basis.	Noted. Continuous Emission Monitoring System (CEMS) for monitoring of air pollutants and waste water discharge in not applicable for existing installation i.e. chloromethane plant.
16	Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 I dated 07/12/2015 and amended time to time.	Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
17	Unit shall comply all the conditions stipulated in Coal Handling Guidelines published by GPCB.	Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
18	The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.	Agreed to complied.
19	The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 I dated 16 th November, 2009 shall be complied with.	Complied. <ul style="list-style-type: none"> • We carry out monthly Ambient Air Monitoring through GPCB authorised and NABL approved laboratory. • Record of the monitoring is maintained.
20	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 for compliance Our currently installed and operational chloromethane plant is ZLD.
21	The project proponent shall allocate the separate fund of Rs. 3436.25 lakhs i.e. 0.75 % of the capital investment in accordance to the MoEFCC's Office—Memorandum No. F.No.22-65/2017'-IA.1II dated 01/05/2018. The entire activities proposed under CER 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 district collector. The monitoring report shall be posted on the website of the project proponent.	Noted for compliance.
22	All the Recommendations mitigation measures, environment protection measures and safeguards proposed in the EIA report of the project prepared by M/s: Eco Chem Sales and Services 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.	Complied. Environment Protection Measures, Risk Mitigation Measures and Safeguards mentioned in the Risk Assessment Report such as provision of Gas detectors, Dyke Wall provision, Level Indicator, Earthing, Flame Arrestor & ready

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		availability of Fire Extinguishers and Fire Hydrant System is ensured.
A.2	Water	
23	Total water requirement for the project shall not exceed 2755 KLD. Unit shall reuse 272 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 2463 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.	Complied. Our fresh water requirement for the compliance period is not exceeding the prescribed limit and it shall be met through GIDC water supply only.
24	Prior permission from the concerned authority shall be obtained for withdrawal of water.	Noted for compliance. Prior permission from GIDC has been obtained for withdrawal of water.
25	No ground water shall be tapped for the project requirements.	Complied.
26	The water meter shall be installed and records of daily and monthly water consumption shall be maintained.	Complied. Water meters have been installed and the record is maintained.
27	All efforts are made to optimize water consumption by exploring Best Available Technology (BAT).	Noted for compliance.
28	The unit shall continuously strive to reduce, recycle and reuse the treated effluent.	Noted for compliance.
29	Unit shall segregate industrial waste water streams as Stream A	Noted for compliance.
30	<u>Stream I:</u> Wastewater generated from Process, washing and safety showers from Chloromethane, Chlorotoluene, Epichlorohydrin and Chlorinated Paraffin Wax, plant (175 KLD) shall be treated in ETP-1 (Cap. 200 KLD) and treated water shall be discharged into GIDC effluent collection system for sea discharge. <u>Stream-III:</u> The industrial effluent 363 KLD (199 KLD from boiler, 13 KLD from DM regeneration, 29 from softener backwash, 102 KLD from cooling tower blow down and 20 KLD from washing) shall be treated in adequate ETP-1A (Cap.400 KLD) followed by UF-1A and RO System-1A. RO Permeate (272 KLD) shall be reused for industrial purpose within plant premises. RO reject (91 KLD) shall be reused for dust suppression and for sprinkling in coal handling units within premises.	Noted for compliance.
31	Total Industrial waste water generation shall not exceed 538 KL/day	Complied.
32	Total discharge of waste water into GIDC's drain for deep sea disposal after conforming to outlet norms prescribed by GPCB/CPCB MoEF&CC shall not exceed 175 KLD.	Complied. Our currently installed and operational CLM plant is ZLD.
34	The treated effluent for final disposal shall not exceed 175 KLD and it shall be conveyed to GIDC drain for deep Sea disposal after ensuring that it meets with the discharge norms prescribed by GPCB.	Complied. <ul style="list-style-type: none"> • Our currently installed and operational CLM plant is ZLD. • For upcoming projects, we shall initiate GIDC drainage connection.
35	The unit shall provide continuous online monitoring system at the outlet of the ETP system and maintain records for the same.	Noted for compliance. <ul style="list-style-type: none"> • Our currently installed and operational CLM plant is ZLD. • For upcoming projects, we shall provide continuous online monitoring system at the outlet of

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		the ETP system and maintain records for the same.						
36	Unit shall take steps measures for reuse/recycle of wastewater as proposed in EIA/EMP report.	Noted for compliance.						
37	Domestic wastewater generation shall not exceed 20 KLD for proposed project and it shall be treated in STP (Cap. 30 KLD).	Complied. Domestic waste water generation is not exceeding prescribed limit.						
38	Treated sewage shall be utilized for gardening and plantation within premises after achieving prescribed GPCB norms.	Complied. <ul style="list-style-type: none"> We are utilizing treated sewage for gardening and plantation within premises after confirming prescribed GPCB norms. We do carryout treated sewage sampling and analysis through GPCB authorised and NABL approved laboratory. 						
39	During monsoon season when treated sewage effluent may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case	Noted for compliance.						
40	Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.	Noted for compliance.						
41	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 the Govt./ GIDC.	Noted for compliance.						
42	Proper logbooks of ETP-1 & ETP-1A, & UF/RO Operations, Chemical Consumption, quantities and qualities of effluent discharge and reuse, power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.	Noted for compliance.						
43	The unit shall provide metering facility at the inlet and outlet ETP-1, ETP-1A, STP, UF, RO, reuse lines, discharge line and maintain records for the same.	Noted for compliance. <ul style="list-style-type: none"> We are in the project stage and at present our currently installed and operational CLM plant is ZLD. Metering facility at the inlet and outlet shall be provided after erection and commissioning of relevant plant and their ETPs. 						
A.3	Air							
44	Unit shall not exceed fuel consumption as mentioned in the table.						Complied. We have installed 910 KVA DG set with adequate stack height. We have not so far installed 280 TPH Boiler.	
	s r	Stack Attach ed to	Stack Height (M)	Nos of stack s	Type of Fuel used	Qty. of fuel cons umpti on		APCM
	1	D. G. Set (1*225 kVA)	9	1	HSD	50 LPH		Adequ ate stack height
2	D. G. Set (1*100 0 kVA)	9	1	HSD	910 LPH	Adequ ate stack height		

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	3	Boilers – 280 TPH	50	1	Impo rted coal	892 TPD	ESP	
45	Unit shall provide adequate APCM as mentioned in the above table.							Complied.
46	Sulfur and ash content of the fuel to be used shall be analysed and its record shall be maintained.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
47	A long term study of radio activity and heavy metals contents on coal lignite to be used shall be carried out through a reputed institute and results thereof analysed regularly and reported along with monitoring, reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal lignite and fly ash (including bottom ash) shall be put in place.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
48	Height of flue gas stacks attached to Boilers shall be minimum 50 m.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
49	High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard prescribed in the Environment (Protection) Rules, 1986 as amended time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
50	Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute / organization.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
51	Lime stone injection technology shall be adopted to control S02 and it shall be ensured that S02 levels in the ambient air do not exceed the prescribed standards.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
52	The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.							Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.

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53	Unit shall provide APCM for various plants as per the table.				Noted for compliance.	
	S / N	Source of Emission	Type of Emission	Stack/Vent Height (meter)		APCM
	1	Reactor of Chlorotoluene plant	HCl, Cl ₂	33		Caustic Soda Scrubber
	2	Scrubbing unit in Chloromethanes plant	HCl, Cl ₂ , CO, SO ₂ , Nox, HC	30		Water + Alkali Scrubber
3	Incinerator of Epichlorohydrin plant	NOx, CO, HCl, C ₂ H ₄ Cl ₂ , TOC, Dioxin	25	Caustic Scrubber		
54	Adequate Air Pollution Control Measures [APCM] shall be provided.				Complied. Adequate stack height has been provided.	
55	Flue gas emission & Process gas emission (Whichever is applicable) shall conform to the standard prescribed by the GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.				Complied. Flue gas emission monitoring is being carried out through GPCB authorised and NABL approved laboratory. Measured values are well within the stipulated standards.	
56	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 I dated 16 th November, 2009 shall be followed.				Complied.	
57	Unit shall take adequate measures to control fugitive emissions as below:					
i	All the joints, flanges, pumps, glands, seals, valves shall be maintained in good conditions through timely predictive and preventive maintenance.				Complied. We have well established predictive and preventive maintenance programme integrated in SAP.	
ii	Regular workplace monitoring shall be carried out for HCl & Cl ₂ at various locations within plant.				Noted for compliance.	
iii	Boundary wall as Wind breaker shall be provided to restrict the dispersion of odor dust from the site.				Complied. We have provided boundary wall as wind breaker to restrict the dispersion of odor dust, if any from the site.	
iv	Well-developed green belt is provided at the existing site and shall be maintained for the proposed project.				Noted for compliance. Green belt is under development stage.	
v	All tanks being used for storage of odorous chemicals products shall be connected to vacuum system. Manometers shall be provided on these tanks. The vacuum shall be monitored on daily basis and actions shall be taken accordingly.				Noted for compliance. This requirement is relevant to upcoming plants, which are not yet installed.	

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vi	All pumps handling hazardous chemicals shall be provided with mechanical seals to prevent fugitive emission. Wherever possible magnetic coupled pumps shall be used.	Complied. We have considered and provided magnetic type/mechanical seal type pumps which are handling hazardous chemicals to prevent fugitive emission.
vii	Any spillage from drums etc. shall be absorbed with saw dust/ soda ash and moped clean. The contaminated absorbent shall be safely disposed-off along with hazardous waste.	Complied.
viii	Manual Handling of various chemicals shall be avoided and shall be designed by implementing latest automation technology.	Complied. Our currently installed and operational chloromethane plant is continuous and is operated through DCS and there by manual handling of chemicals is eliminated to the extent possible.
ix	All venting equipment shall have vapor recovery system. Measuring Instruments with sound alarm and having strategically placed sensing elements shall be provided for alerting the personnel in case of any escape of gases like Chlorine. Interlock with blower shall be provided.	Complied. We have provided chlorine detector with alarm system in plant for alerting the personnel in case of any escape of chlorine gases.
58	Measures shall be taken to reduce the process vapors emissions as far as possible. Use of toxic solvents shall be minimum. All venting equipment shall have vapour recovery system.	Complied.
59	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.	Complied.
#	Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.	Complied. We have constructed concreted internal roads to reduce the fugitive emission during vehicular movement.
#	Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.	Noted for compliance as applicable.
#	A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.	Noted and is an ongoing compliance.
60	Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.	Noted for compliance.
61	Airborne dust all transfers operations points shall be controlled either by spraying water or providing enclosures.	Noted. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
62	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.	Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
#	All handling & transport of coal shall be exercised through covered coal conveyors only.	Noted for compliance.

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#	Enclosure shall be provided at Coal loading and unloading operations.	This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
#	Water shall be sprinkled on Coal stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.	
#	All transfer points shall be fully enclosed.	
#	Adequate dust suppression/extraction system at crusher house as well as for the Coal/lignite stock yard and other vulnerable areas shall be provided to abate dust nuisance.	
#	Accumulated coal dust /fly ash on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.	
#	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.	
#	Coal/Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.	
#	A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.	Noted for compliance. Greenbelt is under development stage.
63	Regular monitoring of ground level concentration of PM10, PM2.5, SO2, Nox, HC, Dioxin and VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.	Complied. <ul style="list-style-type: none"> • We are carrying out Ambient Air Monitoring through GPCB authorised and NABL approved laboratory. • All measured values are well within the prescribed limit.
64	Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.	Complied. We have provided adequate stack height as per the prevailing norms for flue gas emission.
65	Adequate Air Pollution Control Measures (APCM) shall be provided.	Complied.
66	Flue gas emission & Process gas emission shall conform to the standards prescribed by the GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.	Complied. <ul style="list-style-type: none"> • We do carryout flue gas emission monitoring through GPCB authorised and NABL approved laboratory. • Emission level is well within the prescribed limit.
67	All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	Complied. We have provided closed reactors for our currently installed & operational CLM plant.
68	Online monitoring system shall be installed to monitor the SOx, Nox and SPM in the flue gas stack. An arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis	Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.

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69	Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.			Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
70	Handling of the fly ash shall be through a closed pneumatic system.			Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
71	Ash shall be handled only in dry state.			Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
72	The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.			Noted for compliance. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
A.4	Solid / Hazardous Waste			
73	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.			Complied. We are strictly complying 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. Authorisation from GPCB has been obtained for collection / treatment / storage / disposal of hazardous wastes.
74	Any by-products which fall under the purview of the Hazardous and other Wastes (Management and Transboundary Movement) Rules 2016 shall be handled as per the said rules and necessary permissions from the concern authority shall be obtained.			Noted for compliance. At present only chloromethane plant is commissioned. There is not any intermediate products/by-products mentioned in the product list (PCB granted CCA) qualifying the hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
75	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 for compliance.
76	Management of Hazardous waste shall be according to the table.			Complied. We have been complying with the prescribed mode for disposal of hazardous wastes as mentioned in the table.
	S/ N	Type/ Name of Hazardous waste	Source of Gener ation	
	1	High M.P Liquid Impurities	Chloro toluen e Plant	Incineration (In- house / BEIL- Dahej)

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	2	Used/spent oil	DG Sets	Sold to GPCB authorized reprocesses
	3	Discarded drums and containers	Processes	Collection, decontamination & sold to GPCB authorized recyclers
	4	Oil Contaminated cotton rags or other cleaning materials	Handling	Incineration in captive incinerator / BEIL incinerator
	5	ETP waste	ETP	TSDF of BEIL-Dahej
	6	Incineration Ash	ECH Plant	TSDF of BEIL-Dahej
	7	Waste residue from industrial use of paint	Entire site	Shall be sold to Authorised recyclers by auction process
	8	Lead washers etc. as Lead scrap	Entire site	Sold to recyclers registered with MSTC and possessing requisite valid Environmental permissions from respective State Pollution Control Boards by auction process
	9	Nickel Scrap	Entire site	Sold to recyclers registered with MSTC and possessing requisite valid Environmental permissions from respective State Pollution Control Boards by auction process
	10	Copper tubing, caps and cables etc. – As Copper scrap	Entire site	Sold to recyclers registered with MSTC and possessing requisite valid Environmental permissions from respective State Pollution Control Boards by auction process
	11	Spent Carbon	Entire site	Incineration in captive incinerator / BEIL incinerator

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	1 2	Discarded bags / liner / packing material, Discarded PPEs, gaskets	Entire site	Shall be sold to Authorised recyclers by auction process	
77		The unit shall obtain necessary permission from the nearby TSDf site and CHWIF.			Noted for compliance. We have obtained membership from nearby Pre-processing facility.
78		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 for compliance.
79		Unit shall explore the possibilities for environment friendly methods like Co-processing of hazardous waste for disposal of Incinerable & landfillable wastes before sending to CHWIF & TSDf sites respectively.			Noted for compliance. We are exploring the possibilities for environment friendly methods like Co-processing of hazardous waste for disposal of incinerable & landfillable wastes before sending to CHWIF & TSDf sites respectively.
80		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.			Complied.
81		The design of the Trucks/tankers shall be such that there is no spillage during transportation.			Complied.
82		All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDf/CHWIF.			Noted for compliance. We are exploring the possibilities for environment friendly methods like Co-processing of hazardous waste before sending to CHWIF & TSDf sites respectively.
A.5	Safety				
83		The occupier/project proponent shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963 as well as Manufacture, Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.			Complied. We are complying with the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963 as well as Manufacture, Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.
84		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 Onsite and Off-site Management Plans have to be prepared and implemented.			Complied. We have obtained necessary approvals from PESO and other concerned Govt. Authorities for our currently installed and operational CLM Plant.
85		Main entry and exit shall be separate and clearly marked in the facility.			Complied. We have provided separate main entry and exit.
86		Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.			Complied. Sufficient peripheral open passage in the margin area for free movement of fire tender/ emergency

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		vehicle around the premises has been provided.
87	Storage of flammable chemicals shall be sufficiently away from the production area.	Complied. As per PESO approved guideline, we have stored flammable chemicals sufficiently away from production area.
88	Sufficient number of fire extinguishers shall be provided near the plant and storage area.	Complied. We have provided sufficient numbers of fire extinguishers across the plant including storage area.
89	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.	Complied. Adequate precautionary measures to avoid accident during storage and handling of toxic / hazardous chemicals are being taken.
90	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. We have stored all the toxic/hazardous chemicals in optimum quantity as permitted by the concerned regulatory authorities.
91	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.	Complied.
92	Only flame proof electrical fittings shall be provided in the plant premises.	Complied. We have provided/installed electrical fittings according to electrical area classification.
93	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.	Complied. Storage of all the toxic/hazardous chemicals is being done in optimum quantity as permitted by the concerned regulatory authorities.
94	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.	Complied. We have provided appropriate engineering controls for all the storage tanks to avoid leakages. Also, bund/dyke walls provided for storage tanks for Hazardous Chemicals.
95	Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.	Complied. For avoidance of exposure to hazardous chemicals, we are operating our plant in closed circuit and manual handling of hazardous chemicals in open circuit system is eliminated.
96	Tie up shall be done with nearby health care unit/doctor for seeking immediate medical attention in the case of emergency.	Complied.
97	Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.	Complied. We are providing adequate PPE to workers and also its usage is ensured and supervised.
98	First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	Complied. We have provided sufficient first aid box in different location of office and

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		plant area and are readily accessible.
99	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.	Complied. We are carryout pre-employment and periodical medical examination for all the workers as per the Factories Act and the rules made these under and its record maintained.
100	Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	Complied.
101	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	Complied.
102	Necessary permissions from various statutory authorities like PESO. Factory Inspectorate and others shall be obtained prior to commissioning of the project.	Complied. • We have obtained necessary approvals from PESO and other concerned Govt. Authorities.
103	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be maintained.	Complied • We are providing training to all employees on safety and health aspects of chemicals handling. • We do carryout pre-employment and periodical medical examination for all sthe workers as per the factory act and the rules made these under and its record maintained.
104	Effective safety precaution shall be taken for chemical storage, process handling and transportation hazard.	Complied. We are taking adequate precautions for chemical storage, process handling and transportation hazard.
105	Unit shall prepare and Implement SOP for safe operation of the works.	Complied. We have prepared and implemented SOP for safe operation of the works.
106	The unit shall comply the statutory provision of safety audit & its compliance report.	Complied.
107	Effective step shall be taken for prevention of fire, Explosion & toxic release.	Complied. We are taking adequate steps for the prevention of fire, explosion & toxic release.
108	Proper ventilation shall be provided in the work area.	Complied. Plant operational area is well ventilated.
109	Necessary precautions like continuous monitoring of hot spots [ignited lignite] using temperature detection systems, water sprinklings, avoiding stacking of lignite near steam pipeline etc. shall be made for storing lignite to prevent fire hazard	Noted. This requirement is relevant to thermal power plant and we have not installed thermal power plant yet.
110	A well-designed fire hydrant system shall be installed as per prevailing standards.	Complied. We have installed fire hydrant network and fire water cum foam monitor around the main process area and it is confirming to the relevant Indian Standards.
111	Adequate firefighting facilities shall be provide at the proposed power plant All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages	Noted for Compliance.

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112	The project management shall prepare as detailed disaster management plan (DMP) for the project as per the guidelines from directorate of Industrial safety and health.	Complied. We have prepared On-Site Emergency Action Plan as per the guidelines from Directorate of Industrial Safety and Health.
A.6	Noise	
113	The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	Complied. We do carryout ambient noise monitoring through NABL accredited and GPCB approved agency. Measured values of noise level are well within the norms.
114	To minimize the noise pollution the following noise control measures shall be implemented:	
#	Selection of any new plant equipment shall be made with specification of low noise levels.	Noted and complied
#	Manufacturers / suppliers of major noise generating machines / equipment's 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 the national/international regulatory norms with respect to noise generation for individual units	
#	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	
#	Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.	
#	Employees shall be provided with ear protection measures like earplugs or earmuffs.	
#	Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipment's to reduce noise generation.	
#	Construction equipment 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 / equipment.	
#	Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate .	
#	Construction equipment meeting the norms specified by EP Act, 1986 shall only be used .	
#	Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.	
#	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.	
A.7	Cleaner Production and Waste Minimisation	
115	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.	Noted for compliance.
116	The company shall undertake various waste minimization measures such as:	
a	Metering and control of quantities of active ingredients to minimize waste.	Noted and is being followed.

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b	Reuse of by-products from the process as raw materials or as raw materials substitutes.	
c	Use of automated and close filling to minimize spillages.	
d	Use of close feed system into batch reactors.	
e	Venting equipment through vapour recovery system.	
f	Use of high pressure hoses for cleaning to reduce wastewater generation.	
g	Recycling of washes to subsequent batches.	
h	Recycling of steam condensate	
i	Sweeping of mopping of floor instead of floor washing to avoid effluent generation.	
j	Regular preventive maintenance for avoiding leakage, spillage etc.	
A.8	Greenbelt and Other Plantation	
117	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.	Noted for compliance.
118	Drip irrigation flow-volume, low-angle sprinkler system shall be used for the green belt development within the premises.	Noted for compliance.
B.	Other Conditions	
119	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-1A.111 dated 09/08/2018.	Noted.
120	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 & it's APCM 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	Noted.
120	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.	Noted for compliance.
121	The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-6512017-IA.111 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 MoEF&CC 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.	Noted for compliance.
122	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 around water. Before	Noted for compliance.

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	recharging the surface run off, pre-treatment must be done to remove suspended matter.	
123	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. I GIDC.	Noted for compliance.
124	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 for compliance.
125	The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.	Noted for compliance.
126	All the commitments in undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.	Noted for compliance.
127	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated	Complied.
128	All the recommendations / commitments made in the EIA/EMP report of the project shall be implemented	Noted for compliance.
129	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 for compliance.
130	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Noted for compliance.
131	During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.	Complied.
132	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling area.	Complied. We have developed “pucca” flooring / impervious layer in the work areas, chemical storage areas and chemical handling area.
133	Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.	Complied.
134	The funds earmarked for environment protection measures shall be maintained in a separate account.	Noted for compliance.
135	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.	Noted for compliance.
136	The above condition will be enforced, inter-alia under the provision of the Water (prevention and control of pollution) Act 1974, the Air (prevention and control of pollution) Act 1981, the Environment (Protection) Act, 1986, Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments rules. The project proponent shall comply all the condition mentioned in “The Companies (Corporate Social Responsibility Policy) Rules, 2014” and its amendments from time to time in a letter and spirit.	Noted.

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137	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s: Kadam Environmental Consultants, Vadodara and submitted by project proponent online application vide no. SIA/GJ/IND2/2162512016 dated 24/10/2018 and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.	Noted for compliance.
138	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 for compliance.
139	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 for compliance.
140	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 for compliance.
141	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 copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied.
142	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 the environmental protection and management.	Agreed.
143	It shall be mandatory for the project management to submit yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copy to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	Complied.
144	Concealing factual data or submission of false or 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.
145	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Noted.
146	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted.
147	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.

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148	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.	Noted.
149	This environmental clearance is valid for seven years from the date of issue.	Noted.
150	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.
151	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.