



ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

For

APRIL 2023 TO SEPTEMBER 2023

By:

GULBRANDSEN PRIVATE LIMITED

(Formerly known as Gulbrandsen Chemicals Pvt. Ltd.)

On Coastal Highway, AT & PO : Mujpur

Tal : Padra, Dist. : Vadodara, Gujarat 391440

HALF YEARLY ENVIRONMENT CLEARANCE COMPLIANCE REPORT

E.NO. J-11011/490/2011-IA-II (I) dated 23.01.2014

FOR PERIOD FROM APRIL 2023 TO SEPTEMBER 2023

Sr. No	Conditions	Compliance Status
2	<p>The Ministry of Environment and Forests has examined the application for the above project. It is noted that the existing plant had obtained an environmental clearance from this Ministry vide letter no. J-11011/257/2008-IA.II (I) on 23.11.2010.</p> <p>M/s. Gulbrandsen Chemicals Private Limited have proposed to expand their Chemical Unit (from 24,980.04 to 1, 45,685.04 MTPA) at Sy. No. 202 to 205, 265b, 266a, 266b, 285 to 294, 296 to 298, 321, 323, 326, 200, 199 Coastal Highways, Village Mujpur, Tehsil Padra, District Vadodara, Gujarat.</p> <p>The proposed expansion will be carried out in an area of 2.73 ha. Total plant area after the expansion will be 7.88 ha. No Forest land is involved.</p> <p>No Defense Installation, Biosphere Reserve, National Park/WildLife Sanctuary, Ecologically Sensitive Area is located within 10 km radius of the project site.</p> <p>Total cost of the project is Rs.50 crores. Rs. 1 crore and Rs.2 crores is earmarked towards the capital cost and recurring cost per annum towards the environmental protection measures.</p> <p>Rs. 23.20 lakhs is earmarked towards the CSR related activities for a period of 2013-16.</p>	<p>Complied</p> <p>Till date expansion up to 95535 MTPA of production against the approval of 120705 MTPA for the proposed project.</p> <p>Production data of the last 6 months are enclosed herewith as ANNEXURE: 1.</p> <p>Environment Clearance amendment for addition of new plots received on dated 27.03.2018. Now the total plot area is 104364 m². We have received CTE no. 92482 dated 15.05.2018 and CTO no. AW-104908 dated 24.12.2019 for increase in plot area.</p> <p>No Ecologically Sensitive Area is located within 10 km radius of the project site.</p> <p>Every year Adequate funds are allocated toward capital cost and recurring cost for environmental pollution control measures. The fund allocated for Environment management is not diverted to any other purpose.</p> <p>CSR contribution during 2013-16: INR 1,00,27,392 CSR contribution during Apr-23 to Sep-23: INR 50.69 Lakhs</p>

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3	<p>Following are the details of existing and proposed products.</p> <table><tr><th rowspan="2">Sr .</th><th rowspan="2">Name of Product</th><th>Existing</th><th>Proposed</th><th>Total after expansion</th></tr><tr><th>MTPA</th><th>MTPA</th><th>MTPA</th></tr><tr><td>1</td><td>Organometallic compounds</td><td>21836.04</td><td>32700</td><td>54536.04</td></tr><tr><td>2</td><td>Polyethylene wax</td><td>0.0</td><td>20000</td><td>20000.0</td></tr><tr><td>3</td><td>R&D Products Organometallic Compounds/Organic/inorganic chemicals</td><td>0.0</td><td>25.0</td><td>25.00</td></tr><tr><td>4</td><td>Aluminum Chloride (25%) (AlCl3)</td><td>3144</td><td>48510</td><td>51654</td></tr><tr><td>5</td><td>Ethyl Iodide (C2H5I)</td><td>0.0</td><td>19470</td><td>19470</td></tr><tr><td></td><td>Total</td><td>24980.04</td><td>120705</td><td>145685.04</td></tr></table>	Sr .	Name of Product	Existing	Proposed	Total after expansion	MTPA	MTPA	MTPA	1	Organometallic compounds	21836.04	32700	54536.04	2	Polyethylene wax	0.0	20000	20000.0	3	R&D Products Organometallic Compounds/Organic/inorganic chemicals	0.0	25.0	25.00	4	Aluminum Chloride (25%) (AlCl3)	3144	48510	51654	5	Ethyl Iodide (C2H5I)	0.0	19470	19470		Total	24980.04	120705	145685.04	<p>Complied</p> <table><tr><th rowspan="2">Sr. No</th><th rowspan="2">Name of Product</th><th>Proposed</th><th>Expansion implemented</th></tr><tr><th>MTPA</th><th>MTPA</th></tr><tr><td>1</td><td>Organometallic compounds</td><td>32700</td><td>27000</td></tr><tr><td>2</td><td>Polyethylene wax</td><td>20000</td><td>20000</td></tr><tr><td>3</td><td>R&D Products Organometallic Compounds/Organic/inorganic chemicals</td><td>25.0</td><td>25.0</td></tr><tr><td>4</td><td>Aluminum Chloride (25%) (AlCl3)</td><td>48510</td><td>48510</td></tr><tr><td>5</td><td>Ethyl Iodide (C2H5I)</td><td>19470</td><td>0</td></tr><tr><td></td><td>Total</td><td>120705</td><td>95535</td></tr></table>	Sr. No	Name of Product	Proposed	Expansion implemented	MTPA	MTPA	1	Organometallic compounds	32700	27000	2	Polyethylene wax	20000	20000	3	R&D Products Organometallic Compounds/Organic/inorganic chemicals	25.0	25.0	4	Aluminum Chloride (25%) (AlCl3)	48510	48510	5	Ethyl Iodide (C2H5I)	19470	0		Total	120705	95535
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4	<p>The raw materials required are Aluminium, Ethylene, Hydrogen, Hexane, Caustic, CO2, HCL, AlCl3 and ethanol etc.</p> <p>The power requirement for the proposed expansion is 2100 KVA, which will be met from the Madhya Gujarat Vij Company Limited.</p>	<p>Complied</p> <p>Raw material consumption data are enclosed herewith as ANNEXURE : 2.</p> <p>We are utilizing only 800 KVA of power out of the approved 2100 KVA power requirement.</p>																																																																				
5	<p>It is noted that the adequate stack height will be provided for wider dispersion of emissions.</p> <p>The raw materials will be stored in the dedicated sheds to avoid fugitive emissions.</p> <p>The Ventury caustic scrubbing system will be provided to collect the un-reacted fumes of anhydrous aluminium chloride.</p> <p>Chlorine scrubbing system will be provided to handle the emergency situation of a leakage in chlorine cylinder.</p>	<p>Complied</p> <p>Adequate stack height has been provided for wider dispersion of stack emissions.</p> <p>Complied</p> <p>Raw materials stored in pucca warehouses/closed containers to control fugitive emissions.</p> <p>Complied</p> <p>Since September 2012, we have stopped the Anhydrous Aluminium Chloride plant and therefore now only Tin Tetrachloride plant is connected with this scrubber.</p> <p>Complied</p> <p>An emergency chlorine scrubber along with proper suction arrangement has already been provided to handle emergency situations in case of leakage.</p>																																																																				

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6	<p>The water requirement after the proposed expansion is 459.85 m³/day (Existing: 358.03 m³/day; Expansion: 101.82 m³/day) which will be sourced from existing bore well and purchased RO water.</p> <p>The existing industrial and domestic wastewater generation is 54.8 m³/day and 10.17 m³/day respectively.</p> <p>The wastewater generation from the proposed expansion is 4.5 m³/day. Out of 4.5 m³/day, the domestic effluent is 2 m³/day. This effluent will be treated in STP and reused for gardening purposes.</p> <p>The remaining wastewater (boiler - 0.5 m³/day and cooling - 2 m³/day) will be recycled and reused for domestic purposes. There will be no process wastewater generation due the proposed expansion.</p>	<p>Complied</p> <p>Total water consumption is 204.3 m³/day (average) against approved quantity of water consumption 459.85 m³/day. Water is sourced from existing borewells and purchased RO water. Water consumption details are enclosed herewith as ANNEXURE : 3</p> <p>Complied</p> <p>Total Industrial waste water generation Average 48.2 m³/day (≤ 52.05 m³/day as per latest consent) &</p> <p>Domestic waste water generation Average 11.74 m³/day (≤ 12.17 m³/day as per latest consent)</p> <p>Domestic wastewater is treated in STP and reused for gardening purposes.</p> <p>The treated domestic effluent from STP is used for gardening purposes inside plant premises.</p> <p>Details of wastewater are enclosed herewith as ANNEXURE : 4</p>
7	<p>It is noted that used oil will be sent to the registered recyclers. The other solid waste such as waste/residue containing oil, distillation residue, waste refractory, ETP sludge will be sent to TSDF at Nandesari and Ankleshwar, operated by Nandesari Environment Control Limited (NECL) and Bharuch Enviro Infrastructure Limited (BEIL) respectively. M/s. Gulbrandsen Chemicals Private Limited is a member to the said TSDFs.</p>	<p>Complied</p> <ul style="list-style-type: none"> - Used oil is sent to the registered recycler M/s Suraj Barrel which is a CPCB authorized recycler. - Company has taken membership of following landfill sites for disposal of landfill waste: <ul style="list-style-type: none"> - NECL, Nandesari - BEIL, Dahej - SAFE, Bharuch - Company has taken membership of following incineration & Co Processing site: <ul style="list-style-type: none"> - RSPL, Panoli - BEIL, Ankleshwar - SEPPL, Kutch - Banas Resources LLP, Dahej
8	<p>All Synthetic Organic Chemical Industries located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised at Central level.</p>	<p>Noted</p>
9	<p>The proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 6th meeting held during 5-7th March 2013. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public Hearing / Public Consultation meeting was conducted by the Gujarat Pollution Control Board on 16.8.2012.</p>	<p>Noted</p>
10	<p>Based on the information submitted by you, Presentation made by you and your consultant, M/s. EQMS India Private Limited,</p>	<p>Noted</p>

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	the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:	

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A.	SPECIFIC CONDITIONS																																																																												
i.	Ambient air quality data should be collected as per NAAQS standards notified by the Ministry on 18th November, 2009.	<p>Complied</p> <p>AAQ data are collected as per NAAQ standards notified by the Ministry on 18th November 2009 through a third party NABL accredited laboratory.</p> <p>Summary of AAQM data for Apr-23 to Sep-23:</p> <table><tr><th>PARAMETER</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>Particulate Matter (PM10)</td><td>µg/m3</td><td>100</td><td>44</td><td>87</td></tr><tr><td>Particulate Matter (PM2.5)</td><td>µg/m3</td><td>60</td><td>18</td><td>34</td></tr><tr><td>Oxides of Sulphur as SO2</td><td>µg/m3</td><td>80</td><td>10.8</td><td>17.5</td></tr><tr><td>Oxides of Nitrogen as NO2</td><td>µg/m3</td><td>80</td><td>13.6</td><td>24.7</td></tr><tr><td>Hydrogen Chloride (HCl)</td><td>µg/m3</td><td>200</td><td>BDL</td><td>BDL</td></tr><tr><td>Chlorine (Cl2)</td><td>µg/m3</td><td>100</td><td>BDL</td><td>BDL</td></tr><tr><td>Ozone</td><td>µg/m3</td><td>100</td><td>BDL</td><td>BDL</td></tr><tr><td>Lead</td><td>µg/m3</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>CO</td><td>µg/m3</td><td>2</td><td>0.11</td><td>0.27</td></tr><tr><td>Ammonia</td><td>µg/m3</td><td>400</td><td>BDL</td><td>BDL</td></tr><tr><td>Benzene</td><td>µg/m3</td><td>5</td><td>BDL</td><td>BDL</td></tr><tr><td>Benzo(a)Pyrene</td><td>ng/m3</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>Arsenic</td><td>ng/m3</td><td>6</td><td>BDL</td><td>BDL</td></tr><tr><td>Nickel</td><td>ng/m3</td><td>20</td><td>BDL</td><td>BDL</td></tr></table> <p>Monthly AAQ Monitoring data, Monitoring Reports, NABL certificate of laboratory & photographs of Ambient Air Quality monitoring station are enclosed herewith as ANNEXURE : 5</p>	PARAMETER	Unit	Norms	Min.	Max.	Particulate Matter (PM10)	µg/m3	100	44	87	Particulate Matter (PM2.5)	µg/m3	60	18	34	Oxides of Sulphur as SO2	µg/m3	80	10.8	17.5	Oxides of Nitrogen as NO2	µg/m3	80	13.6	24.7	Hydrogen Chloride (HCl)	µg/m3	200	BDL	BDL	Chlorine (Cl2)	µg/m3	100	BDL	BDL	Ozone	µg/m3	100	BDL	BDL	Lead	µg/m3	1	BDL	BDL	CO	µg/m3	2	0.11	0.27	Ammonia	µg/m3	400	BDL	BDL	Benzene	µg/m3	5	BDL	BDL	Benzo(a)Pyrene	ng/m3	1	BDL	BDL	Arsenic	ng/m3	6	BDL	BDL	Nickel	ng/m3	20	BDL	BDL
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ii.	Regular monitoring of Volatile Organic Compounds (VOCs) should be carried out.	<p>Complied</p> <p>Monitoring of Volatile Organic Compounds (VOC) is carried out monthly in Ambient Air as well as at the workplace.</p> <p>Summary of VOC results for Apr-23 to Sep-23:</p> <table><tr><th>PARAMETER</th><th>Unit</th><th>Min.</th><th>Max.</th></tr><tr><td>Volatile Organic Compounds (VOC)</td><td>PPM</td><td>0.00</td><td>0.01</td></tr></table> <p>Monthly Monitoring results are enclosed herewith as ANNEXURE : 5A</p>	PARAMETER	Unit	Min.	Max.	Volatile Organic Compounds (VOC)	PPM	0.00	0.01																																																																			
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iii.	Stack of adequate height should be installed to oil fired boiler to disperse waste gases into atmosphere.	<p>Complied.</p> <p>We are using Natural Gas as fuel for Boilers. Adequate height is provided to all stacks as per CPCB /GPCB Standard.</p>																																																																											

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		Stack & APCM details are enclosed herewith as ANNEXURE : 6																				
iv	Fugitive emissions in the work zone environment, product, raw materials storage area etc. should be regularly monitored. The emissions should conform to the limits imposed by SPCB.	<p>Complied.</p> <p>Fugitive emissions are regularly monitored in plant & storage areas.</p> <p>Summary of fugitive emissions for Apr-23 to Sep-23:</p> <table><tr><th>PARAMETER</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>HCl</td><td>mg/Nm3</td><td>5</td><td>0.2</td><td>1.6</td></tr><tr><td>Cl2</td><td>mg/Nm3</td><td>3</td><td>BDL</td><td>0.5</td></tr><tr><td>VOC</td><td>mg/Nm3</td><td>-</td><td>0.0</td><td>0.01</td></tr></table>	PARAMETER	Unit	Norms	Min.	Max.	HCl	mg/Nm3	5	0.2	1.6	Cl2	mg/Nm3	3	BDL	0.5	VOC	mg/Nm3	-	0.0	0.01
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v	Ventury Caustic scrubber should be provided to control process emissions.	<p>Complied.</p> <p>All plant process emissions are connected to Venturi Caustic scrubber and/or packed column scrubber.</p> <p>An emergency chlorine scrubber along with proper suction arrangement has already been provided to handle emergency situations in case of leakage from chlorine cylinder.</p> <p>Summary of process emissions for Apr-23 to Sep-23:</p> <table><tr><th>PARAMETER</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>HCl</td><td>mg/Nm3</td><td>20</td><td>1.0</td><td>1.9</td></tr><tr><td>Cl2</td><td>mg/Nm3</td><td>9</td><td>BDL</td><td>BDL</td></tr></table> <p>Stack monitoring details & APCM details are enclosed herewith as ANNEXURE : 6.</p>	PARAMETER	Unit	Norms	Min.	Max.	HCl	mg/Nm3	20	1.0	1.9	Cl2	mg/Nm3	9	BDL	BDL					
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vi	Total water requirement after the proposed expansion should not exceed 459.85 m3/day (Existing: 358.03 m3/day; Expansion: 101.82 m3/day) and prior permission should be obtained from the concerned Authority.	<p>Complied.</p> <p>Total water consumption is 204.3 m3/day (average) against permission of 459.85 m3/day.</p> <p>Company has obtained NOC from the Central Ground Water Authority for extraction of ground water for 95 m³/day.</p> <p>NOC No: CGWA/NOC/IND/REN/3/2023/7895 dated 12/06/2023 valid up to 11/06/2026.</p>																				
vii	No process wastewater will be generated. The boiler and cooling tower blowdown water will be recycled and reused for domestic purpose. Water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB.	<p>Complied.</p> <p>There is no additional process wastewater discharge due to expansion. Overall waste water generation is within the permissible limit.</p> <p>All process water is treated in ETP and treated effluent has been discharged to EICL, CETP after conforming to inlet norms of CETP.</p>																				
viii	The company should obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous	Complied																				

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	Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB should be obtained for disposal of solid / hazardous waste in the TSDF. Measures should be taken for fire fighting facilities in case of emergency.	<p>Company has taken Authorization vide CC&A AWH-129630 valid up to 30/06/2028 for collection, storage and disposal of hazardous waste.</p> <p>Adequate fire fighting systems like fire buckets, fire extinguishers, etc. provided near Hazardous waste storage areas.</p>
ix	<p>Solvent management should be as follows : Reactor should be connected to a chilled brine condenser system.</p> <p>Reactor and solvent handling pump should have mechanical seals to prevent leakages.</p> <p>The condensers should be provided with sufficient Heat Transfer Area (HTA) and residence time so as to achieve more than 95% recovery.</p> <p>Solvents should be stored in a separate space specified with all safety measures.</p> <p>Proper earthing should be provided in all the electrical equipments wherever solvent handling is done.</p> <p>Entire plant where solvents are used should be flame proof. The solvent storage tanks should be provided with a breather valve to prevent losses.</p>	<p>Complied. Reactors are connected with a chilled water condenser system as per requirement.</p> <p>Complied Mechanical seal has been provided to the reactor and solvent handling pump to prevent leakage. Most of the solvent handling pumps are magnetic drive pumps.</p> <p>Complied The condensers are provided with sufficient Heat Transfer Area (HTA) and residence time and >95% recovery is achieved.</p> <p>Complied Solvents are stored in underground storage tanks. These tanks are approved by PESO.</p> <p>Complied Proper earthing has been provided at all electrical equipment wherever solvent handling is done.</p> <p>Complied Flame proof fittings have been installed as per Hazardous Area Classification in the plant.</p>
x	As proposed, green belt should be developed in at least 33 % of the project area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.	<p>Complied</p> <p>Green belt is developed as per CPCB guidelines.</p>
xi	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	<p>Complied. Health check up of all employees is carried out at regular intervals.</p>
xii	All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 16.8.2012 shall be satisfactorily implemented and a separate budget for implementing the same shall be	<p>Complied.</p> <p>Company took all necessary actions to comply with the commitment made in the Public Hearing/Public Consultation meeting held on 16.08.2012 and compliance report submitted to the Ministry's</p>

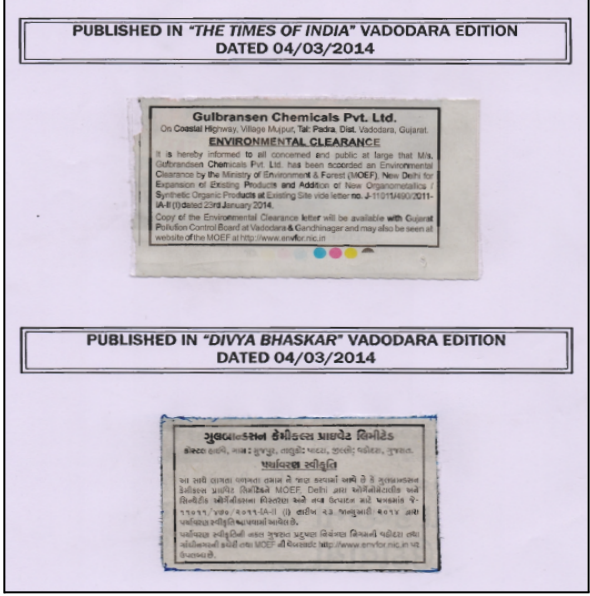
Sr. No	Conditions	Compliance Status
	allocated and information submitted to the Ministry's Regional Office at Bhopal.	Regional Office at Bhopal. Public Hearing compliance was also submitted with EC Six Monthly Compliance of Oct-13 to Mar-14 dated 25.04.2014 vide Letter GCPL/EHS/2014/01.
xiii	At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing Issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.	<p>Complied.</p> <p>The company undertakes various CSR activities in nearby villages on a regular basis. 5% of the total project cost was earmarked towards CSR within the given time.</p> <p>Details of CSR activities are enclosed as ANNEXURE : 7.</p>
xiv	The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Contract persons were from nearby villages; so arrangement of housing facilities for them was not required at our site.

Sr. No	Conditions	Compliance Status
B	GENERAL CONDITIONS	
i	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board and the State Government.	<p>Complied</p> <p>Company follows all stipulations made by the Gujarat Pollution Control Board and submits compliance of the same to GPCB.</p>
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	<p>Noted & Complied</p> <p>Based on EC F.NO. J-110114902011-IA-II (I) dated 23.01.2014, obtained CTE order no: 55793 dated 08.08.2013 & CC&A Amendment vide order no W-62520 dated 09.07.2014.</p> <p>Company has taken various permissions through CTE & CTO amendments from GPCB as per rules and regulations. Details of all permissions are submitted in six monthly compliance reports on a regular basis. Find herewith details as ANNEXURE : 9.</p>
iii	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOX are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhopal and the SPCB/CPCB once in six months.	<p>Complied</p> <p>We have installed Four Ambient Air Quality monitoring stations in downwind and upwind directions.</p> <p>Data on ambient air quality and stack emission are regularly submitted to this Ministry once in six months and to the SPCB on a monthly basis.</p> <p>AAQ Monitoring data & photographs of Ambient Air Quality monitoring stations are enclosed herewith as ANNEXURE : 5.</p>

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iv	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	<p>Compiled.</p> <p>All process water is Treated in ETP and treated effluent is discharged to EICL, CETP after conforming to inlet norms of CETP for further treatment and ultimate discharge into Mahi estuary. We have installed Multiple Effect Evaporator instead of single stage evaporator for more effective treatment of effluent.</p> <p>Summary of treated industrial effluent characteristics for Apr-23 to Sep-23:</p> <table><tr><th>Parameters</th><th>Unit</th><th>PERMISSIBLE LIMIT</th><th>Min.</th><th>Max.</th></tr><tr><td>pH</td><td></td><td>5 to 9</td><td>6.36</td><td>8.52</td></tr><tr><td>Temp 'C</td><td>'C</td><td>45</td><td>29</td><td>31</td></tr><tr><td>TSS</td><td>mg/L</td><td>600</td><td>6</td><td>80</td></tr><tr><td>Oil & Grease</td><td>mg/L</td><td>20</td><td>BDL</td><td>BDL</td></tr><tr><td>Fluorides</td><td>mg/L</td><td>2</td><td>0.2</td><td>0.79</td></tr><tr><td>Sulphides</td><td>mg/L</td><td>2</td><td>0.2</td><td>1.1</td></tr><tr><td>Colour</td><td>pt/Co</td><td>-</td><td>30</td><td>80</td></tr><tr><td>Ammonical Nitrogen</td><td>mg/L</td><td>50</td><td>3.4</td><td>4.3</td></tr><tr><td>Free Ammonia</td><td>mg/L</td><td>5</td><td>1</td><td>1</td></tr><tr><td>Copper</td><td>mg/L</td><td>2</td><td>BDL</td><td>BDL</td></tr><tr><td>Zinc</td><td>mg/L</td><td>5</td><td>0.08</td><td>0.54</td></tr><tr><td>BOD (05-Days)</td><td>mg/L</td><td>500</td><td>54</td><td>130</td></tr><tr><td>COD</td><td>mg/L</td><td>2000</td><td>198</td><td>422</td></tr><tr><td>Arsenic (as As)</td><td>mg/L</td><td>0.2</td><td>BDL</td><td>BDL</td></tr><tr><td>Mercury (as Hg)</td><td>mg/L</td><td>0.001</td><td>BDL</td><td>BDL</td></tr><tr><td>Lead (as Pb)</td><td>mg/L</td><td>0.2</td><td>BDL</td><td>BDL</td></tr><tr><td>Cadmium (as Cd)</td><td>mg/L</td><td>2</td><td>0.04</td><td>0.17</td></tr><tr><td>Hexavalent Chromium</td><td>mg/L</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>Total Chromium (as Cr)</td><td>mg/L</td><td>2</td><td>BDL</td><td>BDL</td></tr><tr><td>Nickel</td><td>mg/L</td><td>5</td><td>0.11</td><td>0.33</td></tr><tr><td>Cyanide as CN</td><td>mg/L</td><td>0.2</td><td>BDL</td><td>BDL</td></tr><tr><td>Phenolic Compound</td><td>mg/L</td><td>5</td><td>BDL</td><td>BDL</td></tr></table> <p>Treated domestic effluent is recycled and reused for plantation purposes.</p> <p>Waste water disposal quantity and analysis data are enclosed as ANNEXURE : 4</p>	Parameters	Unit	PERMISSIBLE LIMIT	Min.	Max.	pH		5 to 9	6.36	8.52	Temp 'C	'C	45	29	31	TSS	mg/L	600	6	80	Oil & Grease	mg/L	20	BDL	BDL	Fluorides	mg/L	2	0.2	0.79	Sulphides	mg/L	2	0.2	1.1	Colour	pt/Co	-	30	80	Ammonical Nitrogen	mg/L	50	3.4	4.3	Free Ammonia	mg/L	5	1	1	Copper	mg/L	2	BDL	BDL	Zinc	mg/L	5	0.08	0.54	BOD (05-Days)	mg/L	500	54	130	COD	mg/L	2000	198	422	Arsenic (as As)	mg/L	0.2	BDL	BDL	Mercury (as Hg)	mg/L	0.001	BDL	BDL	Lead (as Pb)	mg/L	0.2	BDL	BDL	Cadmium (as Cd)	mg/L	2	0.04	0.17	Hexavalent Chromium	mg/L	1	BDL	BDL	Total Chromium (as Cr)	mg/L	2	BDL	BDL	Nickel	mg/L	5	0.11	0.33	Cyanide as CN	mg/L	0.2	BDL	BDL	Phenolic Compound	mg/L	5	BDL	BDL
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v	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels	<p>Complied.</p> <p>Noise level is monitored regularly in and around the plant area. Noise control measures like acoustic hood have already been provided to the DG sets & all flare blowers.</p>																																																																																																																			

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	should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	<div>Summary of ambient noise level for Apr-23 to Sep-23:</div> <table><tr><th>Duration</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>Day Time</td><td>dB(A)</td><td>75.0</td><td>59</td><td>74</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>70.0</td><td>53</td><td>67</td></tr></table> <div>Overall noise level in and around the plant area is within the limit. Noise level results are enclosed as ANNEXURE : 8.</div>	Duration	Unit	Norms	Min.	Max.	Day Time	dB(A)	75.0	59	74	Night Time	dB(A)	70.0	53	67
Duration	Unit	Norms	Min.	Max.													
Day Time	dB(A)	75.0	59	74													
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vi	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<div>Complied.</div> <div>Health check up of all employees is carried out at regular intervals.</div>															
vii	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	<div>Complied.</div> <div>Company has constructed a tank to collect rainwater and utilizes the same in cooling tower.</div> <div>Company has also constructed a check dam in Mujpur village for collection & storage of rainwater.</div>															
viii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	<div>Complied.</div> <div>Company has complied with the environmental protection measures and safeguards recommended in the EIA/EMP report.</div> <div>Company also undertakes various socio-economic development activities in the surrounding villages.<ul style="list-style-type: none">Supporting Government health centerRunning health center in Mujpur villageSkill development projectWomen empowerment programEnvironmental Sustainability</div> <div>Details of CSR activities are enclosed as ANNEXURE : 7</div>															
ix	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhopal. The funds so provided shall not be diverted for any other purpose.	<div>Complied</div> <div>Every year Adequate funds are allocated toward capital cost and recurring cost for environmental pollution control measures. The fund allocated for Environment management is not diverted to any other purpose.</div>															
x	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any,	<div>Complied</div> <div>Environment Clearance letters have been sent to all stakeholders.</div>															

Sr. No	Conditions	Compliance Status
	were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Company has also uploaded a clearance letter on the company website.
xi	<p>The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF at Bhopal. The respective Zonal Office of CPCB and the SPCB.</p> <p>The critical pollutant levels namely; PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>Complied</p> <p>The company has uploaded the status of compliance of the stipulated existing EC condition including results of monitored data on its website.</p> <p>Compliance report including results of monitoring data are being sent to Regional office MoEF, Regional office CPCB and State Pollution Board on a regular basis.</p> <p>Data w.r.t. AAQ monitoring, Stack monitoring & Hazardous waste stock and disposal are displayed near the main gate of the company in the public domain.</p>
xii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhopal / CPCB / SPCB shall monitor the stipulated conditions	<p>Complied</p> <p>The company submits six monthly compliance reports including results of monitoring data of Environmental Clearance to all the concerned regulatory authorities on a regular basis.</p>
xiii	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhopal by e-mail.	<p>Complied</p> <p>The environmental statement for financial year 2022-2023 has been submitted to the state pollution control board with letter No. GPL/EHS/GPCB ID 21999/ES-2022-23 dated 26.06.2023 and also uploaded on the company website. Environment Statement for 2022-2023 is enclosed as ANNEXURE : 10.</p>
xiv	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor@nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall	<p>Complied</p> <p>Advertisement of Environmental Clearance was published in English newspaper "THE TIMES OF INDIA" VADODARA edition dated 04.03.2014 & Gujarati newspaper "DIVYA BHASKAR" edition dated 04.03.2014.</p>

Sr. No	Conditions	Compliance Status
	be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhopal.	
xv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	The company had informed the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
11	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
13	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	<p>Complied</p> <p>Company fulfills all the applicable statutory requirements. Company has taken Authorization vide CC&A AWH-129630 valid up to 30/06/2028 for collection, storage and disposal of hazardous waste. Company has—taken PLI policy vide policy no L0222433 valid up to 31/12/2023 as per the Public Liability (Insurance) Act 1991. The same is enclosed herewith as ANNEXURE : 11.</p>



ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

For

APRIL 2023 TO SEPTEMBER 2023

By:

GULBRANDSEN PRIVATE LIMITED

(Formerly known as Gulbrandsen Chemicals Pvt. Ltd.)

On Coastal Highway, AT & PO : Mujpur

Tal : Padra, Dist. : Vadodara, Gujarat 391440

HALF YEARLY ENVIRONMENT CLEARANCE COMPLIANCE REPORT

E.NO.:J-11011/257/2008-IAII (I) dated 23.11.2010

FOR PERIOD FROM APRIL 2023 TO SEPTEMBER 2023

Sr. No	Conditions	Compliance Status																																																																																																																																																																											
2	<p>The Ministry of Environment and Forests has examined the application. It is noted that Organo Metallic Products/Other Synthetic Organic Chemicals Manufacturing Unit at Village Mujpur, Taluka: Padra, District Vadodara, Gujarat Project cost is Rs. 25.00 Crores. Total land area of the existing plant is 51500 m2 and additional area requirement for proposed expansion will be 1903 m2. Following products and by products will be manufactured:</p> <table><tr><th>S. N</th><th>Products</th><th>Existing (MTPA)</th><th>Proposed (MTPA)</th><th>Total (MTPA)</th></tr><tr><td>1</td><td>Organometallic Compounds</td><td>7800.84</td><td>14035.2</td><td>21836.04</td></tr><tr><td>2</td><td>Hot End Glass Coating Formulations</td><td>0</td><td>1824</td><td>1824</td></tr><tr><td>3</td><td>Cold End Glass Coating Formulations</td><td>0</td><td>300</td><td>300</td></tr><tr><td>4</td><td>Amyl Anthraquinone</td><td>0</td><td>960</td><td>960</td></tr><tr><td colspan="2">Total</td><td>7800.84</td><td>17119.2</td><td>24920.04</td></tr></table> <table><tr><th>S. N</th><th>Other Products</th><th>Existing (MTPA)</th><th>Proposed (MTPA)</th><th>Total (MTPA)</th></tr><tr><td>1</td><td>Anhydrous Aluminium Chloride</td><td>8400</td><td>3600</td><td>12000</td></tr><tr><td>2</td><td>Tin Tetra Chloride</td><td>5075</td><td>0</td><td>5075</td></tr><tr><td>3</td><td>Metal Chloride</td><td>0</td><td>6000</td><td>6000</td></tr><tr><td>4</td><td>Tin Oxide</td><td>0</td><td>912</td><td>912</td></tr><tr><td>5</td><td>Aluminium chloride (25%) (Alcl3)</td><td>3144</td><td>0</td><td>3144</td></tr><tr><td>6</td><td>Aluminium Chloride (30%) (Alcl3)</td><td>2340</td><td>6243</td><td>8583</td></tr><tr><td>7</td><td>Aluminium Sulfate Solution</td><td>103</td><td>1227</td><td>1330</td></tr><tr><td>8</td><td>30% HCL</td><td>0</td><td>253</td><td>253</td></tr><tr><td>9</td><td>Aluminium Bromide</td><td>0</td><td>2500</td><td>2500</td></tr><tr><td>10</td><td>Sodium Bromide</td><td>0</td><td>25</td><td>25</td></tr><tr><td>11</td><td>Sodium Bromate</td><td>0</td><td>7.5</td><td>7.5</td></tr><tr><td colspan="2">Total</td><td>19062</td><td>20767.5</td><td>39829.5</td></tr></table>	S. N	Products	Existing (MTPA)	Proposed (MTPA)	Total (MTPA)	1	Organometallic Compounds	7800.84	14035.2	21836.04	2	Hot End Glass Coating Formulations	0	1824	1824	3	Cold End Glass Coating Formulations	0	300	300	4	Amyl Anthraquinone	0	960	960	Total		7800.84	17119.2	24920.04	S. N	Other Products	Existing (MTPA)	Proposed (MTPA)	Total (MTPA)	1	Anhydrous Aluminium Chloride	8400	3600	12000	2	Tin Tetra Chloride	5075	0	5075	3	Metal Chloride	0	6000	6000	4	Tin Oxide	0	912	912	5	Aluminium chloride (25%) (Alcl3)	3144	0	3144	6	Aluminium Chloride (30%) (Alcl3)	2340	6243	8583	7	Aluminium Sulfate Solution	103	1227	1330	8	30% HCL	0	253	253	9	Aluminium Bromide	0	2500	2500	10	Sodium Bromide	0	25	25	11	Sodium Bromate	0	7.5	7.5	Total		19062	20767.5	39829.5	<p>Complied.</p> <p>Proposed 1903 m² area included in existing plant. Environment Clearance amendment for addition of new plots received on dated 27.03.2018. Now the total plot area is 104364 m². We have received CTE no. 92482 dated 15.05.2018 and CTO no. AW-104908 dated 24.12.2019 for increase in plot area for which we already received EC amendment as mentioned above.</p> <table><tr><th>S. N</th><th>Products</th><th>Proposed (MTPA)</th><th>Present status of proposed expansion</th></tr><tr><td>1</td><td>Organometallic Compounds</td><td>14035.2</td><td>11755</td></tr><tr><td>2</td><td>Hot End Glass Coating Formulations</td><td>1824</td><td>1824</td></tr><tr><td>3</td><td>Cold End Glass Coating Formulations</td><td>300</td><td>300</td></tr><tr><td>4</td><td>Amyl Anthraquinone</td><td>960</td><td>0</td></tr><tr><td colspan="2">Total</td><td>17119.2</td><td>13879</td></tr></table> <table><tr><th>S. 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N	Products	Proposed (MTPA)	Present status of proposed expansion	1	Organometallic Compounds	14035.2	11755	2	Hot End Glass Coating Formulations	1824	1824	3	Cold End Glass Coating Formulations	300	300	4	Amyl Anthraquinone	960	0	Total		17119.2	13879	S. N	Other Products	Proposed (MTPA)	Present status of proposed expansion	1	Anhydrous Aluminium Chloride	3600	0	2	Tin Tetra Chloride	0	0	3	Metal Chloride	6000	0	4	Tin Oxide	912		5	Aluminium chloride (25%) (Alcl3)	0	0	6	Aluminium Chloride (30%) (Alcl3)	6243	5130	7	Aluminium Sulfate Solution	1227	1227	8	30% HCL	253	0	9	Aluminium Bromide	2500	0	10	Sodium Bromide	25	0	11	Sodium Bromate	7.5	0	Total		20767.5	6357
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3	Cold End Glass Coating Formulations	300	300																																																																																																																																																																										
4	Amyl Anthraquinone	960	0																																																																																																																																																																										
Total		17119.2	13879																																																																																																																																																																										
S. N	Other Products	Proposed (MTPA)	Present status of proposed expansion																																																																																																																																																																										
1	Anhydrous Aluminium Chloride	3600	0																																																																																																																																																																										
2	Tin Tetra Chloride	0	0																																																																																																																																																																										
3	Metal Chloride	6000	0																																																																																																																																																																										
4	Tin Oxide	912																																																																																																																																																																											
5	Aluminium chloride (25%) (Alcl3)	0	0																																																																																																																																																																										
6	Aluminium Chloride (30%) (Alcl3)	6243	5130																																																																																																																																																																										
7	Aluminium Sulfate Solution	1227	1227																																																																																																																																																																										
8	30% HCL	253	0																																																																																																																																																																										
9	Aluminium Bromide	2500	0																																																																																																																																																																										
10	Sodium Bromide	25	0																																																																																																																																																																										
11	Sodium Bromate	7.5	0																																																																																																																																																																										
Total		20767.5	6357																																																																																																																																																																										

Sr. No	Conditions	Compliance Status
3	<p>Venturi caustic scrubber packed column type scrubber will be provided to anhydrous aluminum chloride (Anhydrous AlCl_3) and Tin tetra chloride (TTC) plant to collect un-reacted fumes of anhydrous aluminium chloride, TTC and Chlorine gas.</p> <p>Ammonical stripping system for removal of dissolved Ammonical Nitrogen and packed column with caustic spray system for removal of acidic fumes will be provided to Organiometallic production plant.</p> <p>A flare system will be provided to control accidental release of gaseous system, in which flammable gases will be routed through oil quenching system. Stacks of adequate height will be provided to the proposed units.</p> <p>Total ground water requirement will be increased from 121 m^3/day (existing) to 358 m^3/day after expansion. 188.902 KLD after expansion. Effluent treatment plant (ETP) is installed for treatment of effluent and will be further augmented to cater the treatment of additional effluent after expansion. Treated effluent will be disposed off into CETP, Umraya through tankers.</p> <p>Waste /Residue containing oil, spent solvent and used oil will be sold to the recycler, Distillation residue and oil contaminated waste will be incinerated. Chemical sludge from wastewater treatment/ETP, Sludge from scrubber, spill control powder and waste refractory will be disposed by land filling.</p>	<p>Complied</p> <p>Venturi Caustic scrubber packed column scrubber has been provided to the Anhydrous Aluminium Chloride and Tin Tetra Chloride plant. Since September 2012, we have stopped manufacturing of Anhydrous Aluminium Chloride and therefore now only Tin Tetra Chloride plant is connected with this scrubber.</p> <p>As an improvement step we have eliminated NH_3 washing in Di Butyl Tin Oxide (DBTO) process and therefore NH_3 stripping is not required. However, Packed column with caustic spray system is provided for removal of acidic fumes for organometallic production.</p> <p>A flare has been provided in Alkyl for burning of vent gases during normal & continuous operation as well as during abnormal & emergency situation. Flammable gases are routed through quenching system. Stacks of adequate height have been provided.</p> <p>Total water consumption is 204.3 m^3/day (average) (<358 m^3/day). Water consumption details are enclosed as ANNEXURE : 3</p> <p>Total waste water generation is 48.2 m^3/day (average) (< 188.902 m^3/day).</p> <p>The treated domestic effluent from STP is used for gardening purposes inside plant premises.</p> <p>Details of wastewater are enclosed herewith as ANNEXURE : 4</p> <p>Company has taken additional effluent disposal membership with CETP, Umraya.</p> <p>Used oil is sent to the registered recycler M/s Suraj Barrel which is a CPCB authorized recycler.</p> <ul style="list-style-type: none"> - Company has taken membership of following landfill sites for disposal of landfill waste: - NECL, Nandesari - BEIL, Ankleshwar - DIPL, Kutch -BEIL, Dahej -SAFE, Jambusar - Company has taken membership of following incineration & Co Processing site: - RSPL, Panoli

Sr. No	Conditions	Compliance Status
		- BEIL, Ankleshwar - SEPPL, Kutch -Banas, Dahej
4	The public hearing of the project was held on 26 th May, 2009.	Noted
5	The synthetic organic chemical (bulk drugs and intermediates) manufacturing units located out side the notified industrial area are listed at serial no 5(f) of schedule of EIA Notification , 2006 under “A” category and apprised at central level.	Noted
6	The proposal was considered by the Expert Appraisal Committee (Industry-2) in 1st, 7th and 14th meeting held during 24th -25th July 2009, 15th -16th January, 2010 and 16th 17th September 2010, respectively. The Committee recommended the proposal for environment clearance.	Noted
7	Based on the information submitted by the project proponent, the Ministry of Environment and Forest here by accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following specific and General Conditions.	Noted & Complied

Sr. No	Conditions	Compliance Status																																																																											
A	SPECIFIC CONDITIONS																																																																												
i	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	<p>Complied</p> <p>As per prevailing wind directions, AAQM is carried out on regular basis at four locations in the plant. The emission level of all parameters is within the prescribed standard as per National Ambient Air Quality Standards. Monitoring result enclosed herewith as ANNEXURE: 5 which shows that RSPM is within limit.</p> <p>In the plant air pollution generating sources are connected with pollution control systems like scrubber, Activated carbon bed, etc. Pollution Control systems are attached with a stack of adequate height. Monitoring results enclosed herewith as ANNEXURE: 6 which shows that all the parameters are within permissible limit.</p> <p>All pollution control systems are regularly monitored to check their efficiency and regular maintenance is carried out.</p>																																																																											
ii	Ambient air quality data shall be collected as per NAAQS standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 th November, 2009. On-line monitoring of Cl ₂ shall be ensured.	<p>Complied</p> <p>Ambient Air Quality Monitoring is carried out at four locations in the plant premises on a regular basis.</p> <p>Summary of AAQM data for Apr-23 to Sep-23:</p> <table><tr><th>PARAMETER</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>Particulate Matter (PM10)</td><td>µg/ m3</td><td>100</td><td>44</td><td>87</td></tr><tr><td>Particulate Matter (PM2.5)</td><td>µg/ m3</td><td>60</td><td>18</td><td>34</td></tr><tr><td>Oxides of Sulphur as SO2</td><td>µg/ m3</td><td>80</td><td>10.8</td><td>17.5</td></tr><tr><td>Oxides of Nitrogen as NO2</td><td>µg/ m3</td><td>80</td><td>13.6</td><td>24.7</td></tr><tr><td>Hydrogen Chloride (HCl)</td><td>µg/ m3</td><td>200</td><td>BDL</td><td>BDL</td></tr><tr><td>Chlorine (Cl2)</td><td>µg/ m3</td><td>100</td><td>BDL</td><td>BDL</td></tr><tr><td>Ozone</td><td>µg/ m3</td><td>100</td><td>BDL</td><td>BDL</td></tr><tr><td>Lead</td><td>µg/ m3</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>CO</td><td>µg/ m3</td><td>2</td><td>0.11</td><td>0.27</td></tr><tr><td>Ammonia</td><td>µg/ m3</td><td>400</td><td>BDL</td><td>BDL</td></tr><tr><td>Benzene</td><td>µg/ m3</td><td>5</td><td>BDL</td><td>BDL</td></tr><tr><td>Benzo(a)Pyrene</td><td>ng/ m3</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>Arsenic</td><td>ng/ m3</td><td>6</td><td>BDL</td><td>BDL</td></tr><tr><td>Nickel</td><td>ng/ m3</td><td>20</td><td>BDL</td><td>BDL</td></tr></table>	PARAMETER	Unit	Norms	Min.	Max.	Particulate Matter (PM10)	µg/ m3	100	44	87	Particulate Matter (PM2.5)	µg/ m3	60	18	34	Oxides of Sulphur as SO2	µg/ m3	80	10.8	17.5	Oxides of Nitrogen as NO2	µg/ m3	80	13.6	24.7	Hydrogen Chloride (HCl)	µg/ m3	200	BDL	BDL	Chlorine (Cl2)	µg/ m3	100	BDL	BDL	Ozone	µg/ m3	100	BDL	BDL	Lead	µg/ m3	1	BDL	BDL	CO	µg/ m3	2	0.11	0.27	Ammonia	µg/ m3	400	BDL	BDL	Benzene	µg/ m3	5	BDL	BDL	Benzo(a)Pyrene	ng/ m3	1	BDL	BDL	Arsenic	ng/ m3	6	BDL	BDL	Nickel	ng/ m3	20	BDL	BDL
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Nickel	ng/ m3	20	BDL	BDL																																																																									

Sr. No	Conditions	Compliance Status
		<p>The emission level of all parameters is within the prescribed standard as per National Ambient Air Quality Standards. Monthly AAQ Monitoring data, Monitoring Reports, NABL certificate of laboratory & photographs of Ambient Air Quality monitoring station are enclosed herewith as ANNEXURE : 5</p> <p>Company has installed online AAQM stations for Cl₂ monitoring in plant premises.</p>
iii	<p>Venturi caustic scrubber packed column type scrubber shall be provided to anhydrous aluminum chloride and Tin tetra chloride plant to collect un-reacted fumes of anhydrous aluminum chloride, TTC and Chlorine gas.</p> <p>Ammonical stripping system for removal of dissolved Ammonical Nitrogen and packed column with caustic spray system for removal of acidic fumes shall be provided to Organometallic production plant. Caustic scrubber packed column type scrubber shall be provided to collect unreacted fumes.</p>	<p>Complied</p> <p>Venturi Caustic scrubber packed column scrubber has been provided to the Anhydrous Aluminium Chloride and Tin Tetra Chloride plant. Since September 2012, we have stopped manufacturing of Anhydrous Aluminium Chloride and therefore now only Tin Tetra Chloride plant is connected with this scrubber.</p> <p>As an improvement step we have eliminated NH₃ washing in Di Butyl Tin Oxide (DBTO) process and therefore NH₃ stripping is not required. However Packed column with caustic spray system is provided for removal of acidic fumes for organometallic production.</p>
	<p>A dedicated emergency Chlorine scrubber along with proper suction arrangement shall be installed separately to handle emergency situation in case of leakage from Chlorine cylinder.</p>	<p>An emergency chlorine scrubber along with proper suction arrangement has been provided to handle emergency situation in case of leakage from chlorine cylinder.</p>
iv	<p>Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. All the proposed products shall be handled in closed circuit. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits prescribed by the GPCB. A flare system shall be provided to control accidental release of gaseous system and all the flammable gases shall be routed through quenching system.</p>	<p>Complied</p> <p>Closed handling system is provided for all chemicals. Proper care is taken to avoid fugitive emission. Hydrocarbon sensors are installed at strategic locations to know the real time fugitive emissions in the plant.</p> <p>These sensors are connected with PLC and we can check concentration of gases directly from PLC at any time. If at any point concentration of any gas is more than TLV, an audio alarm is generated and precautionary measures to be taken on an immediate basis. These sensors are in operation on a continuous basis.</p> <p>Raw materials and Finished products are stored in pucca warehouse to control dust & fugitive emission during loading/unloading and storage.</p> <p>A flare has been provided in Alkyl for burning of vent gases during normal & continuous operation as well as during abnormal & emergency situations.</p>

Sr. No	Conditions	Compliance Status															
		Flammable gases are routed through a quenching system. In addition, Work area environmental monitoring is being carried out through third party consultants on a regular basis to monitor fugitive emission.															
v	For further control of fugitive emission, following steps shall be followed : a. Closed handling system shall be provided for chemicals. b. Reflux condenser shall be provided over reactor. c. System of leak detection and repair of pump/pipeline based on preventive maintenance. d. The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water. e. Cathodic protection shall be provided to the underground solvent storage tanks.	Complied Closed handling system is provided for all chemicals. Complied Distillation columns are connected with reflux condensers. Complied Mechanical seal type pumps are installed to avoid leakage and fugitive emission. Preventive maintenance is done as per schedule. Most of the solvent handling pumps are magnetic drive pumps. Complied Acid storage tank vents are connected with scrubber system. Complied Cathodic protection has been provided for underground solvent storage tanks.															
vi	Stacks of adequate height shall be provided to the boiler, thermic fluid heaters, DG sets, process vents and flare stack respectively as per CPCB/GPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution	Complied All existing stack height is as per CPCB/GPCB standards. Acoustic enclosure has also been provided to the DG sets to control the noise level. Summary of ambient noise level for Apr-23 to Sep-23: <table><tr><th>Duration</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>Day Time</td><td>dB(A)</td><td>75.0</td><td>59</td><td>74</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>70.0</td><td>53</td><td>67</td></tr></table> Overall noise level in and around the plant area is within the limit. Noise level results are enclosed as ANNEXURE : 8.	Duration	Unit	Norms	Min.	Max.	Day Time	dB(A)	75.0	59	74	Night Time	dB(A)	70.0	53	67
Duration	Unit	Norms	Min.	Max.													
Day Time	dB(A)	75.0	59	74													
Night Time	dB(A)	70.0	53	67													
vii	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the	Complied The company has uploaded the status of compliance of the stipulated existing EC conditions on its website.															

Sr. No	Conditions	Compliance Status
	respective Zonal office of CPCB and the State Pollution Control Board. The levels of SPM, RSPM, SO ₂ , NO _x , HCl and VOC in ambient air and emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.	<p>Compliance report including results of monitoring data are being sent to Regional office MoEFCC, Regional office CPCB and State Pollution Board on a regular basis.</p> <p>Data w.r.t. AAQ monitoring, Stack monitoring & Hazardous waste stock and disposal are displayed near the main gate of the company in the public domain.</p>
viii	<p>Solvent management shall be as follows :</p> <p>a. Reactor shall be connected to chilled brine condenser system</p> <p>b. Reactor and solvent handling pumps shall have mechanical seals to prevent leakages.</p> <p>c. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery</p> <p>d. Solvents shall be stored in a separate space specified with all safety measures.</p> <p>e. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.</p> <p>f. Entire plant shall be flame proof. The solvent storage tanks shall be provided with a breather valve to prevent losses.</p>	<p>Complied Reactors are connected with a chilled water condenser system as per requirement.</p> <p>Complied Mechanical seal has been provided to the reactor and solvent handling pump to prevent leakage. Most of the solvent handling pumps are magnetic drive pumps.</p> <p>Complied The condensers are provided with sufficient Heat Transfer Area (HTA) and residence time and >95% recovery is achieved.</p> <p>Complied Solvents are stored in u/g storage tanks. These tanks are approved by PESO.</p> <p>Complied Proper earthing has been provided at all electrical equipment wherever solvent handling is done. Also solvent carrying piping is connected with earthing.</p> <p>Complied Flame proof fittings have been installed as per Hazardous Area Classification in the plant.</p>
ix	<p>Total ground water requirement shall not exceed 358 KLD after expansion and prior permission for the withdrawal of ground water shall be obtained from CGWA/SGWB.</p> <p>Total effluent generation shall not increase 188.902 KLD after expansion and properly treated in the ETP and shall meet the CETP inlet norms specified by the Gujarat Pollution Control Board. Low volume & high COD/TDS wastewater shall be concentrated in multi-effect evaporator (MEE) followed by incinerator to achieve "Zero discharge". However high volume & low COD/TDS effluent shall be treated in</p>	<p>Complied.</p> <p>Company has obtained NOC from the Central Ground Water Authority for extraction of ground water for 95 m³/day. NOC No: CGWA/NOC/IND/REN/3/2023/7895 dated 12/06/2023 valid up to 11/06/2026.</p> <p>Total industrial waste water generation is 48.2 m³/day (≤ 52.05 m³/day as per latest consent) & Domestic waste water generation is 11.74 m³/day (≤ 12.17 m³/day as per latest consent)</p> <p>Treated effluent is discharged to EICL CETP after conforming to inlet norms of CETP. We have</p>

Sr. No	Conditions	Compliance Status																																																																																																																			
	ETP and discharged to CETP after confirming to the standards prescribed for inlet norms for the CETP. Treated effluent shall be disposed off into CETP, Umraya only after obtaining prior permission from the GPCB. Membership to M/s Enviro-Infrastructure Co. Ltd. for the disposal of treated effluent shall be obtained and a copy submitted to the Ministry's Regional Office at Bhopal. Domestic sewage shall be treated in membrane bioreactor based sewage treatment plant (STP).	<p>installed Multiple Effect Evaporator instead of single stage evaporator for more effective treatment of effluent.</p> <p>Summary of treated industrial effluent characteristics for Apr-23 to Sep-23:</p> <table><tr><th>Parameters</th><th>Unit</th><th>PERMISSIBLE LIMIT</th><th>Min.</th><th>Max.</th></tr><tr><td>pH</td><td>-</td><td>5 to 9</td><td>6.36</td><td>8.52</td></tr><tr><td>Temp °C</td><td>°C</td><td>45</td><td>29</td><td>31</td></tr><tr><td>TSS</td><td>mg/L</td><td>600</td><td>6</td><td>80</td></tr><tr><td>Oil & Grease</td><td>mg/L</td><td>20</td><td>BDL</td><td>BDL</td></tr><tr><td>Fluorides</td><td>mg/L</td><td>2</td><td>0.2</td><td>0.79</td></tr><tr><td>Sulphides</td><td>mg/L</td><td>2</td><td>0.2</td><td>1.1</td></tr><tr><td>Colour</td><td>pt/Co</td><td>-</td><td>30</td><td>80</td></tr><tr><td>Ammonical Nitrogen</td><td>mg/L</td><td>50</td><td>3.4</td><td>4.3</td></tr><tr><td>Free Ammonia</td><td>mg/L</td><td>5</td><td>1</td><td>1</td></tr><tr><td>Copper</td><td>mg/L</td><td>2</td><td>BDL</td><td>BDL</td></tr><tr><td>Zinc</td><td>mg/L</td><td>5</td><td>0.08</td><td>0.54</td></tr><tr><td>BOD (05-Days)</td><td>mg/L</td><td>500</td><td>54</td><td>130</td></tr><tr><td>COD</td><td>mg/L</td><td>2000</td><td>198</td><td>422</td></tr><tr><td>Arsenic (as As)</td><td>mg/L</td><td>0.2</td><td>BDL</td><td>BDL</td></tr><tr><td>Mercury (as Hg)</td><td>mg/L</td><td>0.001</td><td>BDL</td><td>BDL</td></tr><tr><td>Lead (as Pb)</td><td>mg/L</td><td>0.2</td><td>BDL</td><td>BDL</td></tr><tr><td>Cadmium (as Cd)</td><td>mg/L</td><td>2</td><td>0.04</td><td>0.17</td></tr><tr><td>Hexavalent Chromium</td><td>mg/L</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>Total Chromium (as Cr)</td><td>mg/L</td><td>2</td><td>BDL</td><td>BDL</td></tr><tr><td>Nickel</td><td>mg/L</td><td>5</td><td>0.11</td><td>0.33</td></tr><tr><td>Cyanide as CN</td><td>mg/L</td><td>0.2</td><td>BDL</td><td>BDL</td></tr><tr><td>Phenolic Compound</td><td>mg/L</td><td>5</td><td>BDL</td><td>BDL</td></tr></table> <p>Company has also taken permission from EICL for additional effluent discharge.</p> <p>Domestic sewage is being treated in MBBR based Sewage Treatment Plant.</p> <p>Details of waste water analysis results are enclosed herewith as ANNEXURE :4</p>	Parameters	Unit	PERMISSIBLE LIMIT	Min.	Max.	pH	-	5 to 9	6.36	8.52	Temp °C	°C	45	29	31	TSS	mg/L	600	6	80	Oil & Grease	mg/L	20	BDL	BDL	Fluorides	mg/L	2	0.2	0.79	Sulphides	mg/L	2	0.2	1.1	Colour	pt/Co	-	30	80	Ammonical Nitrogen	mg/L	50	3.4	4.3	Free Ammonia	mg/L	5	1	1	Copper	mg/L	2	BDL	BDL	Zinc	mg/L	5	0.08	0.54	BOD (05-Days)	mg/L	500	54	130	COD	mg/L	2000	198	422	Arsenic (as As)	mg/L	0.2	BDL	BDL	Mercury (as Hg)	mg/L	0.001	BDL	BDL	Lead (as Pb)	mg/L	0.2	BDL	BDL	Cadmium (as Cd)	mg/L	2	0.04	0.17	Hexavalent Chromium	mg/L	1	BDL	BDL	Total Chromium (as Cr)	mg/L	2	BDL	BDL	Nickel	mg/L	5	0.11	0.33	Cyanide as CN	mg/L	0.2	BDL	BDL	Phenolic Compound	mg/L	5	BDL	BDL
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Phenolic Compound	mg/L	5	BDL	BDL																																																																																																																	

Sr. No	Conditions	Compliance Status
x	Distillation residue and oil contaminated waste shall be incinerated. Chemical sludge from wastewater treatment/ETP, sludge from scrubber, spill control powder and waste refractory shall be disposed by land filling. The process product mix shall be reused in process. Membership for the disposal of solid/hazardous waste shall be obtained from M/s Nandesari Environment Control Ltd. and a copy submitted to the Ministry's Regional Office at Bhopal. Waste/residue containing oil, spent solvent and used oil shall be sold to the authorized recyclers only.	<p>Complied</p> <ul style="list-style-type: none"> - Used oil is sent to the registered recycler M/s Suraj Barrel which is CPCB authorised recycler. - Company has taken membership of following landfill sites for disposal of landfill waste: <ul style="list-style-type: none"> - NECL, Nandesari - BEIL, Dahej - SAFE, Bharuch - Company has taken membership of following incineration & Co Processing site: <ul style="list-style-type: none"> - RSPL, Panoli - BEIL, Ankleshwar - SEPPL, Kutch - Company has also taken membership of NECL for disposal of Incineration waste.
xi	High calorific organic residues shall be sent to cement industries for burning in the kiln or disposed off to nearby TSDF site	<p>Complied</p> <p>Company has taken membership of M/s. Recycling Solutions Pvt. Ltd., Panoli which disposes off waste to cement industries.</p>
xii	The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008 as amended time to time for management of hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company shall undertake measures for fire fighting facilities in case of emergency.	<p>Complied</p> <p>Company has taken Authorization vide CC&A CC&A AWH-129630 valid up to 30/06/2028 for collection, storage and disposal of hazardous waste.</p> <p>Adequate fire fighting systems like fire buckets, fire extinguishers, etc. provided near Hazardous waste storage areas.</p>
xiii	The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the MVA, 1989.	<p>Complied</p> <p>Company strictly complies with all rules and guidelines under MSIHC 1989 as amended till date.</p> <p>Transportation of all hazardous chemicals is being carried out as per the MVA 1989 as amended till date .</p>
xiv	Hazardous chemicals shall be stored in tanks, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be done by pumps.	<p>Complied</p> <p>Necessary precautions are taken to handle hazardous chemicals and solvents in a safe manner.</p>

Sr. No	Conditions	Compliance Status
xv	During transfer of materials, spillages shall be avoided and gulland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.	<p>Complied</p> <p>Transfer of material is carried out under close supervision. LI, LT, etc. provided to avoid any spillage/overflow.</p> <p>Storage tanks have secondary containment/dyke facilities so that there will be no chance of leakage in the surrounding area.</p>
xvi	A written commitment regarding safe handling of Cl ₂ shall be obtained, if transportation of Cl ₂ from supplier to project premise is done by the supplier. Risk assessment due to handling of Cl ₂ storage and usage shall be carried out and accordingly mitigation measures shall be adopted.	<p>Complied.</p> <p>Supplier is responsible for safe transportation of Cl₂ from supplier end to project premises.</p> <p>Risk Assessment for Cl₂ storage & handling has been carried out as a part of Environmental Impact Assessment study and all mitigation measures have been adopted.</p>
xvii	<p>The company shall undertake following waste minimization measures:-</p> <p>a. Metering and control of quantities of active ingredients to minimize waste.</p> <p>b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</p> <p>c. Use of automated filling to minimize spillage.</p> <p>d. Use of close feed system into batch reactors.</p> <p>e. Venting equipment through vapour recovery system.</p> <p>f. Use of high pressure hoses for equipment cleaning to reduce waste water generation.</p>	<p>Complied</p> <p>Started vacuum pump seal water recirculation and increased condensate recovery in plant thereby reducing effluent generation quantity and increasing water conservation.</p> <p>Optimised filtration through filter-aid and reduced the purge off frequency of TnBal product.</p> <p>Company has adopted automated filling in place of manual filling to minimise spillages.</p> <p>Close feed system is provided in batch reactors.</p> <p>Recovery system is provided in all venting equipment.</p> <p>Company is utilising high pressure hoses for equipment cleaning as & when required.</p>
xviii	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the OISD 117 norms.	<p>Complied</p> <p>Flameproof equipment installed in all the flammable areas as per Hazardous Area Classification. LEL detectors installed at flammable chemicals handling area.</p> <p>Adequate fire fighting system like fire hydrant system, fire trailer pump, fire extinguishers, SCBA set, water sprinkler, etc. provided.</p>
xix	Training shall be imparted to all employees on safety and health aspects of chemical handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular	<p>Complied</p> <p>Regular training is provided to all employees on safety & health aspects.</p>

Sr. No	Conditions	Compliance Status
	basis. Training to all employees on handling of chemicals shall be imparted. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Pre-employment & periodic medical examinations for all employees are undertaken on a regular basis and records are maintained. Occupational health check up of all workers is carried out on a regular basis.
xx	Green belt shall be developed in 33 % of the plant area. Selection of plant species shall be as per the CPCB guidelines.	Complied Green belt is developed as per CPCB guidelines.
xxi	The company shall comply with the recommendations made in the EIA/EMP/Risk assessment report. Risk assessment shall be included in the safety Manual.	Complied Company has taken all measures to comply with the recommendations made in the EIA/EMP/Risk Assessment report.
xxii	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	Contract persons were from nearby villages; so arrangement of housing facilities for them was not required at our site.
xxiii	All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 26 th May, 2009 shall be satisfactorily implemented.	Complied

Sr.No	Conditions	Compliance Status																																																																											
B .	GENERAL CONDITIONS:																																																																												
i	The project authorities shall strictly adhere to the stipulations made by the Gujarat Pollution Control Board.	Complied Company follows all stipulations made by Gujarat Pollution Control Board.																																																																											
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted & Complied Total approved quantity for expansion in EC was 37887 MTPA out of which Gulbrandsen has already received CTE and CC&A for 20236 MTPA vide CTE order No. 43965 dtd 03.11.2011 and CC&A order No. AWH 46164 dt 27.03.2012. Gulbrandsen is yet to receive CTE for the remaining 17651 MTPA. Company has submitted CTE application for 5568 MTPA production out of remaining 17651 MTPA vide application No. 108775 dated 31.05.2016 but as framework of Padra policy is under preparation, GPCB has not yet approved our CTE application.																																																																											
iii	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Complied Company has installed four Ambient Air Quality monitoring stations in downwind and upwind directions. Summary of AAQM data for Apr-23 to Sep-23: <table><tr><th>PARAMETER</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>Particulate Matter (PM10)</td><td>µg/m3</td><td>100</td><td>44</td><td>87</td></tr><tr><td>Particulate Matter (PM2.5)</td><td>µg/m3</td><td>60</td><td>18</td><td>34</td></tr><tr><td>Oxides of Sulphur as SO2</td><td>µg/m3</td><td>80</td><td>10.8</td><td>17.5</td></tr><tr><td>Oxides of Nitrogen as NO2</td><td>µg/m3</td><td>80</td><td>13.6</td><td>24.7</td></tr><tr><td>Hydrogen Chloride (HCl)</td><td>µg/m3</td><td>200</td><td>BDL</td><td>BDL</td></tr><tr><td>Chlorine (Cl2)</td><td>µg/m3</td><td>100</td><td>BDL</td><td>BDL</td></tr><tr><td>Ozone</td><td>µg/m3</td><td>100</td><td>BDL</td><td>BDL</td></tr><tr><td>Lead</td><td>µg/m3</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>CO</td><td>µg/m3</td><td>2</td><td>0.11</td><td>0.27</td></tr><tr><td>Ammonia</td><td>µg/m3</td><td>400</td><td>BDL</td><td>BDL</td></tr><tr><td>Benzene</td><td>µg/m3</td><td>5</td><td>BDL</td><td>BDL</td></tr><tr><td>Benzo(a)Pyrene</td><td>ng/m3</td><td>1</td><td>BDL</td><td>BDL</td></tr><tr><td>Arsenic</td><td>ng/m3</td><td>6</td><td>BDL</td><td>BDL</td></tr><tr><td>Nickel</td><td>ng/m3</td><td>20</td><td>BDL</td><td>BDL</td></tr></table> Monthly AAQ Monitoring data, Monitoring Reports, NABL certificate of laboratory & photographs of	PARAMETER	Unit	Norms	Min.	Max.	Particulate Matter (PM10)	µg/m3	100	44	87	Particulate Matter (PM2.5)	µg/m3	60	18	34	Oxides of Sulphur as SO2	µg/m3	80	10.8	17.5	Oxides of Nitrogen as NO2	µg/m3	80	13.6	24.7	Hydrogen Chloride (HCl)	µg/m3	200	BDL	BDL	Chlorine (Cl2)	µg/m3	100	BDL	BDL	Ozone	µg/m3	100	BDL	BDL	Lead	µg/m3	1	BDL	BDL	CO	µg/m3	2	0.11	0.27	Ammonia	µg/m3	400	BDL	BDL	Benzene	µg/m3	5	BDL	BDL	Benzo(a)Pyrene	ng/m3	1	BDL	BDL	Arsenic	ng/m3	6	BDL	BDL	Nickel	ng/m3	20	BDL	BDL
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Sr.No	Conditions	Compliance Status															
		Ambient Air Quality monitoring station are enclosed herewith as ANNEXURE : 5.															
iv	The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. On all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	<p>Noise level is monitored regularly in and around the plant area.</p> <p>Summary of ambient noise level for Apr-23 to Sep-23:</p> <table><tr><th>Duration</th><th>Unit</th><th>Norms</th><th>Min.</th><th>Max.</th></tr><tr><td>Day Time</td><td>dB(A)</td><td>75.0</td><td>59</td><td>74</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>70.0</td><td>53</td><td>67</td></tr></table> <p>Overall noise level in and around the plant area is within the limit. Noise level results are enclosed as ANNEXURE : 8.</p>	Duration	Unit	Norms	Min.	Max.	Day Time	dB(A)	75.0	59	74	Night Time	dB(A)	70.0	53	67
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v	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	<p>Complied</p> <p>Company has constructed a tank to collect rainwater and utilises the same in cooling towers.</p> <p>Company has also constructed a check dam in Mujpur village for collection & storage of rainwater.</p>															
vi	Usage of Personnel Protection Equipment (PPEs) by all employees/workers shall be ensured.	<p>Complied</p> <p>Use of PPE is mandatory in the plant premises. No person is allowed inside the plant area without necessary PPE. Company has implemented Life Saving Rules.</p>															
vii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<p>Complied.</p> <p>Health check up of all employees is carried out at regular intervals and records are maintained.</p>															
viii	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	<p>Complied.</p> <p>Company has taken necessary action for compliance of recommendations proposed in EIA/EMP.</p>															
ix	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	<p>Complied.</p> <p>Company undertakes various socio-economic development activities in the surrounding villages.</p> <ul style="list-style-type: none">● Supporting Government health center● Running health center in Mujpur village● Skill development project● Women empowerment program● Environmental Sustainability <p>Details of CSR activities are given in ANNEXURE : 7.</p>															

Sr.No	Conditions	Compliance Status
x	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Complied. The company takes necessary measures for overall improvement of the environment.
xi	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied. A separate Environment, Health & Safety Management Cell has already been set up. A full fledged in-house laboratory facility is available for environmental management & monitoring functions.
xii	The company shall earmark adequate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Complied Every year Adequate funds are allocated toward capital cost and recurring cost for environmental pollution control measures. The fund allocated for Environment management is not diverted to any other purpose.
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.	Complied Environment Clearance letters have been sent to all stakeholders.
xiv	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Gujarat Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	Complied The company submits six monthly compliance reports of Environmental Clearance including results of monitoring data to all the concerned regulatory authorities on a regular basis.
xv	The environmental statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance	Complied. The environmental statement for financial year 2022-2023 has been submitted to the state pollution control board vide letter No. GPL/EHS/GPCB ID 21999/ES-2022-23 dated 26.06.2023 and also uploaded on the company website. Environment Statement for 2022-2023 is enclosed as ANNEXURE : 10 .

Sr.No	Conditions	Compliance Status
	conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	
xvi	<p>The Project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.</p>	<p>Complied</p> <p>Advertisement of Environmental Clearance was published in English newspaper "THE TIMES OF INDIA" VADODARA edition dated 01.12.2010 & Gujarati newspaper "GUJARAT SAMACHAR" edition dated 30.11.2010.</p> <div data-bbox="887 600 1396 1077" data-label="Image"> </div> <div data-bbox="887 1167 1396 1644" data-label="Image"> </div>
xvii	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	The company had informed the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
8.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted

Sr.No	Conditions	Compliance Status
9.0	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted
10.0	Any appeal against this environment clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	Noted
11.0	The above conditions will enforce, 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 and Handling) Rules, 1989/2003/2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	<p>Complied</p> <p>Company fulfils all the applicable statutory requirements. Company has taken Authorization vide CC&A AWH-129630 valid up to 30/06/2028 for collection, storage and disposal of hazardous waste. Company has—taken PLI policy vide policy no L0222433 valid up to 31/12/2023 as per the Public Liability (Insurance) Act, 1991. The same is enclosed herewith as ANNEXURE : 11.</p>