

Ref.: MFCL (Phase I)/EHS/Env/2025-26/01

The IGF& Incharge  
Ministry of Environment, Forests and Climate Change  
Integrated Regional Office, Kolkata  
1 B-198, Bidhan Nagar  
Sector III, Kolkata -700106

30<sup>th</sup> May, 2025

**Subject: Submission of Half-Yearly Environment Clearance (EC) Compliance Report for October 2024 to March 2025.**

**Reference: MoEF&CC File No. J-11011/440/2009-IA II (I) dated 22<sup>nd</sup> April 2010 and subsequent amendments dated 19<sup>th</sup> December 2013, 15<sup>th</sup> May 2015 & 23<sup>rd</sup> February 2018.**

Dear Sir,

This is with reference to the Environmental Clearances issued to us under the above mentioned file number J-11011/440/2009-IAII(I) and subsequent amendments dated 19<sup>th</sup> December 2013, 15<sup>th</sup> May 2015 & 23<sup>rd</sup> February 2018, please find enclosed herewith the half-yearly Compliance report along with relevant annexures for the period of **October 2024 to March 2025**.

We trust that the information submitted is in order and kindly request you to take the same on record.

Thanking you,

Yours faithfully,



**Mahesh Debnath**  
(DGM - EHS)



Enclosure: As above

- Copy to:**
1. Member Secretary, West Bengal Pollution Control Board, 10A, Broadway Rd, LA Block, Sector 3, Bidhannagar, Kolkata, West Bengal-700106.
  2. Zonal Officer, Zonal Office Kolkata, Central Pollution Control Board, Kasba New Market, Sector E, East Kolkata Township, Kolkata, West Bengal - 700107
  3. Regional Officer, West Bengal Pollution Control Board, Durgapur Regional Office, Shahid Khudiram Sarani, City Center, Durgapur, West Bengal - 713216.

**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAll (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

S.NO	CONDITIONS	COMPLIANCE STATUS																																
SPECIFIC CONDITIONS																																		
(i)	The company shall undertake measures for water conservation. The specific water consumption shall not exceed 8 m <sup>3</sup> /tonne of urea produced. The wastewater generated from all sources after treatment and recycled back in the process and use for green belt development to maintain zero discharges condition. The treated effluent shall conform to the prescribed standards. The process water condensate shall be recycled as boiler feed water. The process condensate from the urea and ammonia plant after stripping shall be recycled.	<p>We have implemented multiple water conservation measures, including recycling process water, reusing treated water for dust suppression and greenbelt maintenance, rainwater harvesting etc.</p> <p>The specific water consumption is 3.81 m<sup>3</sup>/MT of urea produced as of 31<sup>st</sup> Mar' 2025.</p> <p>The zero-discharge condition was amended by the MoEF&amp;CC to permit the discharge of 201 m<sup>3</sup>/Hr of treated effluent into the Damodar River vide letter no. J-11011/440/2009-IA II (I), dated 19.12.2013. Compliance details for this amendment are provided as an additional condition.</p> <p>The treated water confirms to the standard as prescribed by WBPCB. Monitoring report is given below:</p> <table><tr><th>Sl. No.</th><th>Parameters</th><th>Prescribed Standards by WBPCB</th><th>Observed Values</th></tr><tr><td>1</td><td>pH</td><td>6.5 – 8.5</td><td>7.45</td></tr><tr><td>2</td><td>Ammoniacal Nitrogen as N (mg/Ltr)</td><td>50</td><td>17.60</td></tr><tr><td>3</td><td>Oil &amp; Grease (mg/Ltr)</td><td>10</td><td>&lt;5.0</td></tr><tr><td>4</td><td>TSS (mg/Ltr)</td><td>100</td><td>22.67</td></tr><tr><td>5</td><td>Nitrate Nitrogen as N (mg/Ltr)</td><td>10</td><td>2.02</td></tr><tr><td>6</td><td>TKN as N (mg/Ltr)</td><td>75</td><td>20.30</td></tr><tr><td>7</td><td>Free Ammonia (mg/Ltr)</td><td>2.0</td><td>&lt;0.02</td></tr></table> <p>Additionally, the condensate water generated from the stripping process in the ammonia and urea plants is recycled back into the process.</p>	Sl. No.	Parameters	Prescribed Standards by WBPCB	Observed Values	1	pH	6.5 – 8.5	7.45	2	Ammoniacal Nitrogen as N (mg/Ltr)	50	17.60	3	Oil & Grease (mg/Ltr)	10	<5.0	4	TSS (mg/Ltr)	100	22.67	5	Nitrate Nitrogen as N (mg/Ltr)	10	2.02	6	TKN as N (mg/Ltr)	75	20.30	7	Free Ammonia (mg/Ltr)	2.0	<0.02
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(ii)	The project authority shall obtain prior permission for drawl of surface water from the State Irrigation Department. A copy of permission shall be submitted to the Ministry's Regional office.	Permission for surface water extraction from the Damodar River has been obtained from the Damodar Valley River Regulation Committee (DVRRC). A copy of this permission was submitted to your office via letter no. MFCL/MoEF/CG/2011 dated 05 <sup>th</sup> February 2011. Additionally, an agreement with the Damodar Valley Corporation (DVC) has been executed, in accordance with condition no. (E) specified in the permission letter.																																
(iii)	The gaseous emissions (NO <sub>x</sub> , NH <sub>3</sub> , Urea dust) from various units including prilling tower shall conform to the prescribed standards. At no time the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system (s) adopted by the unit.	The gaseous emissions (NO <sub>x</sub> , NH <sub>3</sub> , and urea dust) are effectively controlled and maintained within the prescribed limits. In the event of any exceedance beyond the stipulated norms, immediate corrective actions are undertaken by the relevant section to promptly restore emission levels within the prescribed																																

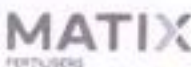


**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS																														
	the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	standards.																														
(iv)	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 respective Zonal office of CPCB and the State Pollution Control Board. The levels of PM10/PM2.5, NH3 and NOx (ambient levels) 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>The Environmental Clearance (EC) compliance report, along with monitoring data, is regularly uploaded to the company website, with copies submitted periodically to the Regional Office of MoEF&amp;CC, CPCB's Kolkata Zonal office, and the WBPCB. The last six-monthly compliance report was submitted via letter no. MFCL (Phase-I)/ENV/2024-25/02 dated 25<sup>th</sup> Nov 2024.</p> <p>Ambient Air Quality Monitoring data is enclosed as <b>Annexure – I</b> and the Stack Emission Monitoring report for the period from 1<sup>st</sup> October 2024 to 31<sup>st</sup> March 2025 is enclosed as <b>Annexure – II</b>.</p> <p>Parameters observed through the Continuous Ambient Air Quality Monitoring System (CAAQMS) are displayed on a board at the factory's main gate.</p>																														
(v)	To control fugitive emissions, regular monitoring of shop floor environment shall be carried. Leakages in the form of gases, liquid and dust emission shall be checked and mitigative measures taken. The company shall provide de-dusting system at all the transfer points in the bagging system.	<p>Fugitive emission monitoring is carried out on a regular basis to ensure workplace safety and environmental.</p> <p>Gas detection systems have been strategically placed across the facility to monitor and address any potential leaks of gases such as Ammonia, CO, Cl<sub>2</sub> etc. Mitigative measures are promptly taken if any leakage is detected.</p> <table><thead><tr><th>Location</th><th>NH3</th><th>CO</th><th>HC</th><th>Cl2</th><th>H2</th></tr></thead><tbody><tr><td>Ammonia Plant</td><td>4</td><td>3</td><td>6</td><td>0</td><td>5</td></tr><tr><td>Urea Plant</td><td>29</td><td>0</td><td>2</td><td>0</td><td>2</td></tr><tr><td>Ammonia Storage</td><td>6</td><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>OSBL</td><td>0</td><td>0</td><td>0</td><td>6</td><td>0</td></tr></tbody></table> <p>Additionally, a wet de-dusting system has been installed in the Urea bagging plant. Collected Urea dust is recycled back into the process using a dissolving method, contributing to our waste minimization and resource efficiency efforts.</p>	Location	NH3	CO	HC	Cl2	H2	Ammonia Plant	4	3	6	0	5	Urea Plant	29	0	2	0	2	Ammonia Storage	6	0	0	0	0	OSBL	0	0	0	6	0
Location	NH3	CO	HC	Cl2	H2																											
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(vi)	The company shall provide double walled ammonia storage tank and leak detection and repair programme shall be in place and ammonia sensors shall be installed to detect the leakage of ammonia and measures shall be taken to prevent leakage of pipeline for ammonia by regular inspection of the pipeline.	<p>In compliance with safety and environmental requirements, we have provided a double-walled ammonia storage tank to enhance containment and safety. Additionally, we have placed 6 nos. ammonia leak detection systems at key points around the storage area and other strategic locations to monitor and swiftly respond to any potential leaks.</p> <p>Regular inspection and preventive maintenance are conducted consistently on ammonia pipelines to prevent any leakage, with thorough records maintained for all inspections and maintenance activities.</p>																														



	<p><b>MATIX FERTILISERS AND CHEMICALS LTD</b>  (2200 MTPD Ammonia, 3850 MTPD Urea &amp; 54 MW CPP)  Panagarh, Dist. – Purba Bardhaman, West Bengal</p> <p><b>Six-monthly Compliance Report of Environment Clearance</b></p>	<p><b>Report For PHASE - I</b></p>
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**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

S.NO	CONDITIONS	COMPLIANCE STATUS
(vii)	The company shall undertake adequate protection measures for handling of ammonia vapour in case of plant upset condition. Safety valve exhaust and drains shall be connected to flare and vent stack.	We have implemented adequate safety measures for handling ammonia vapour in case of a plant upset condition. Safety valve exhausts are in place, and ammonia vapour is directed to dedicated flare stacks to ensure safe venting.
(viii)	The catalyst generated shall be sent to recycler for reuse instead of disposal at the waste disposal facility.	This is to confirm that compliance is being maintained for catalyst management. The catalyst generated from our process is either reused when suitable or, alternatively, sold or disposed of through a West Bengal Pollution Control Board (WBPCB) recognized agency.
(ix)	The company shall develop the green belt in 33% area, out of total area to mitigate the effect of fugitive emissions and noise as per the guidelines CPCB.	In line with CPCB guidelines, a total of 164.50 acres, representing 33% of the total land area, has been designated for green belt development to help mitigate fugitive emissions and noise. Of this earmarked area, 164.50 acres have already been covered. During this monsoon season, we planted 1100 nos. of saplings of local species, as prescribed in the EIA report, through initiatives such as World Environment Week, Swachhata Mission, and other events, both within and around the factory premises.
(x)	The company shall implement all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries.	We confirm that all applicable recommendations from the Charter on Corporate Responsibility for Environmental Protection (CREP) specific to fertilizer industries are being complied with in our operations.
(xi)	Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.	We ensure compliance with occupational health surveillance requirements as per the Factories Act. Pre-employment health checkups are conducted for all new employees and apprentices. Additionally, periodic health checkups are carried out on a half-yearly and annual basis for all employees, with records diligently maintained as required.
(xii)	The Company shall comply with the recommendations made in the EIA/EMP and Risk Assessment and public hearing reports	<p>We confirm compliance with all recommendations made in the EIA/EMP, Risk Assessment, and public hearing reports. All recommendations have been implemented and are continuously followed to ensure continuing improvement.</p> <p>The commitments made during the public hearing, along with compliance details, were submitted to the MoEF&amp;CC, RO Kolkata, dated 22.09.2016. Compliance is actively monitored and updated periodically.</p>
(xiii)	The Company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	We are committed to ensuring the highest standards of safety within our manufacturing and material handling processes. In line with this commitment, we have implemented comprehensive measures to protect against potential fire hazards. Key arrangements



**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS																														
		<p>include:</p> <ul style="list-style-type: none"> <li>Adequate firefighting systems and a robust fire network are in place to address possible fire hazards during manufacturing and material handling operations.</li> <li>Separate 2 nos. fire water storage tanks with a capacity of 4,800 KL each have been installed. These tanks maintain the desired pressure in the fire network lines through auto-operated jockey pumps.</li> <li>A dedicated fire cell staffed with well-trained fire crews is available 24x7 to manage any unforeseen fire incidents effectively.</li> <li>An adequate number of fire extinguishers are strategically placed throughout the facility.</li> <li>Fire hydrant points and monitors are provided at strategic locations to control any unpredicted events.</li> <li>Two fire tenders equipped with foam facilities are on standby to handle fire emergencies promptly.</li> <li>Smoke detectors and fire alarms are installed in strategic locations across the plant and are continuously monitored by the fire cell.</li> </ul> <p>Regular mock drills are conducted to enhance our preparedness for handling emergency situations. The last mock drill was performed in Ammonia Plant on 20<sup>th</sup> March 2025.</p> <p>Please find attached the detailed lists of fire extinguishers, fire equipment, and fire detection systems for your reference.</p> <p><b>Fire Extinguishers Lists:</b></p> <table> <tr> <th>S. No.</th><th>Item Description</th><th>Total Nos.</th></tr> <tr> <td>1</td><td>Ammonia &amp; Ammonia Storage</td><td>136</td></tr> <tr> <td>2</td><td>Urea Plant</td><td>55</td></tr> <tr> <td>3</td><td>Outside Battery Limit Area</td><td>281</td></tr> <tr> <td>4</td><td>Urea Product Handling</td><td>91</td></tr> <tr> <td>5</td><td>Panel Room NG Metering Station</td><td>04</td></tr> <tr> <td>6</td><td>Skid Area of NG Metering Station</td><td>04</td></tr> </table> <p><b>Fire equipment lists:</b></p> <table> <tr> <th>S. No.</th><th>Item Description</th><th>Total Nos.</th></tr> <tr> <td>1</td><td>Double Headed Hydrant</td><td>249</td></tr> <tr> <td>2</td><td>Single Headed Hydrant</td><td>08</td></tr> </table>	S. No.	Item Description	Total Nos.	1	Ammonia & Ammonia Storage	136	2	Urea Plant	55	3	Outside Battery Limit Area	281	4	Urea Product Handling	91	5	Panel Room NG Metering Station	04	6	Skid Area of NG Metering Station	04	S. No.	Item Description	Total Nos.	1	Double Headed Hydrant	249	2	Single Headed Hydrant	08
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**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

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(xiv)	During transfer of materials, spillages shall be avoided, and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.	<p>We have implemented careful measures to prevent spillage during material transfer. Any incidental spillage is promptly recovered and recycled to the fullest extent possible.</p> <p>Additionally, separate garland drains have been constructed to prevent accidental spillages from mixing with domestic waste and storm drains, ensuring a safe and compliant operational environment.</p>																																				
(xv)	The company shall develop rainwater harvesting structures to harvest the runoff water for recharge of ground water.	We have developed a Rainwater Harvesting (RWH) pond to collect runoff water, which is then reused and recycled within the plant for various operations. This initiative supports our commitment to water conservation and groundwater recharge.																																				
(xvi)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel of cooking, mobile toilets, mobile STP, 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.	As the plant is now operational, all temporary structures that were used for housing construction labour have been removed, and no construction workers are currently residing within the factory premises.																																				
<b>GENERAL CONDITIONS</b>																																						
(i)	The project authorities shall strictly adhere to the stipulations of the SPCB/ State Government or any statutory body.	We strictly adhere to all stipulations set forth by the SPCB, State Government, and any other relevant statutory bodies. All required conditions have been complied with, and the necessary reports are submitted to the concerned authorities on time, as per their requirements.																																				
(ii)	The gaseous emissions (SO <sub>2</sub> , HCl, NO <sub>x</sub> , NH <sub>3</sub> ,	We regularly monitor gaseous emissions, including SO <sub>2</sub> ,																																				

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### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS
	fertilizer dust) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. Emission data shall be periodically monitored and reports submitted to Ministry's Regional Office, CPCB and SPCB.	<p>HCl, NOx, NH<sub>3</sub>, fertilizer dust, and particulate matter, through internal resources, and all results have consistently been within the prescribed standards.</p> <p>Additionally, we have engaged a NABL-recognized third-party laboratory for periodic monitoring, and the results are routinely submitted to the concerned authorities.</p> <p>The monitoring data for Ambient Air Quality, Stack Emissions, Effluent Water Quality, and Ground water Quality for the period of 1<sup>st</sup> October 2024 to 31<sup>st</sup> March 2025 are enclosed as <b>Annexures – I, II, III &amp; IV</b>, respectively.</p> <p>Furthermore, real-time monitoring data is continuously transmitted to both the CPCB and WBPCB servers.</p>
(iii)	All the waste waters generated from the various processes shall be recycled/ reused in the plant and zero discharge shall be maintained. The domestic wastewater shall be treated in septic tanks and treated waste shall be used for irrigation in the green belt.	<p>We have implemented effective measures to recycle and reuse wastewater generated from various processes within the plant. Treated wastewater is reused in plant operations, including dust suppression and for irrigation in the green belt area. Additionally, we have initiated several water conservation efforts, such as the recycling of process water and rainwater harvesting etc.</p> <p>Regarding the zero-discharge condition, it was amended by MoEF&amp;CC to allow the discharge of 201 m<sup>3</sup>/Hr. of treated effluent into the Damodar River, as per their letter No. J-11011/440/2009 - IA II (I), dated 19/12/2013. The treated effluent is discharged into the river in compliance with the conditions laid down by WBPCB.</p>
(iv)	No further expansion of modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alternations 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.	<p>We ensure that any modifications to the plant are carried out only after obtaining prior approval from the concerned authorities. Below are the details of the approvals we have received for specific modifications and deviations:</p> <ol style="list-style-type: none"> <li><b>EC Amendment (2013):</b> The Environmental Clearance (EC) was amended by MoEF&amp;CC vide letter No. J-11011/440/2009-IA II (I), dated 19.12.2013, to increase the power plant capacity from 33 MW to 54 MW and permit the discharge of 201 m<sup>3</sup>/Hr. of treated effluent into the Damodar River.</li> <li><b>EC Amendment (2015):</b> The EC was amended by MoEF&amp;CC vide letter No. J-11011/440/2009-IA II (I), dated 15.05.2015, for the use of Naphtha as fuel in addition to CBM. However, we have not used Naphtha and have surrendered the Naphtha storage and handling license and informed to all concerned</li> </ol>



**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS
		<p>authorities.</p> <p>3) <b>Propane Exemption (2018):</b> MoEF&amp;CC granted an exemption for the requirement of EC amendment for the use of propane as fuel in the primary reformer vide letter dated 23.02.2018. Approval for this use was obtained from WBPCB. However, we have not used propane, and the related activities were withdrawn.</p> <p>4) <b>Plant Layout Approval:</b> The revised plant layout has been approved by the Directorate of Factories, as per their letter No. WBF/OL/2018/P.</p> <p>5) <b>No Increase in Pollution Load (NIPL) Certificate:</b> We have obtained the NIPL certificate from WBPCB vide letter No. 643-2N-29/2022(E)-Part-IV, dated 19.09.2024 and CTO for the 15% enhancement in production capacity of Ammonia &amp; Urea.</p> <p>For any future modifications or changes, we will ensure to take prior approval from the relevant authorities.</p>
(v)	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	<p>We ensure that emissions are continuously monitored and maintained within the prescribed limits as per the stipulated standards. The stack emission monitoring reports for the period are enclosed as <b>Annexure-II</b>.</p> <p>In the event of any emission exceeding the prescribed norms, immediate corrective action is taken by the concerned section to bring the emission levels back within the prescribed limits. If necessary, the respective unit is temporarily suspended from operation until the desired efficiency is restored.</p>
(vi)	The locations of ambient air quality monitoring stations shall be reviewed in consultation with the State Pollution Control Board (SPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.	<p>The locations for the Ambient Air Quality Monitoring Stations (AAQMS) have been finalized in consultation with WBPCB.</p> <p>Presently, we have three manual AAQMS in place, and regular monitoring is conducted both internally and through NABL-accredited external agencies, as per the prescribed standards.</p> <p>In addition, we have installed one continuous Ambient Air Quality Monitoring Station (CAAQMS), which is connected to both the CPCB and WBPCB servers. The real-time results from this station are publicly displayed at our main gate for transparency and easy access.</p>
(vii)	Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed	<p>We have provided stacks of appropriate height in compliance with CPCB guidelines to control emissions from various vents.</p>



**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS
	water shall be sent to ETP for further treatment.	<p>Additionally, hydrolyzers and strippers are installed at the Urea plant, and a scrubber has been provided at the Urea bagging unit to further mitigate emissions.</p> <p>The water from the scrubber is recycled back into the process to minimize waste and ensure efficient water use within the plant.</p>
(viii)	All the storage tanks will be under negative pressure to avoid any leakages. Breather valves, N <sub>2</sub> blanketing and secondary condensers with brine chilling system shall be provided for all the storage tanks to minimize vapour losses. All liquid raw material shall be stored in storage Tanks and Drums.	<p>All of our storage tanks are designed to operate under atmospheric pressure. Liquefied ammonia, in particular, is stored in atmospheric storage tanks, which are equipped with N<sub>2</sub> blanketing facilities to minimize vapour losses.</p> <p>For all liquid raw materials and chemicals, we ensure proper storage in tanks or drums, with secondary containment measures in place to prevent leaks and ensure safety.</p>
(ix)	<p>The company shall undertake following Waste Minimization measures.</p> <ul style="list-style-type: none"> <li>➤ Metering and control of quantities of active ingredients to minimize waste.</li> <li>➤ Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</li> <li>➤ Use of automated filling to minimize spillage.</li> <li>➤ Use of 'closed Feed' system into batch reactors.</li> <li>➤ Venting equipment through vapour recovery system.</li> <li>➤ Use of high-pressure hoses for equipment cleaning to reduce wastewater generation.</li> </ul>	<p>We have installed a state-of-the-art technology plant that incorporates advanced features, including those necessary for pollution control, energy conservation, and increased operational efficiency. Below are the specific waste minimization measures we have implemented:</p> <ul style="list-style-type: none"> <li>• <b>Metering and Control:</b> Metering and control systems for active ingredients are in place to minimize waste generation during production.</li> <li>• <b>Reuse of By-products:</b> By-products generated in the Ammonia plant are reused as raw materials in the Urea plant.</li> <li>• <b>Automated Filling System:</b> An automated filling system has been installed in both the Urea bagging unit and Ammonia storage.</li> <li>• <b>Closed Feed System:</b> The plant operates on the principle of a <b>closed</b> circuit and continuous process. As such, there is no batch process involved.</li> <li>• <b>Vapour Recovery System:</b> All steam vents are connected to the Heat Recovery Steam Generator (HRSG) for power generation. Additionally, the Ammonia storage is equipped with a vapour recovery system.</li> <li>• <b>High-Pressure Hose Use:</b> High-pressure hoses are avoided for routine cleaning. In emergency situations, it is used with all necessary safety precautions.</li> </ul> <p>These measures ensure efficient use of resources, minimize waste generation, and contribute to our</p>

Reference: MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

S.NO	CONDITIONS	COMPLIANCE STATUS
		environmental sustainability efforts.
(x)	Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by state pollution control board/central pollution control board.	<p>Fugitive emissions within the work zone environment, as well as in product and raw materials storage areas, are being rigorously monitored through a certified external agency. We ensure that all monitored emissions comply with the prescribed standards of the Central Pollution Control Board (CPCB) and the West Bengal Pollution Control Board (WBPCB).</p> <p>To further enhance our monitoring capabilities, we have installed multiple online detectors for Ammonia, hydrocarbons, CO, and Cl<sub>2</sub> at strategic locations across the facility. This approach supports our commitment to maintaining a safe and compliant work environment.</p>
(x)	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.	We confirm that our unit fully complies with the Manufacture, Storage, and Import of Hazardous Chemicals (MSIHC) Rules, 1989, along with all subsequent amendments in October 1994 and January 2000, as applicable.
(xi)	The overall noise levels 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>The noise levels in and around the plant area are being maintained well within the prescribed standards. Silencers have been installed on process and steam vents in the Ammonia, Urea, and power plants. Additionally, the generator (GD) sets are equipped with acoustic enclosures and silencers to further reduce noise emissions.</p> <p>Ambient noise levels are monitored regularly to ensure compliance with the standards set under the Environment (Protection) Act, 1986 Rules, 1989, which are 75 dBA for daytime and 70 dBA for nighttime. Enclosed as <b>Annexure - V</b> is the noise monitoring data for the period from 1<sup>st</sup> October 2024 to 31<sup>st</sup> March 2025, for your reference.</p>
(xii)	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.	<p>The eco-development plan has already been submitted to the West Bengal Pollution Control Board (WBPCB) as per the stipulated timeline.</p> <p>During the project phase, various eco-developmental measures were undertaken and we continue to implement these on an ongoing basis through our CSR initiatives. These initiatives are tailored to address local needs and contribute to the overall improvement of the environment and community welfare in the project area.</p> <p>For the financial year 2024-25, we have spent over ₹41.66 lakhs on CSR activities (Apr'24 to Sept'24 – 14 Lakhs &amp; Oct'24 to Mar'25 – 27.66 Lakhs), ensuring</p>



**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS
		sustained efforts in alignment with our commitments.
(xiv)	A separate Environmental Management cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	A dedicated Environmental Management cell has been established, led by our DGM (EHS), to oversee all Environmental Management and Monitoring functions. This cell is supported by a fully equipped in-house environmental laboratory, providing all necessary facilities for comprehensive environmental monitoring.
(xv)	The project authorities 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 provided shall not be diverted for any other purpose.	Adequate funds have been exclusively earmarked for environmental protection initiatives, ensuring dedicated resources to meet all Environmental Management requirements. These funds are strictly allocated and will not be diverted for any other purpose.  All conditions stipulated by the Ministry of Environment and Forests, as well as the State Government, are being complied with as part of our ongoing commitment to environmental stewardship.
(xvi)	The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional office of the Ministry/SPCB/CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the company.	Six-monthly compliance reports are consistently submitted to the Ministry of Environment, Forest and Climate Change (MoEF&CC) Regional Office, as well as the Zonal Office of CPCB and SPCB. These reports are also uploaded regularly on the company's website to ensure transparency. The latest compliance report was submitted via our letter no. MFCL (Phase-I)/ENV/2024-25/02, dated Nov. 25, 2024.  Additionally, compliance reports are uploaded to the Parivesh Portal, providing comprehensive access and transparency.
(xvii)	A copy of the 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, were received while processing the proposal.	Complied with immediately upon receipt of the Environmental Clearance.
(xviii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated E C 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 of CPCB and the State Pollution Control Board.	Six-monthly compliance reports, including all monitored data, are being submitted both in hard copy and via email to the MoEF&CC Regional Office, the Zonal Office of CPCB, and the WBPCB, in accordance with the stipulated guidelines.  The latest compliance report was submitted through our letter no. MFCL (Phase-I)/ENV/2024-25/02, dated Nov. 25, 2024.
(xix)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned	The Environmental Statement in Form V is submitted annually to the WBPCB by September 30 <sup>th</sup> , as required under the Environment (Protection) Rules, 1986. For the



**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

S.NO	CONDITIONS	COMPLIANCE STATUS
	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 conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	financial year 2023-24, the statement was submitted on September 24, 2024 and is enclosed as <b>Annexure - VI</b> .  This document is also included as <b>Annexure VI</b> in the six-monthly compliance report submitted to MoEF&CC, both via email and in hard copy, and is uploaded on the company's website along with the status of compliance with environmental clearance conditions.
(xx)	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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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 on 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.	The Environmental Clearance (EC) was published in two widely circulated local newspapers, including one in the vernacular language of the locality, immediately after receipt of the clearance, in compliance with the prescribed mandate.  A copy of the advertisement has been forwarded to the concerned Regional Office of the Ministry.
(xxi)	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.	<ul style="list-style-type: none"> <li>The date of financial closure has already been communicated to the Regional Office (RO) &amp; MoEF&amp;CC</li> <li>The Steam and power generation (SPG) unit was successfully commissioned in August 2015, along with all associated utility services and is currently operational.</li> <li>The commercial production of Urea commenced on 1<sup>st</sup> October 2017.</li> </ul>
<b>EC Ref.: MoEF&amp;CC File No: J11011/440/2009-IA II (I) dated 19<sup>th</sup> December 2013.</b>		
<b>Additional Conditions</b>		
(i)	All the specific conditions and general conditions specified in the Environmental clearance vide Ministry's letter no. J-11011/440/2009-IA (I) dated 22 <sup>nd</sup> March 2010 shall be implemented.	To ensure compliance, all specific and general conditions outlined in the Environmental Clearance, as per the Ministry's letter no. J-11011/440/2009-IA (I) dated 22 <sup>nd</sup> March 2010, are being complied.
(ii)	Company shall enhance the captive power plant capacity from 33 MW to 54 MW comprising of one GTG of 24 MW and one STG of 30 MW. The fuel shall be used as gas. Low NOx burner shall be installed.	The captive power plant with a capacity of 54 MW, comprising one GTG of 24 MW and one STG of 30 MW, has been installed as specified. A Low NOx burner is in place, and we are utilizing NG/RLNG as fuel.
(iii)	The effluent generation from cooling tower, oily water and DM plant effluent shall not be exceeded 201 m <sup>3</sup> /Hr. All the effluents after	The effluent generated from cooling tower, oily water and DM plant is maintained below 201 m <sup>3</sup> /Hr.  Effluent from the DM plant undergoes neutralization in a



Reference: MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

### Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025

S.NO	CONDITIONS	COMPLIANCE STATUS
	treatment shall be routed through a properly lined guard pond/holding pond for equalization and final control. In the guard pond /holding pond automatic monitoring system for flow and relevant pollutants (i.e. pH, ammoniacal nitrogen, nitrate nitrogen etc. shall be provided with high level alarm system.	dedicated neutralization pit. Effluents from the cooling tower, boiler blowdown, and the neutralized DM plant effluent are further treated in the ETP and collected in two holding ponds.  Once the water quality in the holding ponds meets the stipulated standards, it is reused for greenbelt development and horticulture purposes. Any surplus effluent is discharged into the Damodar River in compliance with regulations. An automatic monitoring system is in place to continuously monitor flow, pH, ammoniacal nitrogen, and nitrate nitrogen, with real-time data transferred to the CPCB server as per guidelines.
(iv)	The treated water discharged into the River Damodar after confirming the standards prescribed for the effluent discharge and after obtaining permission from the WBSPCB. No process effluent will be discharged in and around the project site.	The treated effluent meets the specified standards prior to discharge into the River Damodar. The West Bengal State Pollution Control Board (WBSPCB) has granted Consent to Operate, permitting the discharge of treated effluent into the Damodar River, as per their letter no. CO123385 dated 29.04.2022.
(v)	Regular monitoring of ground water by installing piezometric wells around the guard pond and sludge disposal sites shall periodically be done and report submitted to the Bhubaneswar Regional Office of the Ministry, CPCB and SPCB.	Ground water monitoring is conducted regularly from piezometric wells located around the guard pond and sludge disposal sites. This monitoring is performed both in our internal laboratory and through an NABL-accredited third-party laboratory. Copies of analysis reports prepared by our in-house laboratory, is attached herewith as <b>Annexure-IV</b> , for reference.
<b>EC Ref.: MoEF&amp;CC File No: J11011/440/2009-IA II (I) dated 15h May 2015.</b> <i>(Note: The proposed under the subject EC has been discontinued and will not be used.)</i>		
(i)	All the safety precaution mentioned in the risk assesment shall be implemented.	This is to confirm that all safety precautions outlined in the risk assessment study have been fully implemented.  Additionally, please note the following updates: <ul style="list-style-type: none"> <li>Naphtha is no longer used as fuel in our operations. We are using Natural Gas (NG) / Regasified Liquefied Natural Gas (RLNG) supplied by GAIL.</li> <li>We have officially surrendered the license for Naphtha handling and storage, and the associated facilities have been dismantled. A copy of the surrender request and the Petroleum and Explosives Safety Organisation (PESO) acceptance letter is enclosed as <b>Annexure-VII (A &amp; B)</b> for your reference.</li> </ul>
(ii)	Automatic online monitoring system (24x7 monitoring device) for flow measurement and related pollutants in the treated effluent to be installed. The data to be made available to the SPCB and Company Website	An online continuous effluent monitoring system has been successfully installed in the treated effluent discharge line. This system includes real-time monitoring of key parameters such as flow, pH, Ammoniacal Nitrogen, and Nitrate Nitrogen.

**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

S.NO	CONDITIONS	COMPLIANCE STATUS
		The data from these parameters is monitored continuously at our Distributed Control System (DCS) and is relayed in real time to the Central Pollution Control Board (CPCB) and the West Bengal Pollution Control Board (WBPCB) servers. This initiative ensures compliance and transparency with our environmental commitments.
(iii)	Similarly Automatic online monitoring system (24x7 monitoring device) for air emission to be installed. The data to be made available to the respective SPCB and the company website.	Online emission monitoring analyzers have been installed in the stacks of the HRSG, Auxiliary Boiler, and Primary Reformer. These analyzers continuously measure key air emission parameters, including Particulate Matter (PM), Sulfur Dioxide (SO <sub>2</sub> ), and Nitrogen Oxides (NO <sub>x</sub> ).  The data collected is transmitted at regular intervals to both the Central Pollution Control Board (CPCB) and the West Bengal Pollution Control Board (WBPCB) servers, ensuring real-time monitoring and regulatory compliance.

EC Ref.: MoEF&CC File No: J11011/440/2009/-IA II (I) dated 23<sup>rd</sup> February 2018

(Note: The proposed under the subject EC has been discontinued and will not be used.)


### Additional Conditions

(i)	The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in its 30 <sup>th</sup> meeting held during 2-3 November, 2017. The Committee noted that the proposed additional fuel arrangement would save the equivalent quantity of CBM, resulting in its increased availability as feedstock for increase in plant throughput. The Committee also suggested that such proposals involving no change in production capacity and not contributing to any increase in pollution load, may not be insisted for any environmental clearance or amendment in the existing environmental clearance.	Noted.
(ii)	Based on recommendations of the EAC and further deliberations in the Ministry vis-a-vis the Ministry's Notification dated 23 <sup>rd</sup> November, 2016, you are required to obtain 'No increase in pollution load' certificate from the concerned State Pollution Control Board in accordance with the provisions of the said Notification. You are also requested to submit compliance status of the existing EC conditions after receipt of the desired certification from the SPCB.	We have obtained the 'No Increase in Pollution Load' (NIPL) certificate from the West Bengal Pollution Control Board (WBPCB), which issued a recommendation for the use of commercial propane on 18.09.2018.  However, propane is not being used in our plant operations. The propane facilities have been decommissioned, and we now receive a continuous gas supply from GAIL and there are no activities related to propane running as of now.

\*\*\* THE END \*\*\*






	<b>MATIX FERTILISERS AND CHEMICALS LTD</b> (2200 MTPD Ammonia, 3850 MTPD Urea & 54 MW CPP) Panagarh, Dist. – Purba Burdwan, West Bengal <b>Six-monthly Compliance Report of Environment Clearance</b>	<b>Report For PHASE - I</b>
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**Reference:** MoEF&CC File No: J-11011 / 440/2009 – IAI (I) dated 22<sup>nd</sup> April 2010 and its amendments dated (1) 19<sup>th</sup> December 2013, (2) 15<sup>th</sup> May 2015, (3) 23<sup>rd</sup> February 2018.

**Compliance Period: 1<sup>st</sup> October 2024 – 31<sup>st</sup> March 2025**

Annexures		
Sl. No.	Annexures No	Content
01	Annexure – I	Ambient Air Quality Monitoring Report
02	Annexure – II	Stack Emission Monitoring Report
03	Annexure – III	Effluent Water Quality Monitoring Report
04	Annexure – IV	Ground Water Quality Monitoring Report
05	Annexure – V	Noise Level Monitoring Report
06	Annexure – VI	CSR Activities & Expenditure Report
07	Annexure – VII	The Environmental Statement in Form V
08	Annexure – VIIIA	Cancellation of Naphtha license (P372245)
09	Annexure – VIIIB	Cancellation of Naphtha license (P372255)



	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/01
		Date of Issued:	01/05/2025
	<b>Ambient Air Quality Monitoring Report</b>	Issued No.:	01
		Revision No.:	00
		Revision Date:	00

## Annexure - I

Sample collected and tested by: In-house Laboratory

\*Sample Collected and tested by: External 3<sup>rd</sup> party Laboratory (NABL Accredited)

Month: October 2024

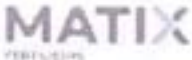
Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 1 (Near Fire & Safety Building)							
			01.10.2024	04.10.2024	*08.10.2024	08.10.2024	15.10.2024	*22.10.2024	26.10.2024	*29.10.2024
PM 10	µg/m <sup>3</sup>	100	46.2	49.8	71.7	52.6	36.4	80.0	76.5	80.9
PM 2.5	µg/m <sup>3</sup>	60	35.3	38.2	38.3	45.3	21.0	37.1	38.7	40.4
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	1.1	1.3	4.6	1.3	1.8	4.7	3.4	4.4
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	9.1	9.0	32.2	10.7	10.4	31.6	18.6	31.2
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	39.4	40.3	21.8	43.9	28.0	23.9	35.2	22.5

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 2 (Near Cooling Tower)							
			01.10.2024	*02.10.2024	04.10.2024	*08.10.2024	15.10.2024	*22.10.2024	26.10.2024	29.10.2024
PM 10	µg/m <sup>3</sup>	100	50.5	76.3	54.6	77.7	40.0	69.9	47.0	57.6
PM 2.5	µg/m <sup>3</sup>	60	45.7	39.2	45.7	45.8	20.0	34.6	24.0	26.0
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	1.0	4.5	1.7	4.9	2.3	4.8	1.3	1.3
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	8.7	31.7	10.0	32.6	10.5	32.1	8.6	8.4
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	36.5	24.8	37.6	23.2	32.0	24.3	35.0	36.7

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 3 (Near Batching Plant)							
			01.10.2024	*02.10.2024	04.10.2024	08.10.2024	15.10.2024	26.10.2024	*29.10.2024	29.10.2024
PM 10	µg/m <sup>3</sup>	100	54.5	81.4	58.1	60.3	42.0	48.0	76.8	56.5
PM 2.5	µg/m <sup>3</sup>	60	33.9	44.3	44.4	35.5	19.0	29.0	37.6	52.0
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	1.2	4.8	1.0	1.4	1.5	1.2	4.4	1.0
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	7.8	32.9	8.2	8.4	8.8	9.0	32.5	7.3
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	31.6	22.2	33.4	34.0	25.0	28.0	23.3	30.3





	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/01
		Date of Issued:	01/05/2025
	<b>Ambient Air Quality Monitoring Report</b>	Issued No.:	01
		Revision No.:	00
		Revision Date:	00

## Annexure - I

Month: November 2024

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 1 (Near Fire & Safety Building)							
			*04.11.2024	08.11.2024	12.11.2024	15.11.2024	*18.11.2024	*25.11.2024	26.11.2024	29.11.2024
PM 10	µg/m <sup>3</sup>	100	83.8	68.0	74.0	81.0	76.3	82.8	85.0	84.0
PM 2.5	µg/m <sup>3</sup>	60	36.5	47.0	49.0	45.0	39.2	48.3	51.1	41.0
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	4.3	2.3	2.1	1.9	4.6	4.7	2.3	1.6
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	32.2	9.5	10.1	9.5	33.3	31.7	11.8	10.8
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	24.1	38.0	39.0	37.0	23.9	23.7	41.0	37.0

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 2 (Near Cooling Tower)							
			01.11.2024	05.11.2024	08.11.2024	*11.11.2024	15.11.2024	*18.11.2024	26.11.2024	29.11.2024
PM 10	µg/m <sup>3</sup>	100	43.0	64.0	78.0	79.3	88.0	71.2	78.0	71.0
PM 2.5	µg/m <sup>3</sup>	60	26.0	40.0	45.0	42.0	50.0	37.5	54.4	41.0
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	1.5	2.1	3.4	4.9	2.7	4.7	1.8	1.7
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	10.2	11.5	10.9	32.9	11.6	32.2	9.8	9.2
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	36.0	43.0	37.0	24.5	42.0	28.1	45.0	40.0

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 3 (Near Batching Plant)							
			01.11.2024	*04.11.2024	08.11.2024	*11.11.2024	15.11.2024	19.11.2024	*25.11.2024	29.11.2024
PM 10	µg/m <sup>3</sup>	100	58.0	74.9	87.2	89.4	78.0	91.0	78.6	79.0
PM 2.5	µg/m <sup>3</sup>	60	29.9	37.1	42.7	48.3	52.0	47.4	45.1	45.0
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	2.1	4.5	1.7	4.7	1.5	1.8	4.81	1.2
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	11.8	32.5	9.8	32.3	12.2	12.8	32.9	8.7
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	41.2	23.2	38.6	24.9	42.0	52.0	25.4	40.0



	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/01
		Date of Issued:	01/05/2025
	<b>Ambient Air Quality Monitoring Report</b>	Issued No.:	01
		Revision No.:	00
		Revision Date:	00

## Annexure - I

Month: December 2024


Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 1 (Near Fire & Safety Building)							
			03.12.2024	*09.12.2024	13.12.2024	*16.12.2024	20.12.2024	*23.12.2024	24.12.2024	31.12.2024
PM 10	µg/m <sup>3</sup>	100	95.2	88.4	89.0	84.1	95.1	79.6	92.6	91.5
PM 2.5	µg/m <sup>3</sup>	60	56.8	47.9	45.0	46.7	52.9	40.8	55.1	58.2
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	2.1	4.4	2.3	5.0	2.9	5.0	2.8	4.1
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	19.3	32.3	18.4	32.1	20.3	31.4	20.1	18.7
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	33.9	24.2	33.2	24.8	38.9	23.9	40.8	38.3

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 2 (Near Cooling Tower)							
			*02.12.2024	06.12.2024	*09.12.2024	10.12.2024	13.12.2024	20.12.2024	*23.12.2024	24.12.2024
PM 10	µg/m <sup>3</sup>	100	83.2	90.1	76.4	69.4	83.3	92.2	71.3	77.2
PM 2.5	µg/m <sup>3</sup>	60	50.8	47.7	44.6	54.6	46.8	45.6	39.2	42.1
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	4.8	4.7	4.8	3.1	3.5	2.4	4.9	2.3
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	34.6	20.5	33.5	21.2	20.9	19.1	39.2	19.3
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	24.2	38.9	25.4	39.3	36.2	41.1	24.9	38.9

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 3 (Near Batching Plant)							
			*02.12.2024	06.12.2024	10.12.2024	13.12.2024	*16.12.2024	20.12.2024	24.12.2024	31.12.2024
PM 10	µg/m <sup>3</sup>	100	73.7	92.6	94.3	88.5	75.4	87.6	96.2	95.6
PM 2.5	µg/m <sup>3</sup>	60	44.6	58.6	48.7	51.4	39.6	54.7	59.2	50.5
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	4.6	2.8	3.4	2.8	4.7	2.6	2.5	3.2
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	33.1	21.6	18.6	17.5	32.9	20.2	18.9	19.8
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	25.1	31.4	34.9	29.7	25.5	28.9	31.1	32.6





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## Annexure - I


Month: January 2025

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 1 (Near Fire & Safety Building)							
			04.01.2025	07.01.2025	10.01.2025	*13.01.2025	18.01.2025	25.01.2025	*27.01.2025	28.01.2025
PM 10	µg/m <sup>3</sup>	100	97.21	87.50	91.10	97.51	88.54	95.40	92.96	98.20
PM 2.5	µg/m <sup>3</sup>	60	47.00	45.10	57.26	51.25	58.34	43.80	49.17	56.90
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	3.24	3.46	3.66	5.61	2.42	3.35	4.12	2.75
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	15.86	13.66	15.34	32.96	14.59	15.90	32.21	15.70
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	31.85	27.60	32.60	26.62	30.14	34.06	26.32	24.90

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 2 (Near Cooling Tower)							
			04.01.2025	*06.01.2025	10.01.2025	*13.01.2025	18.01.2025	*20.01.2025	25.01.2025	28.01.2025
PM 10	µg/m <sup>3</sup>	100	83.00	98.22	78.80	88.57	95.20	95.60	96.46	98.30
PM 2.5	µg/m <sup>3</sup>	60	44.00	54.17	54.69	47.08	51.00	48.33	57.70	58.60
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	2.31	5.14	3.19	5.61	2.26	4.71	2.93	3.29
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	16.32	33.32	17.06	34.03	18.24	32.80	15.66	16.46
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	34.16	26.34	27.29	25.88	35.10	26.84	33.00	27.94

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 3 (Near Batching Plant)							
			*06.01.2025	10.01.2025	14.01.2025	18.01.2025	*20.01.2025	25.01.2025	*27.01.2025	28.01.2025
PM 10	µg/m <sup>3</sup>	100	95.39	90.20	91.30	89.62	95.72	88.90	94.67	96.10
PM 2.5	µg/m <sup>3</sup>	60	53.39	51.59	58.00	48.89	49.17	54.50	57.92	58.40
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	5.17	2.74	2.43	3.22	4.82	2.96	4.65	2.36
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	34.47	19.10	16.98	18.20	33.26	20.10	33.53	18.00
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	26.49	33.70	28.90	32.76	27.58	35.84	26.62	28.40



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		Revision No.:	00
		Revision Date:	00

## Annexure - I

Month: February 2025


Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 1 (Near Fire & Safety Building)						
			*04.02.2025	07.02.2025	*10.02.2025	14.02.2025	18.02.2025	21.02.2025	*24.02.2025
PM 10	µg/m <sup>3</sup>	100	98.52	85.38	92.82	99.10	90.49	94.20	86.97
PM 2.5	µg/m <sup>3</sup>	60	43.33	54.94	48.75	54.39	54.36	53.30	38.75
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	4.55	3.05	5.05	3.77	2.22	3.04	4.82
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	34.20	17.53	33.65	17.97	11.76	13.90	31.54
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	25.93	28.43	26.71	44.55	43.30	42.07	23.35

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 2 (Near Cooling Tower)						
			04.02.2025	07.02.2025	*10.02.2025	14.02.2025	*17.02.2025	18.02.2025	21.02.2025
PM 10	µg/m <sup>3</sup>	100	87.69	89.95	95.37	80.16	90.63	95.88	83.47
PM 2.5	µg/m <sup>3</sup>	60	44.00	47.84	45.53	41.52	48.33	52.32	53.47
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	2.92	3.05	4.92	2.51	4.70	1.79	2.54
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	16.07	15.96	32.98	15.67	33.12	14.84	15.75
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	36.25	29.20	27.10	33.60	25.93	35.44	33.10

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 3 (Near Batching Plant)						
			*04.02.2025	07.02.2025	11.02.2025	14.02.2025	*17.02.2025	21.02.2025	*24.02.2025
PM 10	µg/m <sup>3</sup>	100	97.38	85.43	81.21	88.00	88.45	84.00	90.61
PM 2.5	µg/m <sup>3</sup>	60	45.72	58.51	43.75	41.04	45.83	44.00	44.17
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	4.73	2.00	2.85	2.35	4.92	3.48	4.68
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	33.28	17.33	18.65	18.83	32.47	17.06	32.43
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	25.18	23.31	26.52	31.55	25.88	31.48	24.71





	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/01
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		Revision No.:	00
		Revision Date:	00

## Annexure - I


Month: March 2025

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 1 (Near Fire & Safety Building)						
			*03.03.2025	04.03.2025	07.03.2025	11.03.2025	*17.03.2025	18.03.2025	*24.03.2025
PM 10	µg/m <sup>3</sup>	100	93.42	91.2	94.6	92.8	92.9	88.6	89.82
PM 2.5	µg/m <sup>3</sup>	60	51.25	57.0	50.2	58.2	54.2	54.2	42.50
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	5.17	2.3	2.9	4.1	4.9	3.3	4.91
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	33.12	16.6	19.6	16.9	35.2	16.3	32.43
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	26.71	29.9	28.0	41.3	24.4	38.0	23.49

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 2 (Near Cooling Tower)						
			04.03.2025	07.03.2025	*10.03.2025	11.03.2025	*17.03.2025	18.03.2025	25.03.2025
PM 10	µg/m <sup>3</sup>	100	93.9	93.9	97.2	96.6	91.5	95.24	87.9
PM 2.5	µg/m <sup>3</sup>	60	50.6	50.6	57.2	56.3	51.3	57.50	58.8
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	2.9	2.9	3.1	4.9	3.4	4.80	2.5
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	16.0	16.0	16.9	34.5	15.6	34.53	16.5
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	31.1	31.1	34.0	25.8	34.8	23.93	32.0

Parameters	Unit	Permissible limits (NAAQS)	AAQM Station - 3 (Near Batching Plant)						
			*03.03.2025	07.03.2025	*10.03.2025	11.03.2025	18.03.2025	*24.03.2025	25.03.2025
PM 10	µg/m <sup>3</sup>	100	95.26	91.0	92.4	81.7	85.9	78.83	92.4
PM 2.5	µg/m <sup>3</sup>	60	48.33	54.1	53.8	51.9	58.0	39.17	55.5
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	80	5.03	2.4	5.1	2.9	2.4	4.82	3.1
Nitrogen Oxides (NO <sub>2</sub> )	µg/m <sup>3</sup>	80	32.43	19.3	35.0	18.6	16.8	33.38	13.8
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	400	27.1	30.0	25.3	28.0	31.6	22.73	37.2



	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/02
		Date of Issued:	01/05/2025
	<b>Stack Emission Monitoring Report</b>	Issued No.:	01
		Revision No.:	00
		Revision Date:	00

## Annexure- II

**Period: October 2024 - March 2025**

Sample Collected and Analysed By: In-house Laboratory


\*Sample Collected and Tested by: - External 3<sup>rd</sup> Party Laboratory (NABL Accredited)

SN	Stacks attached to	Parameters	UoM	Results					
				Oct'2024	*Nov' 2024	Dec' 2024	Jan'2025	Feb'2025	*Mar' 2025
1	Auxiliary Boiler (S-1) *	PM	mg/Nm3	NA	NA	NA	NA	NA	NA
		CO	%v/v	NA	NA	NA	NA	NA	NA
2	HRSG (Heat Recovery Steam Generator)- (S-2)	PM	mg/Nm3	NA	19.29	NA	NA	NA	14.63
		CO	%v/v	0.0005	<0.2	0.0044	0.0014	0.0052	<0.2
3	Primary Reformer (S-3)	NOx as NO2	mg/Nm3	214.00	138.0	216.00	165.00	134.00	135.41
4	Prilling Tower (S-4)	PM	mg/Nm3	21.00	28.50	46.9	42.50	45.90	32.98
5	EDG-1	PM	mg/Nm3	NA	71.33	NA	NA	NA	NA
		CO	%v/v	NA	0.0047	NA	NA	NA	NA
6	EDG-2	PM	mg/Nm3	NA	75.80	NA	NA	NA	NA
		CO	%v/v	NA	0.0048	NA	NA	NA	NA

\*Aux Boiler non -operational at the time of sampling and analysis in the months Oct'24- Mar'25. It is operated as per process requirement, only when additional steam is required.





	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/03
		Date of issued:	01/05/2025
	<b>Effluent Water Quality Monitoring Report</b>	Issued No.:	01
		Revision No.:	00
		Revision Date:	00

### Annexure- III

**Period: October 2024 - March 2025**

Sample collected and analyzed by: In-house Env laboratory

\*Sample analysed by External 3<sup>rd</sup> Party Laboratory (NABL Accredited)

Parameters	Limits as per CTO	Month	Oct'24	Nov'24	Dec'24	Jan'25	Feb'25	Mar'25
		UoM + Date →	*22.10.2024	11.11.2024	*10.12.2024	*17.01.2025	*10.02.2025	*17.01.2025
pH	6.5-8.5	--	7.5	7.9	7.4	7.2	7.5	7.2
Ammoniacal Nitrogen as N	50	mg/l	40.5	16	16.8	10.6	11.1	10.6
Oil & Grease	10	mg/l	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
TSS	100	mg/l	34	20	22.0	24	12.00	24
Nitrate Nitrogen as N	10	mg/l	1.5	7.4	<0.05	0.4	0.4	0.4
TKN as N	75	mg/l	42	23	17.6	13	13.20	13
Free Ammonia	2.0	mg/l	<0.02	<0.1	<0.02	<0.02	<0.02	<0.1



	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/04
		Date of Issued:	01/05/2025
		Issued No.:	01
	<b>Ground Water Quality Monitoring Report</b>	Revision No.:	00
		Revision Date:	00

#### Annexure- IV

Sample collected from: Piezometric Wells

Samples analyzed by: In-house Env laboratory in QC

#### In-house Lab Report:

November 2024 (Post - Monsoon)				
Parameters	UoM	Well No. 2	Well No. 3	Well No. 5
Depth of Water Level	M	1.7	1.8	4.75
pH	--	7.4	7.4	7.3
Conductivity	uS/cm	236	598	430
Total Hardness as CaCO <sub>3</sub>	mg/l	122	289	172
Ca Hardness as CaCO <sub>3</sub>	mg/l	80	212	139
Mg Hardness as CaCO <sub>3</sub>	mg/l	42	77	33
Total alkalinity as CaCO <sub>3</sub>	mg/l	101	229	82
Chloride Cl <sup>-</sup>	mg/l	6.0	20.0	22.0
Sulphate as SO <sub>4</sub> <sup>2-</sup>	mg/l	6.2	58	36
Phosphate as PO <sub>4</sub> <sup>3-</sup>	mg/l	<0.1	<0.1	<0.1
Sodium as Na <sup>+</sup>	mg/l	6.0	18	11
Potassium as K <sup>+</sup>	mg/l	7.3	1.5	2.5
Ammonia as NH <sub>3</sub>	mg/l	<1.0	<1.0	<1.0
Nitrate as NO <sub>3</sub> <sup>-</sup>	mg/l	2.5	15	37
TDS	mg/l	170	415	300





	<b>Matix Fertilisers &amp; Chemicals Ltd</b> Panagarh	Document No:	MFCL/Env/EMF/05
		Date of Issued:	01/05/2025
	<b>Noise Monitoring Report</b>	Issued No.:	01
		Revision No.:	00
		Revision Date:	00

Annexure – V

**Period: October 2024 - March 2025**

**Monitoring by: In-House Laboratory**

SN	Location	Noise Level, dB(A)					
		24.10.2024	29.11.2024	29.12.2024	30.01.2025	30.02.2025	26.03.2025
1	Factory gate	62	58	62	64	67	64
2	RWTP	58	56	54	58	59	60
3	DMP CR	65	64	60	56	63	61
4	IA/PA	60	56	58	54	61	58
5	Urea PT	69	68	68	67	69	68
6	CCR	60	62	66	68	67	64
7	Store	60	56	62	60	56	68
8	Ammonia Storage	62	60	66	62	65	63
9	SPG Porta Cabin	62	62	62	58	62	62
10	Work Shop	68	60	68	64	56	64
11	UPH	72	66	70	70	68	66
12	Lab	59	59	58	56	60	64



## Expenditure on CSR Activities

Period: October 2024 – March 2025)

Annexure- VI

CSR Activities and Expenses for last six months (Oct'24 – Mar'25), are being tabulated below:

Name of the Project	Expenses (Rs. In Lakh)
<b>Project Dhadkan:</b> (Total 11494 patients treated under allopathy (4573) and homeopathy (6921) medical services. These community health clinics provide diagnostic and free medicine services across Shyamsunderpur, Dharala, Pondali, Khulepada and Khandari).	10.26
<b>Infrastructure Development at Pondali Primary School:</b> (Pondali Primary School is one of the nearest Govt. Primary schools to our plant periphery. MFCL constructed Mid-Day Meal Kitchen and Storage Room with an objective to provide fresh, healthy and hygienic Mid-Day Meal to school students).	9.01
<b>Support to Ahare Tehetta:</b> (food cum cultural festival at Nadia District).	2.36
<b>Anganwadi Project:</b> (Infrastructural upgradation done in Khulepada and Pondali Anganwadi. Whitewashing, flooring, tile repairing and similar such civil work has been conducted under this infrastructural upgradation).	6.03
<b>Total</b>	<b>27.66</b>





MFCL/Env. Statement /FY23-24/01

September 24<sup>th</sup> 2024

To,  
The Member Secretary  
West Bengal Pollution Control Board  
"Paribesh Bhawan"  
Bldg.No. 10-A, Block - LA, Sector - III  
Salt Lake City, Kolkata - 700 106

**Subject** : Submission of Environment Statement for the financial year ending 31<sup>st</sup> March, 2024 in Form-V.

**Reference** 1. Rule No. 14 of The Environment (Protection) Rules, 1986.  
2. Condition No. 27 of CTO (renewal) vide Memo No. 805-7/WPBD-Cont (5726)/15 (Pt-I) dated: 29<sup>th</sup> April, 2022.  
3. General Condition Sl. No. xix of Environmental Clearance File No. J-11011 / 440/2009 - I(A) (I) dated 22<sup>nd</sup> April, 2010.

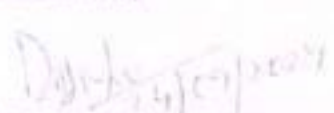
Respected Sir,

This is in reference to the above cited subject; we are hereby submitting the Environmental Statement for the financial year ending 31<sup>st</sup> March, 2024 of Matix Fertilisers & Chemicals Limited.

We trust you will find the compliance in order and assure our commitment of going beyond the applicable Environmental requirements and oblige.

Thanking You

Yours faithfully,

  
(Dr. Rabindra Nath Sahu)  
GM - EHS

Enclosed: a/a

**Copy To** The Regional Officer, West Bengal Pollution Control Board, Durgapur Regional Office, City Centre Durgapur, WB-713 216

Matix Fertilisers and Chemicals Ltd.

Corporate Office

Wing - IV, Matix House, Salt Lake

City Centre, Block - LA, Sector - III, Salt Lake City

Kolkata - 700 106, West Bengal, India

Ph: 91-9228140051 Fax: 91-9228140052

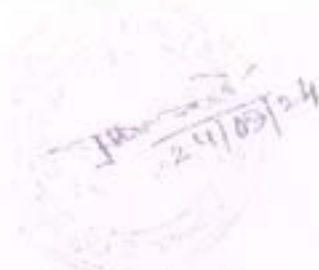
Registered Office

Corporate Office, Matix House

Wing - IV, Block - LA, Sector - III, Salt Lake City

Kolkata - 700 106, West Bengal, India

Ph: 91-9228140051



**[FORM-V]**

(See rule 14)

Environmental Statement for the financial year ending the 31<sup>st</sup> March, 2024**PART-A**

- I. Name and address of the owner/occupier of the industry operation or process: Sri Rajan Thapar, Matix Fertilisers and Chemicals Limited, Panagarh Industrial Park PO- Panagarh Bazar, Dist - Purba Bardhaman, West Bengal -713148
- II. Industry category Primary 31021000 (STC code)  
Secondary 2873 (SIC Code)
- III. Production capacity: 2200 MTPD Ammonia (avg), 3850 MTPD urea (avg), 54 MW Captive Power (avg)
- IV. Year of establishment: 2015
- V. Date of the last environmental statement submitted: 23<sup>rd</sup> September 2023

**PART-B****1) Water and Raw Material Consumption**Water Consumption m<sup>3</sup>/Day

Source	During the financial year: FY 2022 – 2023		Current financial year FY 2023 – 2024	
UOM	M <sup>3</sup>	M <sup>3</sup> /Day	M <sup>3</sup>	M <sup>3</sup> /Day
A. Process	2064320	5659.52	1653031	4538.85
B. Cooling*	1049285	6345.48	4352103	12032.15
C. Domestic	77114	213.27	81232	222.56
Total	3187629	14212.40	6126366	16754.55

\*\*\* excluding evaporation & dist. loss in Cooling Tower, Water vapour evaporation loss, Fire water loss, utility water etc.





Name of Products Process water consumption per unit of product output:

Name of the products	Water consumption per unit of products in M <sup>3</sup> /MT			
	During the financial year FY 22-23		During the current financial year FY 23-24	
	Production	Consumption	Production	Consumption
Urea	1052291 MT	2.64 m <sup>3</sup> /MT Urea	1406684	2.58
Ammonia	617596 MT		862207	
Captive Power	113565 MWH	1.77 m <sup>3</sup> /MW	144704	1.46

i) Raw Material Consumption

Name of the raw materials	Name of the products	Consumption of raw materials							
		During the financial year FY 2022-2023				During the current financial year FY 2023-2024			
RLNG/Coal Bed Methane (CBM)	Urea, Ammonia and Captive Power	Following chemicals and fuels were consumed during FY 2022-2023 for Steam and Power Generation.				Following chemicals and fuels were consumed during FY 2023-2024 for Urea, ammonia and Power Generation			
Hydrochloric Acid (32%)		Sl. No	Chemical	Unit	(FY 22-23)	Sl. No	Chemical	Unit	(FY 23-24) (Total)
Sodium Hydroxide (48%)		1	HCl	MT	519.00	1	HCl	MT	759.15
Sulphuric Acid (98%)		2	NaOH	MT	395.00	2	NaOH	MT	447.54
Chlorine		3	H2SO4	MT	144.55	3	H2SO4	MT	286.09
		4	Chlorine	MT	128.12	4	Chlorine	MT	143.05
	5	Coal Bed Methane Fuel	MM	649465630	5	Coal Bed Methane Fuel/RLNG	MM	861982596	



### PART-C

Pollution discharged to environment/unit of output  
(Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (Mass/day)		Quantity of pollutants in discharges (Mass/Volume)		Percentage of variation from prescribed standards with reasons
A. Water	FY 22-23 (Kg/Day)	FY 23-24 (Kg/Day)	FY 22-23 (mg/L)	FY 23-24 (mg/L)	FY 23-24
pH	NA	NA	7.7	7.6	-
TSS	73.92	74.21	28.0	30.2	-69.5
Ammoniacal N	54.83	38.34	24.6	15.6	-68.8
Nitrate N	13.30	15.32	5.0	6.2	-18.0
O&G	13.20	12.29	<5.0	<5.0	+50.0
Total Kjeldahl Nitrogen	70.11	51.72	30.0	21.0	-72.0
B. Air					
	FY 22-23 (Kg/Day)	FY 23-24 (Kg/Day)	FY 22-23 (mg/Nm3)	FY 23-24 (mg/Nm3)	FY 23-24
Auxiliary Boiler – PM	25.45	30.26*	9.36	10.88	-62.7
Primary Reformers – NO2 in mg/Nm3 at 3% O2	181.68	637.31	25.7	117.4	-85.7
Proiling Tower- PM in mg/Nm3	16949.24	4473.74	46.32	19.50	-61.0
HRSR – PM in mg/Nm3	155.88	44.24	35.73	10.42	-83.1
DG Set-1 PM in mg/Nm3	4.61	5.89**	42.41	54.52	-60.7
DG Set-2 PM in mg/Nm3	4.50	6.72**	40.25	60.11	-58.9

- \* Auxiliary boiler not running every day. It only operates during plant startups. In 2022-23 and 2023-24, the boiler operated for 15 days and 13 days respectively.
- \*\* DG sets are operated only during emergency/ blackouts. In 2022-23 and 2023-24, the DG sets operated for 6.15 days and 9.16 days respectively.

# All units are in mg/l except pH





**PART - D**

**Hazardous Wastes**

(As specified under Hazardous Waste Management and Handling Rules, 2016 and its amendments)

Hazardous Waste	Total quantity generated in Kg.	
	During the last financial Year: 2022-2023	During the current financial Year: 2023-2024
Used Oil	24890	9080
Waste oil	0.0	0.0
Wastes or Residue Containing Oil	0.0	0.0
Contaminated Plastic Wastes	45130	2540
PVC Film & Old Fan Blades	2330	0.0
Used/Spent Resin	42050	8140
ETP Sludge	2650	3000
Spent Catalyst	2960	0.0
Used Insulation (Rock Wool)	9410	24680

**PART - E**

**Solid Wastes**

Solid Waste	Total quantity generated in Kg.	
	During the last financial Year: 2022- 2023	During the current financial Year: 2023- 2024
a) From process	Nil	Nil
Raw water sludge	Nil	2500
Spent activated carbon	Nil	24700
Spent Anthracite	Nil	Nil
b) From Pollution control facilities	Nil	Nil
c) 1. Quantity recycled or reutilized within the unit 2. Sold 3. Disposed	Nil	Nil
	Nil	Nil
	Nil	Nil



#### PART – F

Please specify the characterization (in terms of the composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

The quantities of hazardous waste generated in FY23-24 are mentioned above table in Part D. These were generated due to plant's annual and periodic shutdown maintenance, repairing, overhauling activities and replacement of older materials from process equipment and systems like:- DMF, ACF, MGF, Catalytic Columns, GT, etc. The Hazardous wastes generated are segregated as per their categories and stored at site in the designated HW storage area located away from operation area. These wastes were disposed of through Manifest system to authorized recyclers for recycling, reuse or WBPCB recognized agency (West Bengal Wastes Management Ltd.), having CHWTSO facilities for final treatment and disposal.

Solid wastes generated due to road repair, raw water sedimentation, canteen waste treatment, etc are used in low lying areas filling or gardening as per their characteristics and applicability.

#### PART – G

**Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production.**

Natural resource conservation and recycling of waste are our prime focus and responsibility. Various pollution control measures have been taken to reduce environmental pollution load.

1. We are using natural Gas and CBM as raw materials due to which GHG emission (SO<sub>x</sub>, NO<sub>x</sub>, CO<sub>2</sub> etc.) through stacks are minimum. Particulate Matter emission is also minimum.
2. We have installed low NO<sub>x</sub> boiler limiting NO<sub>x</sub> emission to atmosphere.
3. Our Pulling Tower for urea melts pulling is of Natural draft, hence urea particle emissions are minimum.
4. In Urea production, we have installed hydrolyzer and stripper for treatment of urea process condensate and recovery of ammonia from that.
5. We are recycling boiler blow down for cooling water make-up and cooling tower blow down for fire water.
6. We have a WHRB unit to utilize hot flue gases for boiler operation and power generation.
7. Greenbelt has been coverage of more than 165.21 acres and its further maintenance & development activities are performing with different native species of plants as stipulated.
8. We have installed flare stacks in Ammonia, Urea and Ammonia storage facilities for burning of accidental release Ammonia/NG.





#### PART - H

Additional measures/investment proposals for environmental protection including abatement of pollution, prevention of pollution.

1. Recycling of condensate water from steam condensate, process condensate and turbine condensate, is done and reused in urea ammonia manufacturing process.
2. Rainwater harvesting pond (approx. 50,000 KL capacity) has been developed inside factory to collect and store rainwater that is being recycled/reused for various service activities inside the premises.
3. Online Measurement facilities for monitoring of Environmental parameters of emission and liquid effluent are in place.
4. We have installed one CAAQMS unit at site and will install another 2 units in 2024-25.
5. Internal roads have been paved, cleaned on regular basis and water is sprayed to prevent dust.
6. We have installed Ammonia, Chlorine analysers at strategic locations to identify and control fugitive emissions.
7. Acoustic chambers have been provided in DG sets and silencers provided wherever required to control noise.

#### PART - I

Any other particulars for improving of the quality of environment.

1. EPR registration as per Plastic waste Management Rules done with CPCB and renewed every year. EPR compliance done for FY23-24 and certificates uploaded.
2. Wastes segregation at source and disposed as per the laid down practices. House-keeping measures adopted.
3. Bio-medical wastes from our Occupational Health Centre done as per BMW Rules to WBPCB recognized Common wastes treatment and disposal facility (M/s Medicare Environmental Management Private Limited).
4. Training and awareness on environmental requirements and natural resource conservation measures provided to all stake holders on regular basis.
5. Implementation, follow up and continual improvement of IMS with respect to ISO 14001:2015 and ISO 45001:2018 and EnMS (ISO 50001:2018) done to further improve the Environment as well as energy performance for sustainability.
6. We are installing floating solar cells of 1 MW to conserve Natural gas and prevent water evaporation from water reservoir.

Date \_\_\_\_\_

Place / \_\_\_\_\_



  
Authorized Signatory





5/7/2021



Government of India  
Ministry of Commerce & Industry  
Petroleum & Explosives Safety Organisation (PESO)  
8, Esplanade East, 1st floor, Kolkata - 700069

E-mail : [jtccekkolkata@explosives.gov.in](mailto:jtccekkolkata@explosives.gov.in)  
Phone/Fax No : 033 - 22486600,22480427

No P/HQ/WB/15/2656 (P372245)

Dated : 07/05/2021

To,

M/s. MATIX Fertilisers & Chemicals Ltd,  
Matix Group, Poonam Chams,  
B, Wing, 5th Floor, Dr. Annie Besant,  
Mumbai,  
Taluka: Mumbai,  
District: MUMBAI,  
State: Maharashtra  
PIN: 400018

Sub : Petroleum Class A Installation at Plot No, 3136, 3137, 3332, 3348, 3411, 3412, 3413, 3414, 3415, 3416, 3417, 3226, 3228, 3229, 3230, na, Pondali & kota Chandipur, Taluka: Ausgram - II, District: PURBA BARDHAMAN, State: West Bengal, PIN: 713148 . License No. P/HQ/WB/15/2656 (P372245) granted in FORM XV of Petroleum Rules 2002 - Surrender of License regarding.

Sir(s),

With reference to your letter no.MFCL/F&S/PESO/20-21/002 dt.10/04/2021 the subject licence is cancelled as desired by you. You are advised to intimate this office the stock of Petroleum in your possession. In this connection please comply with procedure laid down in Rule 153 of Petroleum Rules 2002.

You are also advised to submit the original copy of the licence with approved plan for effacement.

Your's faithfully,

Abdul Muttalib  
Controller of Explosives  
For Jt. Chief Controller of Explosives  
Kolkata

Copy forwarded to :-

1. The District Magistrate, PURBA BARDHAMAN(West Bengal) with reference to his NOC No 348/5/FS/II/4-02Part2 Dated 27/06/2016
2. Chief Controller of Explosives, Nagpur

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)

Disclaimer : This page gives the latest action taken by this organization on your application. This page is made

5/7/2021



Government of India  
Ministry of Commerce & Industry  
Petroleum & Explosives Safety Organisation (PESO)  
8, Esplanade East, 1st floor, Kolkata - 700069

E-mail : jtccekolkata@explosives.gov.in

Phone/Fax No : 033 - 22486600, 22480427

No P/HQ/WB/15/2655 (P372255)

Dated : 03/05/2021

To,

M/s. MATIX Fertilisers & Chemicals Ltd,  
Matix Group, Poonam Chambers,  
B, Wing, 5th Floor, Dr. Annie Besant,  
Mumbai,  
Taluka: Mumbai,  
District: MUMBAI,  
State: Maharashtra  
PIN: 400018

Sub : Petroleum Class A Installation at Plot No,  
3136,3137,3332,3348,3411,3412,3413,3414,3415,3416,3417,3226,3228,3229,3230, Mouja 77, Pondali &  
Kota chandipur, Taluka: Ausgram - II, District: PURBA BARDHAMAN, State: West Bengal, PIN: 713148 .  
License No. P/HQ/WB/15/2655 (P372255) granted in FORM XV of Petroleum Rules 2002 - Cancellation of  
License regarding.

Sir(s),

With reference to your letter no.MFCL/F&S/PESO/20-21/002 dt.10/04/2021 the subject licence is cancelled as desired by you. You are advised to intimate this office the stock of Petroleum in your possession. In this connection please comply with procedure laid down in Rule 153 of Petroleum Rules 2002.

You are also advised to submit the original copy of the licence with approved plan for effacement.

Your's faithfully,

Abdul Muttalib  
Controller of Explosives  
For Jt. Chief Controller of Explosives  
Kolkata

Copy forwarded to :-

1. The District Magistrate, PURBA BARDHAMAN(West Bengal) with reference to his NOC No 347/5/FS/14-02Part1 Dated 27/06/2016
2. Chief Controller of Explosives, Nagpur

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)