

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH  
AT CHENNAI**

**Original Application No 33 OF 2024**

**IN THE MATTER OF:**

**NUKATATI RAJA SEKHAR**

..... Applicant

Vs

**UNION OF INDIA & OTHERS**

.... Respondents

**REPORT FILED BY THE APPCB – R4**

**DATE - 10.12.2024**



**M/s MADHURI DONTI REDDY  
ADVOCATE**

**STANDING COUNSEL FOR GOVERNMENT OF ANDHRA PRADESH**

**A.P. POLLUTION CONTROL BOARD**

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,  
SOUTHERN ZONE BENCH, CHENNAI  
In Original Application No. 33 of 2023 (SZ)  
IN THE MATTER OF

Nukatati Rajasekhar & Anr

..... Applicant (s)

Versus

Union of India & Ors

.... Respondent (s)

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Dt.: 10.12.2024  
Place: Kakinada.

*MBS Shankar Rao*  
Environmental Engineer,  
A.P. Pollution Control Board,  
Regional Office, Kakinada.


**ENVIRONMENTAL ENGINEER**  
**A.P. POLLUTION CONTROL BOARD**  
**Regional Office, KAKINADA**


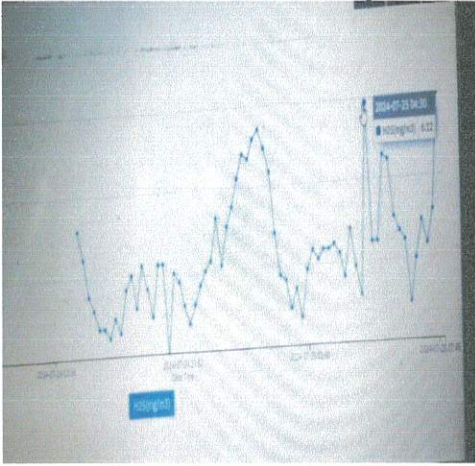
**STATUS REPORT ON REPLY FILED BY THE M/s. ANDHRA PAPER LIMITED, SRIRAMNAGAR, RAJAMAHENDRAVARAM, EAST GODAVARI DISTRICT TO THE APPCB'S REPORT DT.28.08.2024 IN O.A. NO. 33 OF 2023(SZ) FILED BY SRI NUKATATI RAJA SEKHAR.**

M/s. Andhra Paper Limited has submitted reply to APPCB report dated 28.08.2024 filed in the Hon'ble NGT. The unit has submitted reply/ clarification on the non-compliances mentioned in the APPCB report dated 28.08.2024. The details of the non-compliances, clarification given by the unit and the latest compliances status is as follows:

S. No.	Direction	Clarification furnished by the industry	Latest compliance status
1.	The lease agreement of discharge of treated effluent to lagoons at Turuplanka island was expired in 1999 and yet to be renewed. The industry shall immediately renew the lease agreement for discharge of treated effluent to lagoons at Turpulanka sand shallows of River Godavari.	<p>Under Progress with District Administration. The 7<sup>th</sup> Respondent is diligently pursuing with the Administration and has been continuously sending letters to the District Collector for issuing the lease renewal order.</p> <ul style="list-style-type: none"> <li>• Principally approved for 33 years from 2009 onwards up to 2042 by APLMA &amp; Commissioner of Industries</li> <li>• Now pending with District Collector Office for fixation of lease rental.</li> <li>• Yearly lease rentals are being promptly paid to Thasildhar, Rajahmundry Urban, till date.</li> <li>• Letters submitted to District Collector on 29.07.2023, 16.09.2023, 16.10.2023, 20.11.2023, 07.12.2023, 02.01.2024, 11.01.2024, 23.01.2024, 03.02.2024, 19.02.2024, 07.03.2024, 22.03.2024, 23.05.2024, 24.06.2024, 23.07.2024, 23.08.2024, 27.09.2024, 30.10.2024 &amp; 20.11.2024 <b>(Annexure 1)</b> totalling to 18 letters till date requesting to process lease renewal along with personal follow ups during meetings.</li> </ul> <p><b><u>Present Status:</u></b>  <b><u>11.09.2024:</u></b> The District Collector, East Godavari District has convened a meeting with all stake holders including the Joint Collector, Municipal Commissioner, Additional Director – Industries, Executive Engineer – Irrigation, Environmental Engineer - APPCB, RDO &amp; Thasildar. The Collector has directed to conduct a joint inspection of Turpulanka lands and has sought input from each of the concerned departments to proceed forward for lease renewal. <b>(Annexure-2)</b>  <b><u>17.10.2024:</u></b> The Thasidhar – Urban Rajahmundry and the City/Town Planner along with their team, inspected Turpulanka for land survey</p>	<p>Not complied.</p> <p>The representative of the industry informed that the lease agreement procedure is under Progress with District Administration &amp; is being perused constantly and writing communications to release renewal order to Hon'ble District Collector. Company informed that, yearly lease rentals are being paid to Thasildhar, Rajahmundry Urban.</p> <p>The Collector &amp; District Magistrate, East Godavari District has sought remarks / report from the APPCB on the renewal of lease agreement for discharge of treated effluents to lagoons at Turpulanka island. The APPCB has submitted report to the Collector &amp; District Magistrate, East Godavari District.</p>

		<p>and conducted physical surveying of the lands.</p> <p><b>19.10.2024:</b> Detailed Land survey conducted by Rajahmundry Thasidhar Office with land surveyors</p> <p><b>14.11.2024:</b>The 7<sup>th</sup> Respondent understands from the from the District Collector's Office that, the Environmental Engineer - APPCB, Executive Engineer - Godavari Head Works (Irrigation), Thasildhar - Rajahmundry Urban &amp; Rajahmundry Municipal Corporation have submitted their reports on Turpulanka land to District Collector as on 14.11.2024.</p> <p>The fact remains that the 7<sup>th</sup> Respondent has been duly paying the lease rentals to the Thasildhar, Rajahmundry Urban who has been accepting the same and have been permitting the 7<sup>th</sup> Respondent to use the sand shoals in terms of the lease agreement till date without any disturbance or obstruction. The 7<sup>th</sup> Respondent herein has taken all possible efforts to get their Turpulanka lease renewed and have left no stone unturned to get the same done. The matter is now in the final stages of being approved and given effect to by the District collector and this Respondent shall abide by the conditions that may be laid down in this regard.</p>	
7.	<p>The industry shall expedite plan of action for alternate disposal mode of treated wastewater along with treated sullage of Rajamahedravararam. The progress shall be reported every month to District Administration and to the Board.</p>	<p>Under Progress with District Administration &amp; APPCB. Details of various communications and Current status is as follows:</p> <p>1) M/s. CII- Triveni Water Institute completed "Feasibility study for Exploring the alternative options for effluent discharge" on 20.01.2017 and was submitted to APPCB on 22.04.2017.</p> <p><b>(Annexure 16 in 7<sup>th</sup> Respondent's original Reply)</b></p> <p>2) The District Collector constituted a District Level Implementation committee on 24.06.2022.</p> <p>3) District Level Implementation Committee meeting held under the Chair of the District Collector to discuss the project modalities and way forward for implementation on 02.07.2022. Minutes of Meeting (MoM) was circulated for with various actions points across various departments.</p> <p>4) As per the MoM action items No.4 &amp; 7, the 7<sup>th</sup> Respondent has identified Professional agency and has informed APPCB - Regional office, Kakinada for on 01.10.2022 and had pursued them again on 22.12.2022 with copy to</p>	<p>Andhra Paper engaged M/s. CII-Triveni Water Institute &amp; prepared the "Feasibility study for Exploring the alternative options for effluent discharge" on 20.01.2017. Subsequently, the unit has commissioned tertiary clarifier to improve the treated effluent quality and also proposed to prepare DPR to design alternative disposal mode of treated effluent water by engaging M/s. GSI planning &amp; Management, New Delhi. The DPR preparation was not completed and the same was reviewed in the Task Force Committee meeting on 26.02.2024 and the industry was issued with direction (Direction No.7) as "The industry shall expedite plan of action for alternate disposal mode of treated wastewater along with treated sullage of Rajamahendravararam. The progress shall be reported every month to District Administration and to the Board." A copy of the direction order dated 15.03.2024 is herewith submitted as <b>Annexure-I</b>.</p>

		<p>District Collector.</p> <p><b>Latest Status:</b>          APPCB External Advisory Committee (EAC - Task Force) reviewed during meeting on 13.01.2023 and passed the below directions:          APPCB EAC committee noticed that the 7<sup>th</sup> Respondent has identified professional agency and profile of the agency forwarded to APPCB for review and suggestions. The Environmental Engineer - APPCB - Kakinada was directed to verify the competence of professional agency M/s. GSI Planning and management - New Delhi for preparation of DPR and tender document within a period of three (3) months for marine discharge pipe line. He was further directed to submit the data within 15 days, on all industries (having potential to discharge into surface water courses) located in the downstream of Andhra Paper to from a consortium for laying marine discharge pipe line into Bay of Bengal.</p>																																																	
9.	<p>The industry shall regularly operate the water sprinklers at coal yard and lime kiln area for suppression / containment of fugitive emissions. The industry shall provide flow meter with totalizer to quantify the water consumed for operation of the sprinklers and the records shall be kept accessible to inspecting officials.</p>	<p><b>Action Plans and Status:</b>          Water sprinklers provided at various locations to suppression fugitive dust. The Flow meters' procurement and installation will be completed by December, 2024 at an estimated cost of Rs.10.00 Lacs.          The 7<sup>th</sup> Respondent has issued Purchase order to M/s. +HAUSER PVT LTD on 11.10.2024 with cost of Rs.10.0 Lac, and the delivery of the equipment is expected by 20.12.2024. <b>(ANNEXURE 3)</b>  <b>Permanent Water sprinklers provided as below:</b></p> <table border="1" data-bbox="597 1536 1075 2096"> <thead> <tr> <th>Area</th> <th>No of sprinklers</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lime Kiln Road</td> <td>20</td> <td rowspan="2">51</td> </tr> <tr> <td>Coal yard to Chip dust feeding area at Boiler roads</td> <td>14</td> </tr> <tr> <td>Coal yard to Boiler Stack roads</td> <td>17</td> <td rowspan="6">86</td> </tr> <tr> <td>Coal yard shed - 1</td> <td>39</td> </tr> <tr> <td>Coal yard shed - 3</td> <td>12</td> </tr> <tr> <td>Coal yard shed - 4</td> <td>11</td> </tr> <tr> <td>Coal yard shed - 5</td> <td>8</td> </tr> <tr> <td>Coal yard shed - 6</td> <td>16</td> </tr> <tr> <td>Movable sprinklers- coal yard</td> <td>8</td> <td></td> </tr> </tbody> </table> <div data-bbox="609 2096 1047 2356">  </div>	Area	No of sprinklers	Total	Lime Kiln Road	20	51	Coal yard to Chip dust feeding area at Boiler roads	14	Coal yard to Boiler Stack roads	17	86	Coal yard shed - 1	39	Coal yard shed - 3	12	Coal yard shed - 4	11	Coal yard shed - 5	8	Coal yard shed - 6	16	Movable sprinklers- coal yard	8		<p>The unit has provided permanent water sprinklers at various locations to suppression fugitive dust and the details are as follows:</p> <table border="1" data-bbox="1112 1210 1502 2057"> <thead> <tr> <th>Area</th> <th>No of sprinklers</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lime Kiln Road</td> <td>20</td> <td rowspan="2">51</td> </tr> <tr> <td>Coal yard to Chip dust feeding area at Boiler roads</td> <td>14</td> </tr> <tr> <td>Coal yard to Boiler Stack roads</td> <td>17</td> <td rowspan="6">86</td> </tr> <tr> <td>Coal yard shed - 1</td> <td>39</td> </tr> <tr> <td>Coal yard shed - 3</td> <td>12</td> </tr> <tr> <td>Coal yard shed - 4</td> <td>11</td> </tr> <tr> <td>Coal yard shed - 5</td> <td>8</td> </tr> <tr> <td>Coal yard shed - 6</td> <td>16</td> </tr> <tr> <td>Movable sprinklers in coal yard</td> <td>8</td> <td></td> </tr> </tbody> </table> <p>The unit has to provide Flow meters for assessing water consumption for dust suppression. The unit representative informed that they are in the process of procurement and inform the installation will be completed by December, 2024.</p>	Area	No of sprinklers	Total	Lime Kiln Road	20	51	Coal yard to Chip dust feeding area at Boiler roads	14	Coal yard to Boiler Stack roads	17	86	Coal yard shed - 1	39	Coal yard shed - 3	12	Coal yard shed - 4	11	Coal yard shed - 5	8	Coal yard shed - 6	16	Movable sprinklers in coal yard	8	
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13.	The industry shall complete reliability studies on the NCG collection and treatment system by 31.03.2024.	<p>Action Plans and Status:</p> <p>1) Pursuant to time extension granted by APPCB, based on technical expertise and subsequent commercial discussions, Andhra Paper awarded a purchase order to M/s. Cholamandalam MS Risk Services Limited on 19.07.2024 to carry out reliability studies on the NCG collection and treatment system &amp; dispersion pattern of odours substances in the core zone and possible impacts in the surroundings of the industry. <b>(ANNEXURE 4)</b></p> <p>2) 01.08.24 to 02.08.24: Preliminary Site visit and assessment conducted by M/s. Cholamandalam MS Risk Services Limited.</p> <p>3) 17.09.24 to 23.09.24: Reliability study &amp; NCG sampling completed in core zone area done. The Report yet to receive from M/s. Cholamandalam and is expected in a month's time.</p>	Andhra Paper awarded purchase order to M/s. Cholamandalam MS Risk Services Limited on 19.07.2024 to carry out reliability studies on the NCG collection and treatment system & dispersion pattern of odours substances in the core zone and possible impacts in the surroundings of the industry. Kick off meeting done on 29.07.2024. Preliminary Site visit and assessment conducted by M/s. Cholamandalam MS Risk Services Limited from 01.08.24 to 02.08.24. From 17.09.24 to 23.09.24 M/s. Cholamandalam MS Risk Services Limited conducted assessment on Reliability study & NCG sampling also completed in core zone area done. The report is yet to receive from M/s.Cholamandalam.
14.	The industry shall complete installation of H2S online stack analysers to rotary kiln - 1 & 2 and connectivity with website of APPCB & CPCB by 30.04.2024 for continuous display of the monitoring values in the online portal.	<p>RLK.2 Stack with a Capital investment of Rs.14.00 Lacs installed and connected to CPCB &amp; APPCB from 24.07.2024.</p>  <p><b>Kiln. 2 Stack H2S Online analyser</b></p>  <p><b>Screen Shot - Connected to APPCB &amp; CPCB</b></p> <p><b>RLK. 1 Stack:</b> Lime Kiln No: 1 is proposed to be replaced with new Lime Kiln in place of old kiln by adopting latest technologies</p>	<p>The industry has provided H<sub>2</sub>S online stack analysers to rotary kiln -2 and the same was connected to CPCB &amp; APPCB on 24.07.2024.</p> <p>With regard to the Lime Kiln No:1, the unit has proposed to replace existing Kiln with new Lime Kiln by adopting latest technologies with NEW ESP for dust control.</p> <p>The unit has applied for CTE of the Board for replacement of existing 100 TPD Lime Kiln with new 100 TPD Lime Kiln and the Board vide CTE order 24.04.2024 permitted the replacement of existing 100 TPD Lime Kiln with new 100 TPD Lime Kiln. A copy of the CTE order dated 24.04.2024 is herewith submitted as <b>Annexure-II</b>.</p> <p>The civil works of the new kiln are completed and erection of the machinery was in progress.</p>

		with NEW ESP for dust control. In this regard, the CTE already had been obtained from Board. It is will be commissioned by the end of January 2025. This further helps to control emissions and to able to maintain all process control parameters like temperatures, O2 ratios etc. The New Kiln will be fitted with Online PM & H <sub>2</sub> S analysers.	
15.	The industry shall undertake periodical study by an reputed organization to identify the dispersion pattern of odours substances in the core zone and possible impacts in the surroundings of the industry; to furnish short & long term plans to implement requisite containment measures to mitigate any odour nuisance in the surroundings. The study findings and implementation plan of action to alleviate odour nuisance in the surroundings shall be furnished to the Board within 3 months.	Please refer to response given to point No.13 above	Andhra Paper awarded purchase order to M/s. Cholamandalam MS Risk Services Limited on 19.07.2024 to carry out reliability studies on the NCG collection and treatment system & <b>also dispersion pattern of odours substances in the core zone and possible impacts in the surroundings of the industry.</b> A copy of the purchase order is herewith submitted as <b>Annexure-III.</b> It is to submitted that kick off meeting was done on 29.07.2024. Preliminary Site visit and assessment conducted by M/s. Cholamandalam MS Risk Services Limited from 01.08.24 to 02.08.24. From 17.09.24 to 23.09.24 M/s. Cholamandalam MS Risk Services Limited conducted assessment on Reliability study & NCG sampling also completed in core zone area done. The report is yet to receive from M/s.Cholamandalam.
16.	The industry to implement measures to control Hydrogen Sulphide emissions at Rotary Lime Kilns -1 & 2 to achieve compliance of H <sub>2</sub> S concentration less than 10 mg/Nm <sup>3</sup> within a month and other prescribed standards from the stack emissions of the rotary kilns.	<b>Complied with</b> <b><u>A) Thermal Incineration:</u></b> 1) The rotary lime kiln temperature are always maintained higher than 1050 deg.c for 100 % calcination of Ca Co <sub>3</sub> to CaO, which is the output product to use in further manufacturing processes. <b>At these elevated temperatures, there is scientifically no chance of H<sub>2</sub>S emission from stacks.</b> 2) The Non-Condensable Gases (NCG), which contain Sulphur compounds are incinerated in rotary lime-kilns across all pulp and paper industries and the same is a proven technology for treatment of these NCG gases. 3) The temperature profile recorded during sampling period by CPCB on 15.05.2023 is attached as <b>ANNEXURE 5.</b> The temperature of KILN-1 is > 1290 deg.c& KILN-2 is > 1440 deg.c. 4) The higher Kiln temperature indicates that H <sub>2</sub> S presence in the NCG	The rotary lime kiln temperature are being maintained higher than 1050°C for 100 % calcination of CaCo <sub>3</sub> to CaO, which is the output product to use in further manufacturing process. At this elevated temperatures, the total H <sub>2</sub> S gases are being thermal oxidized. In addition to above, the unit has recently installed H <sub>2</sub> O <sub>2</sub> dosing to stack flue gases before ESP as suggested by M/s. Andritz Technologies Private Limited,(Finland based) Chennai and was commissioned on 20.09.2024.  The officials of the Zonal Laboratory, Visakhapatnam conducted stack monitoring on <b>24.10.2024 and 25.10.2024</b> for the stack attached to Lime Kiln-I & II and as per the analysis report,

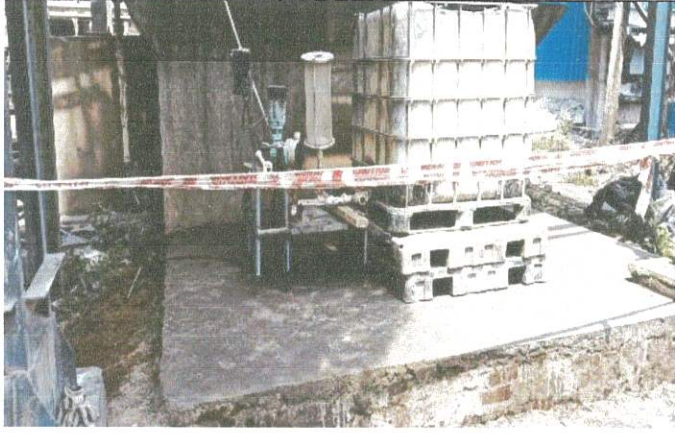
	<p>gases is completely decomposed. Hence, there is scientifically no chance of such high values reporting in stacks flue gases.</p> <p><b><u>B) H2O2 Dosing system for further improvement and care:</u></b>          In addition to above explanation, the 7<sup>th</sup> Respondent has recently installed H2O2 dosing to stack flue gases before ESP as suggested by M/s. ANDRITZ TECHNOLOGIES PRIVATE LIMITED, (Finlandbased) Chennai - 600 032, India, and was commissioned on 20.09.2024.</p>  <p><b><u>C) Sampling by APPCB in Compliance:</u></b>          The H2S values of samples collected by APPCB on 24.10.2024 are within the norms and the same are filed herewith as ANNEXURE 6.</p> <p><b><u>D) Sampling by 3<sup>rd</sup> Party M/S. Glens in compliance:</u></b>          The H2S values of samples collected by NABL accredited 3<sup>rd</sup> party M/S. Glens Innovation Lab Pvt. Ltd on 07.07.2023, 12.12.2023 &amp; 14.12.2023 are within the norms.          Rotary Lime Kiln - 1 H2S values are 9.1 mg/ Nm3 &amp; 8.0 mg/ Nm3 respectively against the norm of 10 mg/Nm3.          Rotary Lime Kiln - 2 H2S value is 8.5 mg/ Nm3 &amp; 7.2 mg/ Nm3 respectively against the norm of 10 mg/Nm3.          The same are filed herewith as ANNEXURES 7 &amp; 8.</p> <p><b><u>E) Monthly sampling by M/s.SV Enviro in compliance:</u></b>          NABL accredited 3<sup>rd</sup> party is testing the samples once in a month and the H2S values are within the norms and the same reports are being submitted to APPCB Regional Office on monthly basis. The 3<sup>rd</sup> party test reports of last two months, i.e., September and October 2024 are filed herewith as ANNEXURE 9.</p>	<p>the H<sub>2</sub>S values in Lime Kiln are 8.6 ppm &amp; 8.2 ppm respectively for the kiln-1 &amp; 2 as against the standard of 10 ppm. A copy of the analysis report is herewith submitted as Annexure-IV.</p>
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Further, it is submitted that M/s. Andhra paper limited has also submitted their compliance status / clarification of the recommendations mentioned in the CPCB report dated 10.08.2023 as mentioned in APPCB report dated 28.08.2024 submitted in the Hon'ble NGT. The observations mentioned in the CPCB report, clarification submitted by the industry and also the latest compliance is as follows:

CPCB's Observation in its Report	Clarification furnished by the industry	Latest compliance status
<p><b>Page No: 22</b> <b>S. No : 18</b> <b>Point No: (i)</b> To renew the lease agreement for discharge of treated effluent to lagoons at Turpulanka.</p>	<p>Under Progress with District Administration. The 7<sup>th</sup> Respondent is diligently pursuing with the Administration and has been continuously sending letters to the District Collector for issuing the lease renewal order.</p> <ul style="list-style-type: none"> <li>• Principally approved for 33 years from 2009 onwards up to 2042 by APLMA &amp; Commissioner of Industries</li> <li>• Now pending with District Collector Office for fixation of lease rental.</li> <li>• Yearly lease rentals are being paid to Thasildhar, Rajahmundry Urban.</li> <li>• Letters submitted to District Collector on 29.07.2023, 16.09.2023, 16.10.2023, 20.11.2023, 07.12.2023, 02.01.2024, 11.01.2024, 23.01.2024, 03.02.2024, 19.02.2024, 07.03.2024, 22.03.2024, 23.05.2024, 24.06.2024, 23.07.2024, 23.08.2024, 27.09.2024, 30.10.2024 &amp; 20.11.2024 (<b>Annexure 1 above</b>)</li> </ul> <p>totalling to 18 letters till date requesting to process lease renewal along with personal follow ups during meetings. <b>Present Status:</b> <b>11.09.2024:</b>The District Collector, East Godavari District has convened a meeting with all stake holders including the Joint Collector, Municipal Commissioner, Additional Director – Industries, Executive Engineer – Irrigation, Environmental Engineer - APPCB, RDO &amp;Thasildar. The Collector has directed to conduct a joint inspection of Turpulanka lands and has sought input from each of the concerned departments to proceed forward for lease renewal. (<b>Annexure 2 above</b>) <b>17.10.2024:</b> The Thasidhar – Urban Rajahmundry and the City/Town Planner along with their team, inspected Turpulanka for land survey and conducted physical surveying of the lands. <b>19.10.2024:</b> Detailed Land survey conducted by Rajahmundry Thasidhar Office with land surveyors. <b>14.11.2024:</b>The 7<sup>th</sup> Respondent understands from the from the District Collector's Office that, the Environmental Engineer – APPCB, Executive Engineer – Godavari Head Works (Irrigation), Thasildhar – Rajahmundry Urban &amp; Rajahmundry Municipal Corporation have submitted their reports on Turpulanka land to District Collector as on 14.11.2024. The fact remains that the 7<sup>th</sup> Respondent has been duly paying the lease rentals to the Thasildhar, Rajahmundry Urban who has been accepting the same and have been permitting the 7<sup>th</sup> Respondent to use the sand shoals in terms of the lease agreement till date without any disturbance or obstruction. The 7<sup>th</sup> Respondent herein has taken all possible efforts to get their Turpulanka lease renewed and have left no stone unturned to get the same done. The matter is now in the final stages of being approved and given effect to by the District collector and this Respondent shall abide by the conditions that may</p>	<p>Not complied.</p> <p>The representative of the industry informed that the lease agreement procedure is under Progress with District Administration &amp; is being perused constantly and writing communications to release renewal order to Hon'ble District Collector. Company informed that, yearly lease rentals are being paid to Thasildhar, Rajahmundry Urban.</p> <p>The Collector &amp; District Magistrate, East Godavari District has sought remarks / report from the APPCB on the renewal of lease agreement for discharge of treated effluents to lagoons at Turuplanka island. The APPCB has submitted report to the Collector &amp; District Magistrate, East Godavari District.</p>

<p><b>Page No: 22</b> <b>S. No : 18</b> <b>Point No : ii</b></p> <p>To augment air pollution control devices at recovery boiler and coal fired boiler to control particulate matter emissions.</p>	<p>be laid down in this regard.</p> <p><b>Complied with</b> During planned Mill Annual shut from 10.02.24 to 30.03.24, the following actions have been taken under preventive and predictive maintenance program on ESPs of Recovery Boiler and Coal Fired Boiler: <b>Recovery Boiler:</b> Source emissions from the stacks are controlled by Electrostatic Precipitators (ESP). There are 3 ESPs with total of 11 no's (3+3+5) of electric fields. <b>1) During 2024 Annual Mill shut: ESP No.3 fields 1 to 4 Renovation done as per details given below:</b></p> <ul style="list-style-type: none"> <li>- The field internals for 1 to 4 were replaced at a cost of Rs.13.00 Crores. Company engaged M/s. KC Cottrell Engineering services, Chennai for this project.</li> <li>- Common ash collection conveyers and related ducting were renovated</li> <li>- Inlet &amp; Outlet ducting for ESP.3 renovated.</li> <li>- Inlet &amp; Outlet Cone of ESP.3 modified to balancing flue gas distribution among all ESPs.</li> <li>- Rapping mechanism also undertaken for maintenance and repairs to improve dust collection.</li> <li>- Addressed thoroughly for Air ingress issue in ESP ducting / cones etc... to avoid negative pressure, aging, leakages and corrosion of ESP internal components to increase the efficiency dust collection.</li> </ul> <p><b>2) During 2022 Annual Mill Shut: ESP.1 &amp; 2 Renovation:</b> All the internal fields for ESP 1 &amp; 2 completely replaced at a cost of Rs.8.69 Crores.</p> <p><b>3) During 2021 Annual Mill Shut: ESP – 3 field – 5<sup>th</sup> Renovation:</b> The 5<sup>th</sup> field internals were replaced at a cost of Rs.95.0 Lacs.</p> <p><b>Coal fired Boiler:</b> Coal fired boiler Source emissions from the stacks are controlled by Electrostatic Precipitators (ESP). There is 1 ESP with a total of 3 electric fields. <b>1) During 2024 Annual Mill Shut: ESP fields renovation:</b> <b>90 No's of ESP collecting electrode</b> plates for 2 &amp; 3 fields replaced with new due to heavy damages. Air ingress issues in ducting addressed. All the above jobs with respect to recovery boiler and coal-fired boiler are being done as a part of improvement plan. Replacement of aged equipment and spares in a phased manner for reliable operations and controls is being done. Every year during annual maintenance shut overhauling, cleaning and maintenance of ESPs will be undertaken. Further in this regard, this Hon'ble Tribunal may kindly note that 1) NABL accredited 3<sup>rd</sup> party has been testing once in a month and the PM values are within the norms. The 3<sup>rd</sup></p>	<p>The details of action taken by the unit to control particular emissions from the Recovery Boiler and Coal fired boiler are as follows:</p> <p><b>a) Recovery Boiler:</b> Source emissions from the stacks are controlled by Electrostatic Precipitators (ESP). There are 3 ESPs with total of 11 no's (3+3+5) of electric fields. During Feb'24 to April'24, the mill was taken shut down and unit replaced the 1 to 4 fields of ESP No.3 and the details are as follows:</p> <ul style="list-style-type: none"> <li>• The field internals for 1 to 4 were replaced with a cost of Rs. Rs.13.00 Crores.</li> <li>• Common ash collection conveyers and related ducting were renovated.</li> <li>• Inlet &amp; Outlet ducting for ESP.3 renovated.</li> <li>• Inlet &amp; Outlet Cone of ESP.3 modified to balancing flue gas distribution among all ESPs.</li> <li>• Rapping mechanism also undertaken for maintenance and repairs to improve dust collection.</li> <li>• Addressed thoroughly for Air ingress issue in ESP ducting / cones etc... to avoid negative pressure, aging, leakages and corrosion of ESP internal components to increase the efficiency dust collection.</li> </ul> <p><b>b) Coal fired boiler:</b> Source emissions from the stacks are controlled by Electrostatic Precipitators (ESP). There is 1 ESP with a total of 3 electric fields. During Feb'24 to April'24,</p>
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	<p>party test reports of last two months i.e., for SEP &amp; OCT 2024 are filed herewith as <b>ANNEXURE - 10</b></p> <p>2) The PM values of samples collected by APPCB on 24.10.2024 are within the norms. The APPCB reports of the collected samples are filed herewith as <b>ANNEXURE 11</b> for effluents and <b>ANNEXURE 12</b> for Stack emission.</p> <p>3) Previously the PM values of samples collected by M/s. Glens Innovation Labs Pvt. Ltd on 12.12.2023 &amp; 14.12.2023 is within thenorms and the same are filed herewith as <b>ANNEXURE 13</b>.</p>	<p>the mill was taken shut down and during this period, 90 No's of ESP collecting electrode plates for 2 &amp; 3 fields are replaced with new due to heavy damages. Also, Air ingress issues in ducting was addressed.</p> <p>The officials of Zonal Laboratory, Visakhapatnam conducted stack monitoring on 24.10.2024 and 25.10.2024 as per the analysis report, the value of PM is <b>44.7 mg/Nm<sup>3</sup>(for the stack attached to 1 x 1300 TPD recovery boiler); 40.1 mg/Nm<sup>3</sup>(for the stack attached to 1 x 105 TPH coal fired boiler) as against the standard of 50 mg/Nm<sup>3</sup></b>. A copy of the analysis report is herewith submitted as <b>Annexure-V</b>.</p>
<p><b>Page No: 22</b> <b>S. No : 18</b> <b>Point No : iii</b></p> <p>To implement measures to control Hydrogen Sulphide emissions at Rotary Lime Kilns -1 and Rotary Lime Kilns - 2 and comply with the source emission standards.</p>	<p><b>Complied with</b> <b><u>A) Thermal Incineration:</u></b></p> <p>1) The rotary lime kiln temperature are always maintained higher than 1050 deg.c for 100 % calcination of Ca Co3 to CaO, which is the output product to use in further manufacturing processes. <b>At this elevated temperatures, there is scientifically no chance of H2S emission from stacks.</b></p> <p>2) The Non-Condensable Gases (NCG), which contain Sulphur compounds are incinerated in rotary lime-kilns across all pulp and paper industries and the same is a proven technology for treatment of these NCG gases.</p> <p>3) The temperature profile recorded during sampling period by CPCB on 15.05.2023 is attached as <b>(ANNEXURE 5 above)</b>. The temperature of KILN-1 is &gt; 1290 deg.c&amp; KILN-2 is &gt; 1440 deg.c.</p> <p>4) The higher Kiln temperature indicates that H2S presence in the NCG gases is completely decomposed. Hence, there is scientifically no chance of such high values reporting in stacks flue gases.</p> <p><b><u>B) H2O2 Dosing system for further improvement and care:</u></b></p> <p>In addition to above explanation, the 7<sup>th</sup> Respondent has recently installed H2O2 dosing to stack flue gases before ESP as suggested by M/s. ANDRITZ TECHNOLOGIES PRIVATE LIMITED, ( Finland based ) Chennai - 600 032, India, and was commissioned on 20.09.2024.</p>	<p>The rotary lime kiln temperature are being maintained higher than 1050°C for 100 % calcination of CaCo3 to CaO, which is the output product to use in further manufacturing process. At this elevated temperatures, the total H<sub>2</sub>S gases are being thermal oxidized. In addition to above, the unit has recently installed H<sub>2</sub>O<sub>2</sub> dosing to stack flue gases before ESP as suggested by M/s. Andritz Technologies Private Limited, (Finland based) Chennai and was commissioned on 20.09.2024.</p> <p>The officials of the Zonal Laboratory, Visakhapatnam conducted stack monitoring on <b>24.10.2024 and 25.10.2024</b> for the stack attached to Lime Kiln-I &amp; II and as per the analysis report, <b>the H<sub>2</sub>S values in Lime Kiln are 8.6 ppm &amp; 8.2 ppm respectively for the kiln-1 &amp; 2 as against the standard of 10 ppm</b>.A copy of the analysis report</p>

	 <p><b>C) Sampling by APPCB in Compliance:</b> The H2S values of samples collected by APPCB on 24.10.2024 are within the norms. <b>(ANNEXURE 6 above)</b></p> <p><b>D) Sampling by 3<sup>rd</sup> Party M/S. Glens in compliance:</b> The H2S values of samples collected by NABL accredited 3<sup>rd</sup> party M/S. Glens Innovation Lab Pvt. Ltd on 07.07.2023, 12.12.2023 &amp; 14.12.2023 are within the norms. Rotary Lime Kiln - 1 H2S values are 9.1 mg/ Nm3 &amp; 8.0 mg/ Nm3 respectively against the norm of 10 mg/Nm3. Rotary Lime Kiln - 2 H2S value is 8.5 mg/ Nm3 &amp; 7.2 mg/ Nm3 respectively against the norm of 10 mg/Nm3. <b>(ANNEXURE - 7 &amp; 8 above)</b></p> <p><b>E) Monthly sampling by M/s.SV Enviro in compliance:</b> NABL accredited 3<sup>rd</sup> party is testing the samples once in a month and the H2S values are within the norms and the same reports are being submitted to APPCB Regional Office on monthly basis. The 3<sup>rd</sup> party test reports of last two months, i.e., September and October 2024. <b>(ANNEXURE 9 above)</b></p>	<p>is herewith submitted as <b>Annexure-IV.</b></p>
<p><b>Page No : 22</b> <b>S. No : 18</b> <b>Point No : iv</b> To calibrate and operate the OCEMS installed for monitoring particulate matter emissions, properly and record the actual concentrations.</p>	<p><b>Complied With</b></p> <p><b>1) Calibration:</b> Annual Calibration schedule is in place for once in a quarter. The recent calibrations of OCEMS done in March'2024, May'2024 &amp; Aug'24. The calibration reports indicates which are in the acceptable range. Such recent calibration report is herewith filled as <b>ANNEXURE 14.</b></p> <p><b>2) Maintenance &amp; quality control checks:</b> All stack PM online sensors were undertaken for comprehensive maintenance and quality control checks in the month of April,2024 (Mill shut from 19.02.2024 to 30.04.2024 for annual maintenance and further workers unrest) by Equipment Supplier M/S. Swan Environmental Pvt. Limited, Hyderabad. The same reports are filed herewith as <b>ANNEXURES 15, 16, 17 &amp; 18.</b></p>	<p>All stack Online sensors were undertaken for comprehensive maintenance and quality control checks in the month of April,2024 (during Mill shut from 19.02.2024 to 30.04.2024) by M/s. Swan Environmental Pvt. Limited, Hyderabad.</p> <p>The unit is having Annual Calibration schedule once in a quarter. The recent calibrations of OCEMS done in August, 2024. The calibration certificate is herewith attached as <b>Annexure-VI.</b></p>
<p><b>Page No : 22</b> <b>S. No : 18</b> <b>Point No : v</b> To reduce the temperature of the</p>	<p><b>Complied with</b> Compliance report submitted to Regional office - APPCB vide letter no. APL/ENV/2023/11-594, 08.11.2023. <b>ANNEXURE 19</b> Existing ETP cooling tower was rebuild as per below</p>	<p><b>The unit has renovated the existing ETP cooling tower to bring down temperature of effluent less than 35° C and the details of renovations</b></p>

<p>effluent to less than 35°C prior to microbial treatment</p>	<p>and successfully commissioned in the 3<sup>rd</sup> week of August, 2023.</p> <ul style="list-style-type: none"> <li>Entire civil tank and structures renovated.</li> <li>Cooling tower internal replaced</li> <li>Heat exchange surface area increased</li> <li>Wings increased from 4 to 8 No's of new set, accordingly gear new gear box installed</li> <li>Motor capacity increased from 50 HP to 100 HP.</li> <li>Drip eliminators replaced.</li> <li>Modification of inlet effluent distribution header line.</li> <li>Safety handrails replaced with SS pipe.</li> <li>Hot well slope readjusted to maintain equivalence</li> <li>Effluent inlet nozzles replaced</li> </ul> <p>The project work has been assigned to M/s. S.V.Cooling Towers (P) Ltd. E-32 Kavi Nagar Industrial Area, Sector-17, Ghaziabad-201002, U.P, India with a Cost of Rs.73.74 Lakhs.</p>	<p><b>are as follows:</b></p> <p>i) Entire civil tank and structures renovated; ii) Cooling tower internal replaced; iii) Heat exchange surface area increased; iv) Wings increased from 4 to 8 No's of new set, accordingly new gear box installed; v) Motor capacity increased from 50 HP to 100HP vi) Drip eliminators replaced; vii) Modification of inlet effluent distribution header line; viii) Safety handrails replaced with SS pipe; ix) Hot well slope readjusted to maintain equivalence and x) Effluent inlet nozzles replaced. The renovation was completed and commissioned the same in August, 2023 (After inspection of the CPCB officials)</p>
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It is also submitted that the APPCB, Regional Office, Kakinada is collecting the sample of outlet of ETP before discharging into sand shoals located in River Godavari at Turpulanka and as per the analysis reports the analysis values of outlet of ETP are as follows:

S. No.	Date of Sample Collection	Point of Sample Collection	PARAMETERS						
			pH	TSS	TDS	COD	BOD	O & G	AOX
1	24.10.2024	Outlet of ETP	7.23	43	968	88	24	--	--
2	18.09.2024	Outlet of ETP	8.09	32	1072	88	20	<1.0	--
3	08.08.2024	Outlet of ETP	7.03	35	1212	112	26	<1.0	0.422
4	22.07.2024	Outlet of ETP	8.09	40	1432	120	28	<1.0	--
5	28.06.2024	Outlet of ETP	7.18	22	1512	136	38	<1.0	---
6	09.05.2024	Outlet of ETP	6.79	14	1252	128	26	<1.0	---
<b>CONSENT DISCHARGE STANDARDS</b>			<b>6.5 to 8.5</b>	<b>100</b>	<b>---</b>	<b>250</b>	<b>30</b>	<b>10</b>	<b>1 Kg/Ton of paper</b>

**Note:** the plant was under shutdown for maintenance in the month of March, 2024 & April, 2024.

The above information is submitted for kind consideration. The APPCB will abide by all such directions as the Hon'ble Tribunal may deem fit and appropriate.

Dt.: 10.12.2024.  
Place: Kakinada.

*MBC Shankar Rao*  
Environmental Engineer,  
A.P. Pollution Control Board,  
Regional Office, Kakinada.  
**ENVIRONMENTAL ENGINEER**  
**A.P. POLLUTION CONTROL BOARD**  
Regional Office, KAKINADA



**ANDHRA PRADESH POLLUTION CONTROL BOARD**  
 Dr. YSR Paryavaran Bhavan, APIIC Colony Road,  
 Gurunanak Colony, Autonagar, Vijayawada- 520007  
 Phone. No.0866-2463200, Website : <https://pcb.ap.gov.in/>



**Order No. 617/APPCB/HO/ECS/KKD/2019-**

**Date: 15/03/2024.**

### **DIRECTIONS**

**Sub:** APPCB – HO - ECS – M/s. Andhra Paper Limited, Sriramnagar, Rajamahendravaram, East Godavari District - Complaints on water & air pollution problems from your industry – Non-compliance to CTO conditions and prescribed discharge standards – Monitoring (TF) Committee Meeting held on 26.02.2024 – Directions – Issued – Reg.

- Ref:
1. The industry obtained EC on 31.01.2005.
  2. CTO & HWA order dt. 03.07.2023 valid upto 30.06.2028
  3. The Board officials inspected the industry on 07.12.2022.
  4. External Advisory Committee (Task Force) meeting held on 13.01.2023.
  5. SCN No . 617/APPCB/ERM/TF/KKD/2023- Date: 30.01.2023.
  6. Monitoring (TF) Committee meeting held on 26.02.2024.

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**WHEREAS** you are operating an integrated a wood-based Pulp, Paper and Co generation plant in the name and style of M/s Andhra Paper Limited located at Rajamahendravaram, East Godavari District, Andhra Pradesh.

**WHEREAS** the Board issued renewal of Consent to Operate (CTO) & Hazardous Waste Authorization (HWA) dt. 03.07.2023 to your industry for period up to 30.06.2028 to produce Paper - 2,07,550 TPA; Pulp - 2,00,000 TPA; Captive Power - 46 MW and Paper sheets (A4 Sheeter) – 267 TPD.

**WHEREAS** the Board officials inspected the industry and sand shoals of Turpulanka on 07.12.2022 and reported non-compliance to consent conditions and Board directions.

**WHEREAS** the Board reviewed the non-compliance of your industry during EAC (TF) meeting held on 13.01.2023 and issued show cause notice dt. 30.01.2023 (vide ref. 5<sup>th</sup> cited).

**WHEREAS** the Hon'ble NGT (SZ), Chennai registered O.A No. 33 of 2023 (SZ) on the allegations of Sri N. Rajasekhar and Sri M. Pushparaju, Kotilingalapeta, EG District against M/s. Andhra Paper Limited, Sriramnagar, Rajamahendravaram , East Godavari District.

**WHEREAS** CPCB officials inspected your industry in compliance to the Hon'ble NGT order dt. 12.04.2023 in O.A No. 33 of 2023 (SZ) during 15<sup>th</sup> – 17<sup>th</sup> May, 2023 and filed report before the Hon'ble NGT. The main observations and recommendations of the CPCB are as follows –

- a. The annual raw material consumption data and production data of pulp, paper and A4 Sheets and operation of captive power plant during the Financial Years 2020-21, 2021-22 and 2022-23 shows that the Industry is operated within the consented capacity.
- b. Approximately 32,405 KLD of water from River Godavari is utilized in the process section and 27,532 KLD of effluent is generated, complying the EC and Consent to

- Operate conditions. Average water consumed per ton of paper produced is 55 KL and it is complying the permitted quantity of 75 KL per ton of paper in EC conditions.
- c. Effluent Treatment Plant of capacity 45,000 KLD consisting of primary clarifiers, aeration tanks, secondary clarifiers and tertiary clarifiers is installed for treatment of effluent through activated sludge process. The capacity of the ETP is adequate for treating 27,532 KLD of effluent generated from process. During the inspection, the ETP was in operation.
  - d. The treated effluent samples were collected from the outlet of the ETP and inlet of the Lagoons at Turupulanka island. The results of the samples analyzed shows that pH, BOD, COD, TSS, AoX and oil and grease are within the limits of effluent discharge standards
  - e. Electro Static Precipitator along with stack are provided at Rotary Lime Kilns -1, Rotary Lime Kilns -2, recovery boiler and coal fired boiler for control of particulate matter emissions. Source monitoring results shows that particulate matter concentrations at Rotary Lime Kilns -1 and Rotary Lime Kilns -2 are 45.2 mg/Nm<sup>3</sup> and 32.8 mg/Nm<sup>3</sup> and are within the limits of source emission standards for particulate matter i.e., 50 mg/Nm<sup>3</sup>.
  - f. Particulate matter concentrations at recovery boiler is 84 mg/Nm<sup>3</sup> and coal fired boiler is 164 mg/Nm<sup>3</sup> and exceeding the limits of source emission standards for particulate matter i.e., 50 mg/Nm<sup>3</sup>.
  - g. Hydrogen Sulphide concentration at Rotary Lime Kilns -1 and Rotary Lime Kilns -2 are 1206 mg/Nm<sup>3</sup> and 1033 mg/Nm<sup>3</sup> and exceeding the limits of source emission standards for Hydrogen Sulphide i.e. 10 mg/Nm<sup>3</sup>.
  - h. The OCEMS for monitoring of Particulate matter are installed at stacks connected to Rotary Lime Kilns -1, Rotary Lime Kilns -2, recovery boiler and coal fired boiler. Data are connected to the APPCB and CPCB portals. The analysis of OCEMS data of May, 2023 shows that the industry is exceeding emission standards.
  - i. Comparison of concentration of particulate matter emissions recorded during manual monitoring and corresponding OCEMS data shows that OCEMS data recorded are 2 to 4.5 times less than the actual concentration of Particulate matter and actual values are not recorded.
  - j. For control of fugitive emissions, closed conveyers and water sprinklers are provided at coal storage yard; closed conveyers, suction ducts and cyclones are provided to wood chipping yard; and lime dust extraction system, bag filters are provided at Rotary Lime Kilns.
  - k. The hazardous and non-hazardous waste generated are segregated and stored in the designated locations with proper labelling and platforms and disposed through authorized dealers. Waste such as ETP sludge, used lubricated oil, spend ion exchange resin, contaminated cotton/cleaning material were disposed in the boilers along with the fuel complying the consent conditions. The samples of river water were collected from River Godavari at upstream and downstream of locations of lagoons at Turupulanka island. The concentration of pH, BOD and Dissolved Oxygen in river water samples shows that the river water is complying with the Water Quality Criteria of Class of Water 'A' with designated best use for "Drinking Water Source without conventional treatment but after disinfection".
  - l. The industry is complying with the conditions of Environmental Clearance and Consent conditions except for the following:
    - i. The lease agreement of discharge of treated effluent to lagoons at Turupulanka island was expired in 1999 and yet to be renewed.
    - ii. The Industry is exceeding the source emission standards for Particulate matter at recovery boiler and coal fired boiler.
    - iii. The industry is exceeding the source emission standards for Hydrogen Sulphide at Rotary Lime Kiln- 1 and Rotary Lime Kiln -2.
    - iv. OCEMS installed for monitoring emissions are not calibrated and operated properly as particulate matter emissions data recorded in OCEMS are 2 to 4.5

times less than the actual concentration of Particulate matter emissions.

- v. As per the consent conditions, temperature of the effluent shall be below 35°C prior to the inlet of the ETP. To reduce the temperature of the effluent from 45-48°C, the effluent is circulated through cooling tower prior to microbial treatment. As per the records, the temperature at the outlet of the cooling tower is 40-45°C. During the inspection it was observed that the Industry is in the process of renovating the cooling tower to increase the surface area to reduce the effluent temperature to less than 35°C.
- vi. Compared to 33% of the required area to be develop as greenbelt as per the consent conditions, 32.8% of the total land area of the industry is developed as greenbelt.
- vii. The Industry has to install four Continuous Ambient Air Quality Monitoring Stations as per consent conditions. The Industry has installed only two CAAQM Stations and out of two stations, one station is in operation.

#### **CPCB Recommendations:**

The industry may be directed to implement the following:

- i. To renew the lease agreement for discharge of treated effluent to lagoons at Turupulanka.
- ii. To augment air pollution control devices at recovery boiler and coal fired boiler to control particulate matter emissions.
- iii. To implement measures to control Hydrogen Sulphide emissions at Rotary Lime Kilns -1 and Rotary Lime Kilns -2 and comply with the source emission standards.
- iv. To calibrate and operate the OCEMS installed for monitoring particulate matter emissions, properly and record the actual concentrations.
- v. To reduce the temperature of the effluent to less than 35°C prior to microbial treatment.
- vi. To develop greenbelt in 33% of the total land area of the Industry to mitigate effects of fugitive emissions.
- vii. To install two Continuous Ambient Air Quality Monitoring Stations in addition to the existing two CAAQM Stations and ensure operation of all the four CAAQM Stations.

**WHEREAS** the Hon'ble NGT vide order dt. 01.12.2023 in O.A No. 33 of 2023 (SZ) directed the APPCB to file the report.

**WHEREAS** a hearing was conducted before the Monitoring (Task Force) Committee Meeting of A.P. Pollution Control Board on 26.02.2024. The representatives of the industry attended the meeting and informed that they have applied to Government for renewal the lease agreement for discharge of treated effluents into Turpulanka sand shallows of River Godavari. Further informed that upgradation of ETP with jet aerators in aeration tank; dust extraction system in chipper house; water sprinklers at coal yard and renovation of ESP fields in recovery boiler are under progress. Also informed that cooling tower to ETP; oxygen injection line into Aeration Tank-1; water conservation and water sprinklers at coal yard & lime kiln area are under progress and submitted time bound action plan vide letter dt.26.02.2024. The EE, RO, Kakinada attended the meeting through VC and informed that the officials of CPCB, Chennai inspected the unit during May, 2023 in connection with Hon'ble NGT order date.12.04.2023 in O.A.No. 33/2023 (SZ) and observed certain non-compliance/ recommendations. Further informed that the industry is discharging the wastewater generated at their unit into Turpulanka sand shallows of river Godavari after treatment, without obtaining lease renewal from GoAP since 1999. The Board is monitoring

the outlet of ETP and treated wastewater discharges into Turpulanka sand shallows every month. The industry exceeded prescribed emission standards at point sources i.e. PM concentration in stack emissions from coal boiler & recovery boiler; and H<sub>2</sub>S concentration in the stack emissions from Rotary Kiln -1 & 2.

After detailed review, the Committee recommended to issue the specific directions to M/s. Andhra Paper Limited, Sriramnagar, Rajamahendravaram. Accordingly, the Board hereby issues the following directions to your industry under Sec.33(A) of the Water (Prevention & Control of Pollution) Act, 1974 and under Sec.31(A) of Air (Prevention & Control of Pollution) Act, 1981 and amendments thereof -

1. ***The lease agreement of discharge of treated effluent to lagoons at Turuplanka island was expired in 1999 and yet to be renewed. The industry shall immediately renew the lease agreement for discharge of treated effluent to lagoons at Turupulanka sand shallows of River Godavari.***
2. ***The industry shall immediately stop discharging the treated or untreated wastewater into the Turpulanka sand shallows of River Godavari for a period of one month until 25th March, 2024.***
3. ***The industry shall expedite installation of Jet aerators in aeration tank by replacing diffuser membrane system by 30.04.2024.***
4. ***The industry shall upgrade & maintain the cooling tower of the ETP to ensure temperature of the wastewater to less than 35<sup>0</sup>C at inlet of ETP.***
5. ***The industry shall implement latest techniques to improve water conservation and to reduce freshwater consumption to best possible extent. The progress shall be reported periodically.***
6. ***The industry shall complete installation of VFD for aeration tank inlet pumps to maintain consistent flow by 30.07.2024.***
7. ***The industry shall expedite plan of action for alternate disposal mode of treated wastewater along with treated sullage of Rajamahendravaram. The progress shall be reported every month to District Administration and to the Board.***
8. ***The industry shall expeditiously complete replacement of analyzers in the 2<sup>nd</sup> AAQM station for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> and VOC analyzer by 30.04.2024.***
9. ***The industry shall regularly operate the water sprinklers at coal yard and lime kiln area for suppression / containment of fugitive emissions. The industry shall provide flow meter with totalizer to quantify the water consumed for operation of the sprinklers and the records shall be kept accessible to inspecting officials.***
10. ***The industry shall immediately augment air pollution control devices at coal fired boiler by 31.03.2024 and Recovery boiler by 30.04.2024 to control pollutants emissions and ensure compliance to the prescribed emissions standards.***
11. ***The industry shall operate the dust extraction system effectively in chipper house for suppression/containment of fugitive dust emissions.***
12. ***The industry shall expedite installation of additional 2 No. AAQM Stations by 30.05.2024 at representative locations in consultation with RO, Kakinada.***
13. ***The industry shall complete reliability studies on the NCG collection and treatment system by 31.03.2024.***
14. ***The industry shall complete installation of H<sub>2</sub>S online stack analyzers to rotary kiln – 1 & 2 and connectivity with website of APPCB & CPCB by 30.04.2024 for continuous display of the monitoring values in the online portal.***
15. ***The industry shall undertake periodical study by an reputed organization to identify the dispersion pattern of odours substances in the core zone and possible impacts in the surroundings of the industry; to furnish short & long***

*term plans to implement requisite containment measures to mitigate any odour nuisance in the surroundings. The study findings and implementation plan of action to alleviate odour nuisance in the surroundings shall be furnished to the Board within 3 months.*

16. *The industry to implement measures to control Hydrogen Sulphide emissions at Rotary Lime Kilns -1 & 2 to achieve compliance of H<sub>2</sub>S concentration less than 10 mg/Nm<sup>3</sup> within a month and other prescribed standards from the stack emissions of the rotary kilns.*
17. *OCEMS installed for monitoring emissions are not calibrated and operated properly as particulate matter emissions data recorded in OCEMS are 2 to 4.5 times less than the actual concentration of Particulate matter emissions. The industry shall immediately rectify the above and shall furnish plan of action to prevent such reoccurrences; to calibrate and operate the OCEMS for monitoring particulate matter emissions properly and record the actual concentrations.*
18. *The industry shall ensure compliance to the CPCB guidelines dated. 05.02.2014, 02.03.2015 and further notification issued for periodical calibration of online pollution monitoring systems from time to time.*
19. *The industry shall complete construction of shed of adequate capacity for storage of ETP sludge with elevated platform, leachate collection and dedicated pumps to convey the collected leachate to ETP by 30.06.2024. Adequate facilities shall be provided to prevent contamination of run-off.*
20. *The industry shall expedite greenbelt development in the balance area to achieve 33% of total project site.*
21. *The industry shall furnish implementation progress of the lapses/ recommendations of the CPCB.*
22. *The industry shall abide by the directions issued by the Hon'ble NGT in O.A. No. 33 of 2023 (SZ)*
23. *The industry shall ensure that there shall not be any pollution problems in the surroundings.*

The implementation progress of the above directions shall be reported to RO, Kakinada regularly.

You are hereby directed to note that, should you violate any one of the directions mentioned above, action will be initiated under Sec.41(2) of Water (Prevention & Control of Pollution) Amendment Act, 1988 and Sec.37 of the Air (Prevention & Control of Pollution) Amendment Act, 1987 without any further notice, in the interest of safe guarding Public Health and Environment.

**This Order comes into effect from today i.e.,15/03/2024.**

**B Sreedhar las  
MEMBER SECRETARY**

To  
The Occupier,  
M/s. Andhra Paper Limited,  
Sriramnagar,  
Rajamahendravaram.

Copy to:

1. The Joint Chief Environmental Engineer, Zonal Office, Visakhapatnam for information.
2. The Environmental Engineer, Regional Office, Kakinada for information and necessary action. He is directed to periodically monitor the industry on implementation progress of the above directions and to furnish report.



**ANDHRA PRADESH POLLUTION CONTROL BOARD**

Paryavaran Bhavan, APIIC Colony Road,

Gurunanak Colony,

Autonagar, Vijayawada- 520007.

Website: www.pcb.ap.gov.in



**CONSENT TO ESTABLISH ORDER FOR MODERNIZATION**

**Order No.361/APPCB/CTE /RO-KKD/ /HO/2012**

**Dt. 24/04/2024**

Sub:APPCB – CTE - **M/s. Andhra Paper Limited (Formerly International Paper APPM Limited), Unit: Rajahmundry, Sriramnagar, Rajamahendravaram, East Godavari District** - Consent to Establish (CTE) of the Board **for replacement of old 100 TPD Lime Kiln with new 100 TPD lime kiln** under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

- Ref:
1. EC order dt. 06.03.2014 issued by MoEF & CC, Gol.
  2. EC order dt. 24.03.2023 issued by MoEF & CC, Gol.
  3. CTO order dt. 03.07.2023 which is valid upto 30.06.2028.
  4. CTO (amendment) order dt.29.08.2023 which is valid upto 30.06.2028.
  5. Industry's CTE application received through APOCMMS on 26.02.2024.
  6. Z.O inspection report dt.27.03.2024.
  7. CTE Committee meeting held on 12.04.2024.
  8. Industry's mail dt.19.04.2024.

@@@

- M/s. Andhra Paper Limited**, vide reference 3<sup>rd</sup> & 4<sup>th</sup> cited, obtained CTO of the Board,
1. with a validity period up to **30.06.2028**.
  2. The industry, vide reference 5<sup>th</sup> cited, submitted an application to the Board seeking Consent to Establish (CTE) **for the replacement of the existing 100 TPD Lime Kiln with a new 100 TPD Lime Kiln** with an additional investment of Rs. 77.21 crore (total after expansion: Rs. 1485.89 crore) without change in production quantities.
  3. As per the application, the above activity is to be located in the existing premises located at Unit: Rajahmundry, Sriramnagar, Rajamahendravaram, East Godavari District.
  4. The Joint Chief Environmental Engineer, Zonal Office: Visakhapatnam & Environmental Engineer, Regional Office: Kakinada, A.P Pollution Control Board inspected the site on 29.02.2024 and 30.03.2024 and submitted the report in this regard, vide reference 6<sup>th</sup> cited.
  5. **The item was placed before the CTE Committee meeting held on 12.04.2024.** The JCEE, ZO: Visakhapatnam and EE, RO: Kakinada attended the meeting through video conference. The representatives of the project also attended the meeting in person.
  6. After detailed discussions, the Committee recommended to issue CTE for modernization.
  7. The Board, after careful scrutiny of the application, verification report of the Zonal Officer, and recommendations of the CTE Committee, hereby issues **CONSENT TO ESTABLISH FOR MODERNIZATION** for the replacement of the existing 100 TPD lime kiln with a new 100 TPD lime kiln under Section 25 of the Water (Prevention and Control of Pollution) Act 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act

1981 and the rules made thereunder with the following additional conditions:

1. The existing stacks as per the CTO order remain unchanged, except the 100TPD lime kiln stack. The existing Air Pollution Control equipment shall be maintained properly and shall comply with the Board standards.
2. The replacement of the existing 100 TPD lime kiln with a new 100 TPD lime kiln and the stack details are as follows:

S. No.	Details of Stack	Replacement of existing stack
1	Attached to	New Lime Kiln
2	Capacity	100 TPD
3	Name of the Fuel	FO
4	Stack Height above ground(m)	60 m
5	Details of air Pollution Control equipment	ESP

2. The industry shall not increase production quantities, water consumption, or wastewater generation and Hazardous waste generation; and adhere to quantities issued in earlier CTE/CTO orders.
3. The industry shall submit the renewal of the lease permission for sand shoals from the government of A.P. to the Board immediately.
4. The industry shall explore alternative mechanisms for ID fan changeovers to avoid exceeding the stack emissions.
5. The industry shall install H<sub>2</sub>S online analyzers in the stacks of the lime kilns immediately and connect the same to the APPCB server.
6. **The industry shall comply with the directions issued by the Board dt.15.03.2024.**
7. **The industry shall scrupulously comply with the conditions of the CTO order dt.03.07.2023 & CTO (amendment) order dt.29.08.2023.**
8. **This order is valid for a period of 7 years from the date of issue.**

**B SREEDHAR IAS, MS(BS), O/o MEMBER  
SECRETARY-APPCB**

**To**

**M/s.Andhra Paper Limited (Formerly International Paper APPM Limited),  
Unit: Rajahmundry, Sriramnagar, Rajamahendravaram,  
East Godavari District.  
E-Mail: sreeramachandra.susarla@andhraper.com**

Copy to: 1. The JCEE, Z.O: Visakhapatnam for information and necessary action.  
2. The EE, R.O: Kakinada for information and necessary action.

**Purchase Order**

		<b>PO Number</b>	<b>PO Date</b>
		13807023	19 JUL 2024
<b>Supplier</b>		<b>Ship-To and Bill-To Address</b>	
<b>Vendor Code: 200200544</b> CHOLAMANDALAM MS RISK SERVICES LTD GSTN 33AABCC6610Q1ZL DARE HOUSE NO.2 NSC BOSE ROAD, CENNAI GPO CHENNAI - 600001 India  <b>Attn:</b> MR.SUBBA RAO N.V <b>Phone:</b> 08056025714 <b>E-mail:</b> inquiry@cholams.murugappa.com		ANDHRA PAPER LIMITED Rajamahendravaram Mill Sriram Nagar Rajamahendravaram East Godavari 533105 India	
<b>Instructions</b>		<b>Buyer Contact Details</b>	
# All other terms & conditions as per Andhra Paper Limited's Standard Terms & Conditions of Purchase. # Please mention returnable gate pass ref. in your invoice & delivery challan (applicable for repair services). Necessary Test report and Dimension report to accompany # TDS will be levied as applicable.		<b>Buyer:</b> Sandeep Edara <b>Tel:</b> 0883-2562965 <b>Fax:</b> <b>E-mail:</b> sandeep.edara@andhrpaper.com	
<b>Supplier Reference</b>		<b>Agreement Reference</b>	
<b>Mode of Dispatch</b>		<b>Freight</b>	<b>Shipment terms</b>
			DAF
<b>Payment terms</b>		<b>Insurance</b>	

Item	Item Description	Quantity	UoM	Unit Price (INR)	Total Value	Delivery Date
1	NCG Study 3000296 PROFESSIONAL & CONSULTANCY SERVICES - AU IN:Integrated GST-ND	1.000	AU	1,440,000.00	1440000.00	31 DEC 2024
			%	18	259200.00	
	Total Basic			INR	1440000.00	
	Total P&F			INR	0.00	
	Total Tax			INR	259200.00	
	Total Swachh Bharat & Krishi Kalyan Cess			INR	0.00	
	Grand Total				1699200.00	

**GSTIN:**37AAACT8849D1Z3

**Range:** RANGE V

**Division:** RAJAMAHENDRAVARAM

**Commissionerate:** VISAKHAPATNAM II

Carry Out Studies on NCG sources and identify the impacts and suggest mitigation measure at APL for Rajahmundry unit

Contact: Sreerama Chandra Murthy

Scope of Work:

APL Rajahmundry Mill would like to carry out the following studies as directed by APPCB.

**Registered Office:**

**ANDHRA PAPER LIMITED**

**Sriram Nagar - Rajamahendravaram**

**East Godavari District**

**Andhra Pradesh, India.**

**www.andhrpaper.com**

**Purchase Order ( Continued )**

Instructions		PO Number	PO Date
# All other terms & conditions as per Andhra Paper Limited's Standard Terms & Conditions of Purchase. # Please mention returnable gate pass ref. in your invoice & delivery challan (applicable for repair services). Necessary Test report and Dimension report to accompany # TDS will be levied as applicable.		13807023	19 JUL 2024
		Buyer Contact Details	
		<b>Buyer:</b> Sandeep Edara <b>Tel:</b> 0883-2562965 <b>Fax:</b> <b>E-mail:</b> sandeep.edara@andhrapaper.com	

- # Reliability studies on the NCG collection and treatment system.
- # To identify the dispersion pattern of odours substances (TRS) in the core zone and possible impacts in the surrounding area of the industry and recommend short- term and long-term plans to implement requisite containment measures to mitigate any odour nuisance in the surroundings

LS@INR14,40,000/-

Delivery Terms: As per the user requirement (16 Weeks from the date of PO Issued)

Payment Terms:

- 20% of project cost including GST after completion of site visit within 45 days
- 30% of project cost including GST after reliability studies within 45 days
- 50% of project cost including GST after delivering dispersion patterns with impacts within 45 days

Specific Terms & Conditions:

1. VOC Measurement considered in this proposal has been limited to 10 Nos of samplings.
2. Lodging & Boarding are under APL Scope.
3. To & Fro Travel Charges are under vendor scope.
4. All safety, PPE, ESI, PF, Insurance, Current & Future statutory, Tools & Tackles are under vendor scope.
5. All safety Precautions should meet APL Standards.

Other Terms & conditions:

- a) You shall read the below terms & conditions along with those defined, stipulated in the Service Agreement attached herewith. Please acknowledge the receipt of this PO, Service Contract by returning a signed copy.
- # This order is issued to you on basis of confirmation to comply to Scope Of Work(SOW), Terms & Conditions of this PO and the Contractor Safety Policy requirements.
- # You shall maintain a record of activities performed by your workforce on daily basis and submit the details along with Bills/Invoices.

**Registered Office:**

**ANDHRA PAPER LIMITED**  
**Sriram Nagar - Rajamahendravaram**  
**East Godavari District**  
**Andhra Pradesh, India.**  
**www.andhrapaper.com**



ANDHRA PRADESH POLLUTION CONTROL BOARD  
ZONAL LABORATORY: VISAKHAPATNAM  
39-33-20/4/1, Madhavadhara VUDA Colony,  
Visakhapatnam - 530018



M.RAVI  
SENIOR ENVIRONMENTAL SCIENTIST

e-mail: zovsplab-ses2@appcb.gov.in

Form No: APPCB/ZL/VSP/CL.7.8/FM40

**FORM - IV**

**REPORT BY THE STATE BOARD ANALYST**  
[See Rule-14]

**Report No. VSPA202410185 & 188**

**Date: 29.10.2024**

I hereby certify that I, M. Ravi, State Board Analyst duly appointed under sub-section (2) of Section 26 of the Air (Prevention and Control of Pollution) Act, 1981, received on the day of 26.10.2024 from Junior Scientific Officer, Zonal Laboratory, Visakhapatnam, the following stack emission sample for analysis is from:

- 1) **VSPA202410185:** Stack attached to 1 X 1300 TDP Recovery Boiler
- 2) **VSPA202410186:** Stack attached to 100 TPD Rotary lime Kiln -1
- 3) **VSPA202410187:** Stack attached to 160 TPD Rotary lime Kiln -2
- 4) **VSPA202410188:** Stack attached to 1 x 105 TPH Coal Fired Boiler

of M/s ANDHRA PAPER LIMITED, (FORMERLY INTERNATIONAL PAPER APPM LIMITED), UNIT: RAJAHMUNDRY, SRIRAMNAGAR, RAJAMAHENDRAVARAM, EAST GODAVARI DISTRICT collected on 24.10.2024 & 25.10.2024 was received in a condition fit for analysis as reported below:

I further certify that I have analyzed the above-mentioned sample from 26.10.2024 to 29.10.2024 and declare the result of the analysis to be as follows:

S.No.	Report No.	Parameter	Result (mg/Nm <sup>3</sup> )	CTO Standard (mg/Nm <sup>3</sup> )	Test Method
1.	VSPA202410185	Sulphur Dioxide (SO <sub>2</sub> )	14.6	-	IS-11255 (Part-2)
2	VSPA202410188		22.6		
3	VSPA202410186	Hydrogen Sulphide (H <sub>2</sub> S)	8.6	10.0	TCEQ Lab Method 17
4	VSPA202410187		8.2		



The condition of the seals, fastening and container on receipt was intact.

Signed this on: 29.10.2024

Address:

M. Ravi,  
Senior Environmental Scientist/ Quality Manager  
Zonal Laboratory, APPCB, Visakhapatnam

  
SIGNATURE OF THE STATE BOARD ANALYST/  
QUALITY MANAGER

	<b>ANDHRA PRADESH POLLUTION CONTROL BOARD</b> <b>ZONAL LABORATORY: VISAKHAPATNAM</b> 39-33-20/4/1, Madhavadhara VUDA Colony, Visakhapatnam - 530018 e-mail: zovsplat-ses2@appcb.gov.in	 TC-14351
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Form No: APPCB/ZL/VSP/CI.7.8/FM40

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I further certify that I have analyzed the above-mentioned sample from 26.10.2024 to 29.10.2024 and declare the result of the analysis to be as follows:

S.No.	Report No.	Parameter	Result (mg/Nm <sup>3</sup> )	CTO Standard (mg/Nm <sup>3</sup> )	Test Method
1.	<b>VSPA202410185</b>	Particulate Matter (PM)	44.7	50.0	IS:11255 (Part 1)
2	<b>VSPA202410186</b>	Particulate Matter (PM)	15.6		
3	<b>VSPA202410187</b>	Particulate Matter (PM)	12.7		
4	<b>VSPA202410188</b>	Particulate Matter (PM)	40.1		

The condition of the seals, fastening and container on receipt was intact.

Signed this on: 29.10.2024

Address:

M. Ravi,  
 Senior Environmental Scientist/ Quality Manager  
 Zonal Laboratory, APPCB, Visakhapatnam

  
 SIGNATURE OF THE STATE BOARD ANALYST/  
 QUALITY MANAGER

\*\*\* END OF THE REPORT\*\*\*



# SWAN ENVIRONMENTAL PVT. LTD.,

(ISO 9001 : 2015 CERTIFIED)

Plot. No. 922 & 935, Swami Ayyappa Co-Op Society, Madhapur, Hyderabad - 500 081, Telangana, India.

Phone: +91-40-40216184/85, Fax: +91-40-40216183

Email : info@swanenviron.com Website : www.swanenviron.com

## CALIBRATION CERTIFICATE

**Certificate No:** SEPL/CEMS/APL/2024/0807 **Date of Issue** : 27-08-2024

**Customer** : M/s. Andhra Paper Ltd., Rajahmundry, East Godavari Dist., A.P.

**Station Name** : RB4 Stack

### Instrument Details:

**Instrument** : Online Stack Dust (SPM) Monitor **Date of Calibration** : 22-08-2024  
**Make** : Mip OY, Finland **Due Date** : 19-11-2024  
**Model** : LM3189.  
**Serial No.** : 3189065

### Calibration Filter Details:

Details	Serial NO	Optical Density
Optical Filter	1195847	20 %

### Calibration Details :

Parameter	Span Calibration		
	Standard Optical Density	Measured Density	% of Deviation
Opacity	20.0 %	20.15%	0.75%

**Accepted Tolerance:**  $\pm 2$  %

**Result:** The Calibration of above instrument is performed and it meets the acceptance criteria.

**Calibrated by:**

*P. Rajesh*  
**Mr.P.Rajesh**  
 Engineer Service



**Reviewed by:**

*PN Mahadev*  
**Mr.PN Mahadev**  
 Sr.Sales & Service Engineer



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Email : info@swanenviron.com Website : www.swanenviron.com

## CALIBRATION CERTIFICATE

**Certificate No:** SEPL/CEMS/APL/2024/0808

**Date of Issue** :27-08-2024

**Customer** : M/s. Andhra Paper Ltd., Rajahmundry, East Godavari Dist., A.P.

**Station Name** : CFB6 Stack

### Instrument Details:

**Instrument** : Online Stack Dust (SPM) Monitor

**Date of Calibration** :22-08-2024

**Make** : Mip OY, Finland

**Due Date** :19-11-2024

**Model** : LM3189.

**Serial No.** : 3189041.

### Calibration Filter Details:

Details	Serial NO	Optical Density
Optical Filter	1195847	20 %

### Calibration Details :

Parameter	Span Calibration		
	Standard Optical Density	Measured Density	% of Deviation
Opacity	20.0 %	20.16%	1.4%

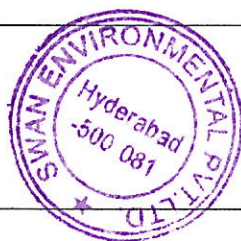
**Accepted Tolerance:**  $\pm 2$  %

**Result:** The Calibration of above instrument is performed and it meets the acceptance criteria.

**Calibrated by:**

*P. Rajesh*

Mr.P.Rajesh  
Engineer Service



**Reviewed by:**

*PN Mahadev*

Mr.PN Mahadev  
Sr.Sales & Service Engineer



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## CALIBRATION CERTIFICATE

**Certificate No:** SEPL/CEMS/APL/2024/0805

**Date of Issue** :27-08-2024

**Customer** : M/s. Andhra Paper Ltd., Rajahmundry, East Godavari Dist., A.P.

**Station name** : RLK-1 Stack

### Instrument Details:

**Instrument** : Online Stack Dust (SPM) Monitor

**Date of Calibration** :22-08-2024

**Make** : EMS Instrument

**Due Date** :19-11-2024

**Model** : L2400

**Serial No.** : M162422

### Calibration Filter Details:

Details	Serial NO	Optical Density
Optical Filter	1195847	20 %

### Calibration Details :

Parameter	Span Calibration		
	Standard Optical Density	Measured Density	% of Deviation
Opacity	20 %	20.02%	0.1%

**Accepted Tolerance:**  $\pm 2\%$

**Result:** The Calibration of above instrument is performed and it meets the acceptance criteria.

**Calibrated by:**

*P. Rajesh*  
Mr.P.Rajesh  
Engineer Service



**Reviewed by:**

*PN Mahadev*  
Mr.PN Mahadev  
Sr.Sales & Service Engineer



# SWAN ENVIRONMENTAL PVT. LTD.,

(ISO 9001 : 2015 CERTIFIED)

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Phone: +91-40-40216184/85, Fax: +91-40-40216183

Email : info@swanenviron.com Website : www.swanenviron.com

## CALIBRATION CERTIFICATE

**Certificate No:** SEPL/CEMS/APL/2024/0806

**Date of Issue** : 27-08-2024

**Customer** : M/s. Andhra Paper Ltd., Rajahmundry, East Godavari Dist., A.P.

**Station name** : RLK-2Stack

### Instrument Details:

**Instrument** : Online Stack Dust (SPM) Monitor

**Date of Calibration** : 22-08-2024

**Make** : EMS Instrument

**Due Date** : 19-11-2024

**Model** : L2400

**Serial No.** : M162423

### Calibration Filter Details:

Details	Serial NO	Optical Density
Optical Filter	1195847	20 %

### Calibration Details :

Parameter	Span Calibration		
	Standard Optical Density	Measured Density	% of Deviation
Opacity	20 %	20.19%	0.95%

**Accepted Tolerance:**  $\pm 2\%$

**Result:** The Calibration of above instrument is performed and it meets the acceptance criteria.

**Calibrated by:**

*P. Rajesh*  
Mr.P.Rajesh  
Engineer Service



**Reviewed by:**

*PN Mahadev*  
Mr.PN Mahadev  
Sr.Sales & Service Engineer