Joint committee report in the matter of Hon'ble National Green Tribunal O.A. No. 15/2024 (CZ), Tapeshwar Singh Bhati V/s M/s Shriram Rayons, Kota & Ors.

1. **Background:**

An Original Application No. 15/2024 (CZ) has been filed by Tapeshwar Singh Bhati before the Hon'ble National Green Tribunal (NGT), Central Zone Bench, Bhopal wherein the applicant has raised the issues of pollution caused by industry namely M/s Shriram Rayons. The Hon'ble NGT, Central Zone Bench, Bhopal on 05/02/2024, in the matter, has inter alia directed following:

"We deem it just and proper to call a report on the matter in issue in present Original Application, from a Joint Committee consisting of:-

i. One representative from the Collector, Kota, Rajasthan
ii. One representative from Rajasthan State Pollution Control Board
iii. One representative from Central Pollution Control Board

The Committee is directed to visit the place and submit the factual and action taken report within six weeks. The State PCB will be the nodal agency for coordination and logistic support."

2. **Constitution of Joint Committee**:

In accordance with the NGT's directives, the following individuals have been nominated as members of the joint committee:

- District Collector, Kota nominated Additional District Magistrate Kota (City) as member of Joint Committee.
- Rajasthan State Pollution Control Board nominated Regional Officer, Kota, as member of Joint Committee.
- Central Pollution Control Board nominated S. Praveen Kumar Jain, Scientist-B, Central Pollution Control Board as member of Joint Committee.

3. **Site Visit**:

In order to scrutinize the contentions presented by the applicant, the committee members conducted site visit of M/s Shriram Rayons from 13/03/2024 to 15/03/2024. During visit the committee members visited all the plants of industry, conducted ambient air and stack sampling and collected treated domestic & industrial wastewater samples. Also, information regarding operation of plant was obtained and the committee also reviewed the documents/details related to the matter.

4. **Details of industry with air & water pollution sources and pollution control measures adopted:**

The main product of M/s Shriram Rayons is Rayon tyre cord. Wood pulp, caustic & carbon di sulphide are main raw materials for manufacturing of Rayon tyre cord. M/s Shriram Rayons has following units operational inside the complex:

(i) Captive Power Plant
(ii) Carbon Di-Sulphide Plant
(iii) Main Plant (Rayon Tyre Cord)
(iv) Dipped Fabric Plant

- **Raw Water Source and its requirement**: Water requirement of entire complex of M/s Shriram Rayons, for various industrial & domestic purposes, is fulfilled through water supplied by RMC Division of Command Area Development (CAD) through the Right Main Canal (RMC) of Chambal River throughout the year. The industry had earlier made common water supply agreement with State Government for the entire complex. The total consented fresh water consumption of the industry is 7081 KLD.
- **Wastewater treatment systems**: In order to treat the domestic and industrial effluents generated from the various units operational inside M/s Shriram Rayons complex the industry has provided following treatment systems:

a. **Effluent Treatment Plant**: In order to treat the industrial effluents generated from the various units operational inside M/s Shriram Rayons complex i.e. Captive Power Plant, Carbon Di-Sulphide Plant and Main Plant (Rayon Tyre Cord), the industry has provided a centralised ETP based on physio chemical and biological treatment system having capacity of 10000 KLD. The ETP is comprised of channel (for lime dosing), clarifier, biological treatment system (2 nos. of aeration tank with diffused aeration system), chemical dosing (polyelectrolyte), flash mixture, tube settler and sludge filters, decanter and lagoons. No pond/sump of waste water was observed inside the premises during visit. The industrial waste water in the unit was being transported to the ETP for treatment. Sampling of ETP outlet was carried out during site visit. The analysis report dated 20/03/2024 of the aforesaid sample reveals that the sample is meeting the prescribed standards laid down in consents for discharge of treated wastewater into drain. ***(A copy of industry's ambient air/stack monitoring reports and ETP outlet/STP outlet analysis reports dated 20/03/2024 are annexed herewith and collectively marked as Annexure-I)***

After adequate treatment in the centralized ETP upto prescribed standards, treated effluent of M/s Shriram Rayons combines with the treated effluent of M/s DCM Shriram Integrated Complex and travels about 2.5 Km in two numbers of closed conduit pipelines/drain and amalgamates with untreated domestic sewage of nearby habitation at Kansua Nallah. This nallah, after merging with river Chandraloi & Alania River, ultimately merges with Chambal River.

b. **Sewage Treatment Plant**: In order to treat domestic effluents generated from the various units operational inside M/s Shriram Rayons complex, the industry has provided a centralised STP of capacity 60 KLD. The STP is comprised of screen, collection tank, aeration tank, tube settler, multi grade filter, activated carbon filter and treated water collection tank. The industry has not provided chlorine contact dosing tank with the STP. Sampling of STP outlet was carried out during site visit. The analysis report dated 20/03/2024 of the aforesaid sample reveals that the sample is not meeting the prescribed standards laid down in consents. The treated domestic wastewater is being used for plantation purposes. ***(A copy of industry's ambient air/stack monitoring reports and ETP outlet/STP outlet analysis reports dated 20/03/2024 are annexed herewith and collectively marked as Annexure-I)***

- **Hazardous waste details**: Hazardous wastes viz. used/spent oil (Sch I, Cat. 5.1), empty discarded containers (Sch I, Cat 33.1) and solid zinc bearing sludge (Sch II, A71) is generated from the industry for which industry has obtained Authorization under Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016 with validity upto 31/10/2024.

Solid Zinc bearing sludge and empty discarded containers are sent for disposal at Rajasthan Waste Management Project (M/s Re Sustainability Limited), Udaipur Site. However, used/spent oil is sold to registered recyclers.

Industry has provided a designated storage room of 20m x 12m for proper storage of generated hazardous wastes where display board has been provided. The room is provided with concrete flooring and lock& key mechanism. Further display board of 4' x 6' has been provided at the main gate for displaying details of hazardous waste.

(i) Captive Power Plant

The power and steam requirement of the industry is met through 4 nos. of husk/husk pellets fired boilers of 30 TPH each. Out of these 4 nos. of boilers, 3 nos. of boilers are operational at a time and one boiler is in standby. The power is generated using 3 nos. of turbines having capacity of 5.2 MW, 4 MW and 2 MW, thus having a total capacity of 11.2 MW. The unit had obtained consent to operate for power generation @ 9.2 MW vide State Board letter dated 16/06/2023 with validity upto 30/11/2027 and consent to operate for power generation @ 2 MW vide State Board letter dated 22/03/2024 with validity upto 30/09/2028. The details of pollution control measures provided with the boilers are as below:

Sr No.	Stack attached to	Fuel	Capacity	Stack height in meter & its adequacy	Details of APCM	Comment on adequacy of APCM	Whether adequate safe infrastructural Monitoring Facility Provided or not?
1	Boiler No-1	Husk/ Husk Pellets	30 TPH	34.14 Mt, Adequate	Mechanical dust collector & ESP (2 Fields)	Adequate	Yes
2	Boiler No-2	Husk	30 TPH	34.14 Mt, Adequate	ESP (2 Fields) & Common Wet Scrubber	Adequate	Yes
3	Boiler No-3	Husk	30 TPH	34.14 Mt, Adequate		Adequate	Yes
4	Boiler No-4	Husk	30 TPH	40.00 Mt, Adequat	ESP (3 Fields) & Wet Scrubber	Adequate	Yes

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Since boiler no. 1 of the unit was in standby, stack monitoring of unit's boiler no. 2, 3 & 4 was carried out during the site visit of the industry. The analysis report of stack monitoring dated 20/03/2024 reveals that the parameter is meeting the prescribed standards laid down in consents for stack emission. (***A copy of industry's ambient air/stack monitoring reports and ETP outlet/STP outlet analysis reports dated 20/03/2024 are annexed herewith and collectively marked as Annexure-I***)

Agro based Power plants require to install Particulate Matter (PM) online analyzers for Continuous Emission Monitoring Systems. The industry has installed the same on the stacks of all 4 nos. of boilers and data for same is also being transmitted to RSPCB Server. As per inspection dated 29/02/2024 and 01/03/2024 of online monitoring system, drift percentage for PM were found to be less than 10% in all the four boilers from laboratory results. Calibration of dust analyzers were being carried out by industry on half yearly basis.

As per 1st Revised Guidelines for Real-time Effluent Quality Monitoring System dated July, 2018 issued by CPCB, Power plants require to install online analyzers for pH, TSS and Temperature. The industry has installed online analyzers for pH, temperature, COD, TSS and flow and data of same is also being transmitting to RSPCB Server. As per inspection dated 29/02/2024 and 01/03/2024 of online monitoring system, drift percentage in parameters were found to be less than 10% from laboratory results. Calibration of pH, temperature, COD and TSS analysers were being carried out on half yearly basis. However, flow meter is being calibrated on yearly basis. PTZ Camera is also installed on effluent and emission points.

The total fresh water consumption (including domestic consumption) of captive power plant is 1830 KLD and total waste water generation including boiler blowdown, cooling tower bleed & RO reject water etc. is 835 KLD which is sent to tertiary RO plant for treatment and about 745 KLD effluent is recycled using tertiary RO plant. Further, RO reject of 90 KLD is discharged into in ETP for treatment and thereafter discharged in drain.

(ii) <u>Carbon Di-Sulphide Plant</u>

Carbon di sulphide is one of the major raw material for manufacturing of Rayon tyre cord. CS_2 gas is manufactured in electric arc furnace using calcined charcoal (carbon) and molten sulphur. Sulphur is melted in pits using steam and then molten sulphur is fed into the furnace where it reacts with well calcined charcoal at temperature around 800°C to produce CS_2. The reaction is endothermic in nature and thus, heat energy is supplied using electric power. Current is passed into the furnace through top & bottom graphite electrodes to form arc which in turn generates heat.

CS_2 produced in gaseous form is condensed in condensers in 2 steps, using water at 25-30°C and chilled water at 6-10°C. Uncondensed CS_2 along with some H_2S is further passed through Oil Scrubbing system where CS_2 is recovered and H_2S sent to Sodium Sulphide scrubbing system where it reacts with Caustic Soda thereby producing 15% Sodium Sulphide Solution as a by-product. Thereafter, uncondensed and unreacted traces of CS_2 and H_2S gases are discharged into the atmosphere using stack of approx. 30m. Condensed CS_2 is stored in liquid form under water and storage tanks are kept cool with water spray and is placed in dyke. The unit has obtained consent to operate for Carbon di sulphide @ 15 TPD and Sodium Sulphide @ 2 TPD vide State Board letter dated 22/03/2024 with validity upto

31/10/2028. Further there are 06 number of gas sensors installed in CS_2 plant out of which five are CS_2 gas sensors and one is H_2S Gas sensor.

Stack monitoring of CS_2 refinery was carried out during the site visit of the industry. The analysis report of stack monitoring dated 20/03/2024 reveals that the parameters are meeting the prescribed standards laid down in consents for stack emission. ***(A copy of industry's ambient air/stack monitoring reports and ETP outlet/STP outlet analysis reports dated 20/03/2024 are annexed herewith and collectively marked as Annexure-I)***

The total fresh water consumption (including domestic consumption) of Carbon di sulphide plant is 135 KLD and total waste water generation including effluent generated from CS2 pressing by water, cleaning & washing, cooling tower bleed etc. is 60 KLD which is sent to centralized ETP for treatment. Thereafter, the treated effluent is then discharged into the drain.

(iii) Main Plant (Rayon Tyre Cord)

The major raw materials for manufacturing of Rayon tyre cord are wood pulp, caustic soda & carbon di sulphide. Wood pulp sheets containing cellulose is treated with dilute caustic soda to turn it into Alkali Cellulose. The sheets are then cut into small crumbs under controlled conditions in a shredder and the crumbs are allowed to age in controlled conditions of temperature and humidity for controlling viscosity of viscose to make the cellulose suitable for further operation. The crumbs are then allowed to react with carbon di sulphide in the Baratte to form cellulose xanthate. The cellulose xanthate is dissolved in dilute Caustic Soda to make viscose solution which is further ripened and deaerated to remove air bubbles before sending it for Spinning. The viscose is extruded through a spinneret immersed in spinbath containing sulphuric acid, sodium sulphate and zinc sulphate under controlled temperature. The yarn produced is passed through hot stretch solution and stretched to impart good physical properties to the yarn. The yarn is then passed through dilute acidic solution for desulphurization, purification solution consisting of sodium carbonate for neutralizing and washing Acid. Thereafter, yarn is passed through Finish Oil Solution where it picks-up Finish Oil, dried with steam and collected on bobbins. The yarn on bobbins is then coned to meet requirement of yarn for customers. Alternately, two yarns are cabled together on twisting machines for making Tyre Cord. The cord bobbins are then sent to loom for weaving Tyre Cord Fabrics.

Since rayon tyre cord unit is covered under Textile (GPI), thus the industry is required to install online analyzers for pH, COD, TSS and flow. The industry has installed online analyzers for pH with temperature, COD, TSS and flow and data of same is also being transmitting to RSPCB Server. As per inspection dated 29/02/2024 and 01/03/2024 of online monitoring system, drift percentage in parameters were found to be less than 10% from laboratory results. Calibration of pH with temperature, COD and TSS analysers were being carried out on half yearly basis. However, flow meter is being calibrated on yearly basis. PTZ Camera is also installed on effluent and emission points. Further there are 10 number of gas sensors installed in main plant out of which five are CS_2 gas sensors and five are H_2S Gas sensors.

The unit had obtained consent to operate for production of rayon tyre cord @ 23 TPD vide State Board letter dated 17/05/2023 with validity upto 30/06/2026. Stack monitoring of the stack attached to main plant could not be carried out during site visit of the industry, as this stack was under renovation/maintenance. However, the industry had submitted the

monitoring report of this stack conducted by MoEF&CC approved laboratory on 16/10/2023. The report shows the parameter for VOC was below detectable limit (BDL). ***(A copy of stack monitoring report of stack attached to main plant conducted by MoEF&CC approved laboratory on 16/10/2023 is annexed herewith and collectively marked as Annexure-II)***

The total fresh water consumption (including domestic consumption) of main plant is 5110 KLD and total waste water generation is 4575 KLD which is sent to centralized ETP for treatment. However, out of 4575 KLD treated effluent about 800 KLD effluent is reused in cooling water makeup and other gainful uses. Further, maximum discharge of about 3775 KLD is discharged into drain after treatment with ETP.

(iv) <u>Dipped Fabric Plant</u>

Dipping is a process of treating Grey Rayon fabric in Resorcinol-Formaldehyde-Latex (RFL) solution and stabilization at 190 to 195°C heat.

Grey Rayon fabric is dipped in RFL solution, passed through squeezing mangle and de-Webber suction unit for uniform solution penetration and to remove excess solution from the fabric. After dipping, fabric is passed through vertical dryer at 90 to 105° for removing water contents and followed by passing through Stenter chamber at 190 to 195°C for heat stabilization and curing of fabric. No air pollution source i.e. furnace, kiln or boiler is installed in dipping plant.

The unit had obtained consent to operate for production of dipped fabric @ 600 MT/month vide State Board letter dated 07/04/2022 with validity upto 30/11/2026.

The total fresh water consumption (including domestic consumption) of dipped fabric plant is 6 KLD and total waste water generation is 3 KLD which is sent to centralized ETP for treatment which is utilised for cleaning/washing within the premises.

5. **Details of the grievances raised in the O.A. no. 15/2024 and comments on the grievances in chronology are as under:**

In the O.A. no. 15/2024, the applicant has raised the issues of deficiencies/non-compliances observed in the industry namely M/s Shriram Rayons during inspections/monitoring carried out in past by RSPCB. The applicant has also raised the issue of operation of some units of the aforesaid industry without obtaining valid consent to operate from RSPCB.

Firstly, deficiencies/non-compliances observed in the industry during inspections and monitoring carried out by RSPCB in the month of September to November, 2022. The applicant has also mentioned about the action taken by the RSPCB (i.e show cause notice dated 18/11/2022) in response to the observed non-compliances during inspection/monitoring. The applicant has also pointed out the reply submitted by the industry on dated 30/11/2022 to the show cause notice dated 18/11/2022.

It is pertinent to mention here that in order to verify the contents of reply submitted by industry, the industry was again inspected and monitored by RSPCB between 13th to 20th March, 2023. ***(A copy of report of industry's inspection/monitoring conducted between 13th to 20th March, 2023 are annexed herewith and collectively marked as Annexure-III)***

During inspection/monitoring conducted between 13th to 20th March, 2023, the status of deficiencies/non-compliances observed during inspection/monitoring carried out between September to November, 2022 have been verified which are as under:

Deficiencies/non-compliances observed during inspection/monitoring carried out between September to November, 2022	**Status of earlier non-compliances/deficiencies during inspection/monitoring conducted between 13th to 20th March, 2023**
1. A sump and a large pond of untreated wastewater were found inside the premises due to which possibility of contamination of ground water cannot be ruled out.	**Partially rectified**, as the sump and large pond of untreated wastewater were found filled and levelled with sand and soil during inspection. However, industry does not have adequate arrangements for the collection of trade effluent.
2. Condition of ETP reveals that it is not of adequate capacity and design to treat wastewater. Further the alkaline pH shows that the sump water is untreated wastewater.	**Partially Rectified**, as the industry they have upgraded the physio chemical and biological treatment system of the ETP. However, analysis report of sampling of outlet drain of the industry conducted by RSPCB on 20/03/2023 was failed for one parameter.
3. Various underground flexible pipelines have been observed which are coming from plant to sump/pond and it seems unit is also discharging untreated wastewater in open land.	**Rectified**, as the flexible pipelines had been removed.
4. Drains for transferring process wastewater from main plant and dipping plant to the ETP were found to be unlined and uncovered due to which possibility of contamination of ground water cannot be ruled out as effluent is mainly of acidic nature. Further there is possibility of overflow of these drains during the rainy season.	**Partially rectified**, as some of the process drains had been lined and covered by the industry. However, most of the process drains of the industry were still in unlined and uncovered condition. At the time unit's representative informed that lining & covering of drains shall be completed within next 3 months.
5. Housekeeping was found unsatisfactory.	**Rectified**, as housekeeping inside the industry was found satisfactory.
6. The analysis report of stack monitoring samples collected on 12/09/2022 reveals that industry's boiler no.2 & boiler no. 3 are not meeting the prescribed standards for particulate matter (PM_{10}).	**Partially Rectified**, as industry has provided additional PCM i.e. common retrofit wet scrubber with 30 TPH boiler no. 2 and 30 TPH boiler no. 3. During inspection the common wet scrubber was found to be operative. Further ambient air monitoring and stack monitoring of the boiler no. 2, 3 & 4 were conducted by Regional Laboratory Kota on 13/03/2023 and 14/03/2023. The analysis report dated 28/03/2023 revealed that the stack air samples of the boilers are complying with prescribed standards. However, the analysis report dated 28/03/2023 reveals that the ambient air samples of the unit are not complying with the prescribed standards at all

	the locations.
7. The analysis report of wastewater samples collected sump and large pond inside the industry on 03/11/2022, reveals that the parameters of sample for pH, TSS, BOD & sulphide (as S) are exceeding the prescribed limits.	**Rectified**, as the sump and large pond of untreated wastewater were found filled and levelled with sand and soil during inspection.
8. CEMS data from 12-13 September, 2022 for SO_2 in Boiler no. 2 and 3 is found static at 10 mg/Nm^3 whereas boiler no. 4 is at 13 mg/ Nm^3 which indicated the possibility of capping or improper working of sensors.	**Not applicable**, as the parameter of SO_2 and NO_x are not applicable on husk fired boilers.
9. Sensors are installed parallel to manual port holes which are not as per the CPCB guidelines 2018.	**Rectified**, as sensors were shifted to 500mm below the manual port holes for the particulate matter.
10. Unit has selected the full range of sensor to measure the pollutant concentration which is not as per the CPCB guidelines 2018.	**Not rectified**, as the industry had still selected the full range of sensor to measure the pollutant concentration which is not as per the CPCB guidelines 2018.
11. Display of Camera for stack emission is too sketchy to observe.	**Partially rectified**, as display of camera for stack emission was under maintenance at the time of this inspection.
12. In online continuous effluent quality monitoring system (CEQMS) software no calibration history was found for the date on which calibration has been done as per the calibration certificate provided by the unit. Moreover, as per the calibration log of instrument the last calibration has been done only for pH sensor.	**Rectified**, as last calibration for CEQMS was carried out on 28/11/2022 and same was available in sensor log also.
13. Calibration of pH sensor is being done with buffer of 4 and 7 only and whereas the results are usually coming beyond pH 7.	**Rectified**, as calibration of pH sensor was carried out with buffer of 4 and 9.20
14. Only one sample analysis results were used to calibrate the sensor for BOD.	**Rectified**, as distilled water and standard of 63 mg/l were used to calibrate the sensor for BOD.
15. Drift% is found quite high for Particulate matter measurement i.e. up to 87%, 84% and 41% (against acceptable limit of 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results.	**Not rectified**, as Drift% was found quite high for Particulate matter measurement i.e. up to 95%, 86% and 51% (against acceptable limit of 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results.
16. Flow meter is not calibrated since installation by the unit.	**Rectified**, flow meter was calibrated on 26/10/2022.
17. A total number of 35 exceedances were observed during period of June 14 to September 13, 2022 out of which 20 exceedances (Stack1=7, stack2=4, stack3=9) has been observed in stack for PM and total 15 exceedances (BOD=2, COD=3, TSS=9 and	The number of exceedances had been reduced from 35 to 7.

pH=1) in effluent water.	
18. Cameras installed for CEMS and CEQMS are not connected with the State Board (RSPCB) server.	**Not rectified**, as cameras installed for CEMS and CEQMS were not connected with the RSPCB server.

As per above table, the deficiencies mentioned at Sr. No. 1, 2, 4, 6 & 11 had been partially rectified and the deficiencies mentioned at Sr. No. 10, 15 & 18 had not been rectified by the industry at the time of inspection/monitoring conducted between 13th to 20th March, 2023.

Accordingly, a show cause notice was again issued to the industry on 19/05/2023. The industry submitted its reply against the aforesaid show cause notice vide industry's letter dated 30/05/2023 wherein it was mentioned that lining work of the process drains is expected to be completed by the end of August, 2023. The unit was again inspected and monitored by RSPCB between 11th to 17th October, 2023, during which following deficiencies/non-compliances were observed (***A copy of report of industry's inspection/monitoring conducted between 11th to 17th October, 2023 are annexed herewith and collectively marked as Annexure-IV***):

i. The industry constructed a new collection tank of 100 KL for collection of effluent generated from CS2 plant. However, this new 100 KL collection tank has not been covered and the possibility mixing of rainwater/storm water with the process wastewater cannot be ruled out.
ii. The legacy wastewater of the CS2 plant, which was earlier collected into the rain water collection tank inside the industry is still stored in the same tank and has not been treated by the industry.
iii. Industry is still using flexible pipelines for transferring wastewater from new 100 KL collection tank of the CS2 plant to the centralized ETP of the industry.
iv. Most of the process drains of the industry are still unlined and the process of lining has not been completed till date.
v. Ambient air monitoring of the unit was conducted by Regional Laboratory Kota on 12/10/2023. The analysis report reveals that the ambient air samples of the unit are not complying with the prescribed standards at all the locations.
vi. Installed range of sensor to measure the pollutant concentration is inadequate.
vii. Drift% was found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10 %) in boiler no. 2, 3 & 4, respectively, compared to laboratory results.
viii. A total number of 193 exceedances were observed during period of 17 July 2023 to 17 October 2023 out of which 178 exceedances (Stack1=35, Stack2=31, Stack3=59 and Stack4=53) have been observed in Stack for PM and total 13 exceedances (BOD=2, COD=2, TSS=5, pH=5 and flow=1) have been observed in effluent water.

In view of above deficiencies/non-compliances, RSPCB has taken following actions:

1. Industry's pending application for consent to operate for expansion of main plant was refused by RSPCB vide letter dated 18/01/2024.
2. A show cause notice for intended revocation of consent to operate of main plant and intended direction for closure of main plant of industry was issued vide letter dated 18/01/2024.

3. Direction for deposition of environmental compensation of Rs. 49,00,000/- under section 33A of the Water Act, 1974 and section 31A of the Air Act, 1981 were issued to the industry vide letter dated 05/03/2024. (***A copy of industry's CTO-expansion refusal letter dated 18/01/2024, show cause notice dated 18/01/2024 and direction for deposition of environmental compensation dated 05/03/2024 are annexed herewith and collectively marked as Annexure-V***)

In response to above actions, the industry has deposited environmental compensation of Rs. 49,00,000/- on 07/03/2024. Further, against the refusal letter dated 18/01/2024 and show cause notice dated 18/01/2024, the industry had submitted its reply through e-mail dated 01/02/2024 wherein industry mentioned that they have rectified all the deficiencies/non-compliances, as such, show cause notice may be withdrawn.

In reference to industry's reply dated 01/02/2024, the industry was again inspected and monitored by the RSPCB on 29/02/2024 and 01/03/2024. During inspection/monitoring dated 29/02/2024 and 01/03/2024, the status of deficiencies/non-compliances observed during inspection/monitoring carried out between 11th to 17th October, 2023 are as under (***A copy of report of industry's inspection/monitoring dated 29/02/2024 and 01/03/2024 are annexed herewith and collectively marked as Annexure-VI***):

Deficiencies/non-compliances observed during inspection/monitoring carried out between 11th to 17th October, 2023	**Status of these non-compliances/deficiencies during inspection/monitoring dated 29/02/2024 and 01/03/2024**
1. The industry constructed a new collection tank of 100 KL for collection of effluent generated from CS2 plant. However, this new 100 KL collection tank has not been covered and the possibility mixing of rainwater/storm water with the process wastewater cannot be ruled out.	**Rectified**, as the 100 KL collection tank (for collection of effluent generated from CS2 plant) has now been covered.
2. The legacy wastewater of the CS2 plant, which was earlier collected into the rain water collection tank inside the industry is still stored in the same tank and has not been treated by the industry.	**Rectified**, as reported, the legacy wastewater of the CS2 plant, which was earlier collected into the rain water collection tank inside the unit has now been treated by the unit in its ETP. The rain water collection tank was found empty during inspection.
3. Industry is still using flexible pipelines for transferring wastewater from new 100 KL collection tank of the CS2 plant to the centralized ETP of the industry.	**Rectified**, as now the flexible pipelines have been completely removed and unit has provided FRP pipelines in place of flexible pipelines.
4. Most of the process drains of the industry are still unlined and the process of lining has not been completed till date.	**Rectified**, as the work of lining is almost complete.
5. Ambient air monitoring of the unit was conducted by Regional Laboratory Kota on 12/10/2023. The analysis report reveals that the ambient air samples of the unit are not complying with the prescribed standards at all the locations.	**Rectified**, as ambient air monitoring and stack monitoring of the boiler no. 1, 2, 3 & 4 as well as CS_2 plant were conducted by Regional Laboratory Kota on 29/02/2024 and 01/03/2024. The analysis report dated 02/03/2024 revealed that the stack air samples of all the boilers and CS_2 plant are complying with prescribed standards. Further, the analysis

	report dated 02/03/2024 reveals that the ambient air samples of the unit are complying with the prescribed standards at all the locations.
6. Installed range of sensor to measure the pollutant concentration is inadequate.	**Rectified**
7. Drift% was found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10 %) in boiler no. 2, 3 & 4, respectively, compared to laboratory results.	**Rectified**, as drift % is for Particulate matter measurement i.e. up to 8.72%, 2.33% and 4.41% and 6.2% (acceptable limit is 10%) in boiler no. 1, 2, 3 and 4 respectively with comparison to laboratory results.
8. A total number of 193 exceedances were observed during period of 17 July 2023 to 17 October 2023 out of which 178 exceedances (Stack1=35, Stack2=31, Stack3=59 and Stack4=53) have been observed in Stack for PM and total 13 exceedances (BOD=2, COD=2, TSS=5, pH=5 and flow=1) have been observed in effluent water.	**Exceedances reduced notably** A total number of 11 exceedances were observed during period of 01/12/2023 to 01/03/2024 out of which 09 exceedances (Stack1=3, Stack 2 =3, Stack 3 =1 and Stack 4=2) have been observed in Stack for PM and total 02 exceedances (pH= 2) have been observed in effluent water. As per CPCB data reporting protocol, said exceedances do not even fall in yellow category.

The above observations in the table indicates that the industry has rectified all the deficiencies/non-compliances observed in the past inspections.

Consent Status

The applicant has also raised the issue that the industry is operating some of its plants without obtaining valid consent from RSPCB. The consent status of all the plants have been mentioned above and also as under:

Sr. No.	Name of Unit	Product and Production capacity	Consent validity
1.	M/s Shriram Rayons (Captive Power Plant)	Power generation @ 9.2 MW	30/11/2027
		Power generation @ 2 MW	30/09/2028
2.	M/s Shriram Rayons (Main Plant)	Rayon Tyre Cord @ 23 TPD Sodium Sulphate (By Product) @ 26 TPD	30/06/2026
3.	M/s Shriram Rayons (Dipped Fabric Plant)	Dipped Fabric @ 600 MT/month	30/11/2026
4.	M/s Shriram Rayons (Carbon Di-Sulphide Plant)	CS_2 @ 15 TPD Na_2S (By Product) @ 2 TPD	31/10/2028

The applicant has also mentioned about the expired consent status of two STPs of 300 KLD and Rayon Tyre Cord @ 7 TPD. In this regard, it is pertinent to mention here that two STPs of 150 KLD each (i.e. total 300 KLD) are not the part of M/s Shriram Rayons Complex. These STPs are in separate premises installed to treat the domestic sewage generated from the colony. The consent to operate of these STPs is valid upto 31/12/2027.

As far as consent validity of Rayon Tyre Cord @ 7 TPD is concerned, as per certificate submitted by the industry, the production of Rayon Tyre Cord is within the consented capacity i.e. 23 TPD. The validity of this consent is upto 30/06/2026 as mentioned in the table above.

Action Taken and Summary

1. The applicant has raised the issues of deficiencies/non-compliances observed during inspections/monitoring conducted in the past i.e. in year 2022 and 2023. The subsequent inspection/monitoring reports of RSPCB indicate that the unit has rectified the deficiencies in phases.
2. Accordingly, direction for deposition of environmental compensation of Rs. 49,00,000/- under section 33A of the Water Act, 1974 and section 31A of the Air Act, 1981 has been issued to the industry vide letter dated 05/03/2024 for observed non-compliances/deficiencies
3. The industry has deposited environmental compensation of Rs. 49,00,000/- on 07/03/2024.
4. Treated water samples of ETP outlet/STP outlet was collected during joint visit. The analysis results reveal that ETP outlet sample are within limit. However, parameters of STP outlet sample are not meeting with the prescribed limits. Thus, industry need to upgrade the STP.
5. Air monitoring was also conducted during joint visit. Air samples of 3 nos. of stacks of boilers & CS_2 refinery were collected and also ambient air monitoring was carried out in the industry at 3 locations. The result of all the stack & ambient air monitoring reveal that the parameters are well within the prescribed limit. However, stack monitoring of main plant could not be done due to renovation/maintenance work of this stack. The industry has submitted the monitoring report of this stack conducted (before renovation/maintenance work) by MoEF&CC approved laboratory. The report shows the parameter for VOC was below detectable limit (BDL).
6. All units of the industry have valid consents.

28/3/24

(Indrajeet Singh)
Additional District
Magistrate, Kota

(Amit Soni)
Regional Officer,
RSPCB, Kota

Praveen Jain

(Praveen Kumar Jain)
Scientist- B,
Central Pollution Control
Board, Bhopal

Annexure- I

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8296**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Ambient Air Quality monitoring at Ambient Station No.-1 (Near Steel Yard).** Collected on **13/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	49.29
2	Hydrogen Sulphide µg/m3	21.96
3	Nitrogen Dioxide as NO2 µg/M3	41.60
4	Particulate Matter (PM10) µg/m3	95
5	Sulphur Dioxide as SO2 ug/m3	12.10

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8297**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Ambient Air Quality Monitoring at Ambient Station No.-2 (Backside of CS2 Plant).** Collected on **13/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	60.22
2	Hydrogen Sulphide µg/m3	32.53
3	Nitrogen Dioxide as NO2 µg/M3	37.20
4	Particulate Matter (PM10) µg/m3	88
5	Sulphur Dioxide as SO2 ug/m3	10.90

The condition of the seals, fastening and container on receipt was as follows : **Intact**

Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8298**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Ambient Air Quality monitoring at Ambient Station No.-3 (Behind NDU Plant).** Collected on **13/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	47.98
2	Hydrogen Sulphide µg/m3	24.28
3	Nitrogen Dioxide as NO2 µg/M3	36.90
4	Particulate Matter (PM10) µg/m3	92
5	Sulphur Dioxide as SO2 ug/m3	12.30

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8299**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack of husk fired Boiler No-3 attached with ESP and Wet Scrubber.** Collected on **13/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	203

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8300**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack of husk fired Boiler No-4 attached with ESP and Wet Scrubber.** Collected on **13/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	138

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8301**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack of husk fired Boiler No-2 attached with ESP and Wet Scrubber.** Collected on **14/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	120

The condition of the seals, fastening and container on receipt was as follows : **Intact**

Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8302**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack of CS2 Plant attached with Caustic Scrubber.** Collected on **14/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Carbon di sulphide Kg/MT	2.26
2	Hydrogen Sulphide Kg/MT	0.587

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 24)

Report No. : **6316**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(3) of Section 53 of the Water (Prevention & Control of Pollution) Act, 1974** received on the **14/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Waste Water** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Final Outlet of ETP** Collected on **14/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Zinc as Zn mg/l	0.866
2	pH	7.49
3	Total Suspended Solids mg/l	34
4	Chemical Oxygen Demand (COD) mg/l	88
5	Bio-Chemical Oxygen Demand (BOD) (3days at 27° C) mg/l	23
6	Oil & Grease mg/l	Not Traceable
7	Copper as Cu mg/l	Not Traceable
8	Total Chromium as Cr mg/l	Not Traceable
9	Sulphides as S mg/l	0.54
10	Chloride as Cl mg/l	472
11	Sulphate as SO_4 mg/l	232
12	Ammonical Nitrogen as N mg/l	7.1

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 24)

Report No. : **6317**
Report On : **20/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(3) of Section 53 of the Water (Prevention & Control of Pollution) Act, 1974** received on the **14/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Waste Water** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Final Outlet of STP(60 KLD)** Collected on **14/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	N total mg/L	8.22
2	pH	7.86
3	Total Suspended Solids mg/l	19
4	Chemical Oxygen Demand (COD) mg/l	103
5	Bio-Chemical Oxygen Demand (BOD) (3days at 27° C) mg/l	20
6	Ammonical Nitrogen as N mg/l	2.62
7	Faecal Coliform (MPN Technique) /100 ml	280

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

NAKSHATRA ENVIRO SERVICES

Plot No. 46, Solitaire Industrial Park, Phase I, Dahmi Kalan, Bagru (Ext.), Jaipur - 303007
Website : www.nakshatraenviro.in I M.: 9413666777, 8003896245
E-mail : neslab2004@gmail.com, nakshatraenviro@gmail.com

Recognized by Ministry of Environment, Forest and Climate Change, Government of India
ISO 9001 : 2015, ISO 14001 : 2015 & ISO 45001 : 2018 Certified Laboratory

Reference No.: NES231017038	Date: 21/10/2023

TEST CERTIFICATE
STACK EMISSION MONITORING REPORT

Issued to	M/s. Shriram Rayons (A Unit of DCM Shriram Industries Limited)
Address	Shriram Nagar, Kota, Rajasthan – 324004
Nature of Industry	Rayons Manufacturing
SAMPLE DETAILS	
Date of Sampling	16/10/2023
Stack attached to	Process Stack – Main Plant
Make of Stack	Cement Concrete
Stack Height (above ground)	60.00 metres
Diameter of Stack	5.00 metres
Sampling Duration	30 minutes
Operating Schedule (hrs./day)	As per requirement
Ambient Temperature	26°C
Stack Gas Temperature	32°C
Stack Gas Velocity	11.50 m/sec.
Period of Testing	17/10/2023 to 21/10/2023

TEST RESULTS

Sl. No.	Parameters	Unit	Values Found	Limits	Test Protocol
1.	Volatile Organic Compounds	mg/Nm^3	B.D.L.	50	USEPA Method 0031

Note: **B.D.L.: Below Detection Limit**

- Limits as per Consent to Operate issued by RPCB.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without special permission in writing.
- Total liability of this laboratory is limited to the invoice amount.
- The results enlisted refer only to the above sample and applicable parameters endorsement of products is neither inferred nor implied.
- Samples will be destroyed after 15 days from the date of issuing of analysis of report unless otherwise specified.

(Madhusudan Sharma)
Review By

Seal

(Saurabh Sharma)
Authorized Signatory

*** END OF REPORT ***

Inspection Report
Shriram Rayons
(A unit of DCM Shriram Industries Ltd.) Captive Power Plant
Shriram Nagar, Tehsil- Ladpura, District-Kota

Aforesaid unit was inspected by the undersigned Official on 20/03/2023 in presence of Sh. Bhupendra Singh (Asst. Manager) in reference to SCN issued to the industry vide H.O. letter dated 07/12/2022.

Unit has submitted reply vide e-mail dated 13/12/2022 to show cause notice dated 07/12/2022. Comments on the reply submitted to show cause notice are as under:

Sr. No.	Sr. No. of SCN dated 07/12/2022	Comments/observations on Unit's reply
1.	8 (i)	The sump and large pond of untreated wastewater were found filled and levelled with sand and soil during inspection (photograph taken during inspection is enclosed as Annex-I). The unit is constructing a new collection tank of 100 KL for collection of effluent generated from CS_2 plant (photograph taken during inspection is enclosed as Annex-II). Currently the wastewater generated from CS_2 plant is being collected into the rain water collection tank inside the unit. As per representative the wastewater collected into the rain water collection tank is pumped to the ETP of the unit and the construction of new collection tank will be completed within next one month.
2.	8 (ii)	As per representative, they have upgraded the physio chemical and biological treatment system of the ETP. Sample of treated wastewater was collected from the final outlet of the Shriram Rayons, Kota Complex on dated 20/03/2023 was sent to Regional Laboratory, Kota for analysis. Analysis report is awaited.
3.	8 (iii)	The flexible pipelines were found removed during inspection.
4.	8 (iv)	During inspection, it was observed that some the process drains (transferring wastewater generated from main plant and dipping plant to the ETP) have been lined and covered by the industry (photograph taken during inspection is enclosed as Annex-III). However most of the process drains of the industry are still in unlined and uncovered condition (photograph taken during inspection is enclosed as

		Annex-IV). Unit representative informed that the work of lining and covering of process drains of the industry shall be completed within next 3 months.
5.	8 (v)	Housekeeping inside the industry was found satisfactory.
6.	8 (vi)	Unit has now provided a common retrofit wet scrubber with 22 TPH boiler no. 2 and 20 TPH boiler no. 3. During inspection the common wet scrubber was found to be operative. Further ambient air monitoring and stack monitoring of the unit was conducted by Regional Laboratory Kota on 13/03/2023 and 14/03/2023. The analysis report dated 28/03/2023 (copy enclosed) reveals that the ambient air samples of the unit are not complying with the prescribed standards at all the locations. However, the stack air monitoring of the boilers and CS_2 plant is complying with prescribed standards. Further, during inspection dated 20/03/2023 CEMS data of boiler no. 1, 2 & 3 were observed to be 101 mg/Nm^3, 191 mg/Nm^3 & 312 mg/Nm^3, respectively (photograph taken during inspection is enclosed as Annex-V).
7.	8 (vii)	The sump and large pond of untreated wastewater were found filled and levelled during inspection (photograph taken during inspection is enclosed as Annex-I). The unit is constructing a new collection tank of 100 KL for collection of effluent generated from CS_2 plant (photograph taken during inspection is enclosed as Annex-II). Currently the wastewater generated from CS_2 plant is being collected into the rain water collection tank inside the unit. As per representative the wastewater collected into the rain water collection tank is pumped to the ETP of the unit and the construction of new collection tank will be completed within next one month.
8.	8 (viii)	As per Inspection report of Online monitoring system (copy enclosed)
9.	8 (ix)	As per Inspection report of Online monitoring system (copy enclosed)
10.	8 (x)	As per Inspection report of Online monitoring system (copy enclosed)

11.	8 (xi)	As per Inspection report of Online monitoring system (copy enclosed)
12.	8 (xii)	As per Inspection report of Online monitoring system (copy enclosed)
13.	8 (xiii)	As per Inspection report of Online monitoring system (copy enclosed)
14.	8 (xiv)	As per Inspection report of Online monitoring system (copy enclosed)
15.	8 (xv)	As per Inspection report of Online monitoring system (copy enclosed)
16.	8 (xvi)	As per Inspection report of Online monitoring system (copy enclosed)
17.	8 (xvii)	As per Inspection report of Online monitoring system (copy enclosed)
18.	8 (xviii)	As per Inspection report of Online monitoring system (copy enclosed)

(Anurag Singh)
AEE, RSPCB, KOTA

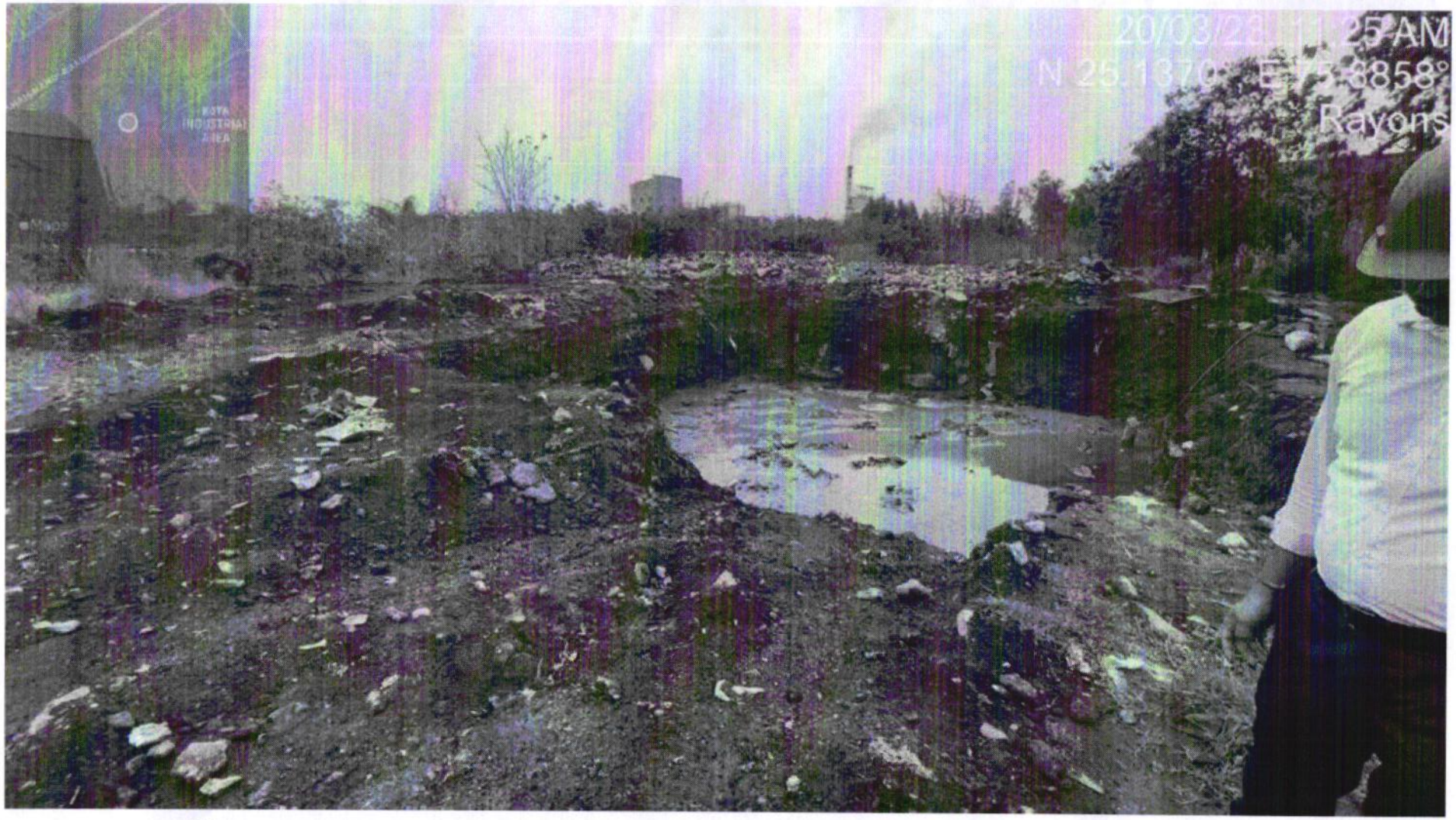
Recommendation: The unit has rectified some of the deficiencies as reported in last inspection report. However, all the deficiencies have not been rectified so far. As such, if deemed fit, pending consent to operate application of the unit may be refused and a show cause notice for intended revocation of consent to operate of the unit dated 10.10.2019 along with intended direction for closure may be issued to the unit.

(Amit Soni)
Regional Officer

Annex-I

Picture Showing Sump and large pond of untreated Wastewater filled and levelled with Sand and Soil

Annex-II



Picture Showing Construction of new collection tank of 100 KL capacity

Annex-III

Picture showing some of the process drains lined and covered

Annex-IV

Picture Showing some process drain which are Still not lined and Covered

Annex-IV

Picture Showing CEMS Data of boiler no. 1, 2, and 3

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **7528**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **14/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Behind NDU plant** Collected on **13/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	5.4
2	Hydrogen Sulphide µg/m3	27
3	Particulate Matter (PM10) µg/m3	162
4	Sulphur Dioxide as SO2 ug/m3	9.2
5	Oxides of Nitrogen as NOx µg/m3	31.4

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Final Report

Report No. : **7529**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **14/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Near Steel yard** Collected on **13/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	67.55
2	Hydrogen Sulphide µg/m3	23
3	Particulate Matter (PM10) µg/m3	125
4	Sulphur Dioxide as SO2 ug/m3	9.1
5	Oxides of Nitrogen as NOx µg/m3	32.3

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **7530**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **14/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 2** Collected on **13/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	NOx mg/NM3	48
2	Particulate Matter mg/Nm3	94
3	Sulphur Dioxide mg/NM3	13

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Final Report

Report No. : **7531**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **14/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 3** Collected on **13/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	NOx mg/NM3	51.58
2	Particulate Matter mg/Nm3	95
3	Sulphur Dioxide mg/NM3	26.2

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area,
Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **7532**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **14/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 4** Collected on **14/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	NOx mg/NM3	118.56
2	Particulate Matter mg/Nm3	86
3	Sulphur Dioxide mg/NM3	15.72

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area,
Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **7533**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **14/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack of CS2 Plant** Collected on **14/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Carbon di sulphide Kg/MT	7.9
2	Hydrogen Sulphide Kg/MT	2.1

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Final Report

Report No. : **7534**
Report On : **28/03/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **15/03/2023** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Near waste yard** Collected on **14/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **28/03/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	74
2	Hydrogen Sulphide µg/m3	22
3	Particulate Matter (PM10) µg/m3	173
4	Sulphur Dioxide as SO2 ug/m3	10.5
5	Oxides of Nitrogen as NOx µg/m3	33.4

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **28/03/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 24)
Final Report

Report No. : **5507**
Report On : **17/04/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(3) of Section 53 of the Water (Prevention & Control of Pollution) Act, 1974** received on the **20/03/2023** from **Shri Anurag Singh, JEE, Kota ,RSPCB Kota** a sample of **Waste Water** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Outlet Drain** Collected on **20/03/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **17/04/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	pH	7.74
2	Total Suspended Solids mg/l	38
3	Chemical Oxygen Demand (COD) mg/l	90.9
4	Bio-Chemical Oxygen Demand (BOD) (3days at 27° C) mg/l	17.8
5	Oil & Grease mg/l	1.2
6	Copper as Cu mg/l	NT
7	Total Chromium as Cr mg/l	NT
8	Sulphides as S mg/l	1.34
9	Chloride as Cl mg/l	520
10	Sulphate as SO_4 mg/l	1642
11	Ammonical Nitrogen as N mg/l	4.21

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **17/04/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

Inspection Report of Online Monitoring System

General Details of Online Monitoring System:

1	Name and Address of the Unit/Industry	M/s Shriram Rayons, Kota
2	Contact Person of the Unit	Sh. Amit Katara-AGM (9929590854) & Sh. Bhupendra Singh-AM (9929590898)
3	Type/Category of the Unit/Industry (Ex. Cement/Power...etc.)	Rayon (Manmade Fiber)
4	Covered under: • CPCB directions (17 Category/GPI/CTDF/OCEMS-Red Category of NCR) • NGT Directions • Other Polluting industries directed by State Board.	Power Plant
5	Applicable for CEMS/CEQMS/Both	Both
6	Whether Unit Installed CAAQMS. If installed than connectivity status:	Not installed
7	Parameters required as per guidelines	Effluent water: COD, BOD, TSS, Flow, pH, Boiler Stack: SO2, NOx, PM
8	Parameters Installed as per guidelines& Connectivity Status of the Industry	Effluent water -pH, TSS, BOD, Flow, COD Boiler Stack -PM, SO_2, No_x Status is Connected
9	Number of Source emission point/s (Total name & number of applicable stacks)	4 nos. Stack – Boiler # 1, 2, 3 & 4
10	Number of Effluent discharge point/s (Total name & number of applicable outlets)	One
11	Is unit ZLD& Use of treated effluents	No
10	Total Number of exceedance in last 3 months	03 in Flue gas for PM 04 in Effluent water for BOD, COD, TSS and pH **(01.12.2023 to 14.03.2023)**
11	Date of Configuration of the unit Parameter wise.	11.07.2015
12	Details of Fee submitted regarding Online monitoring system	200000/- (Two Lacs Rupees)
13	Detail of Bank guarantee submitted regarding delayed installation of online monitoring system	Industry has Installed OEMS within time limit.

1. Continuous Emission Monitoring System(CEMS):

a) Detail of the Stack/Source emission point:

S. No.	Stack /Source emission point	Stack attached with (PCM)	Diameter of the Stack	Height of the stack	Height of the Port Hole from last disturbance point (Mtr)	Height of last disturbance in the stack (distance from the ground)	Height of the CEM from Ground Level	Appropriate site selection of OCEMS & Port Hole	Applicable Parameter	Process Parameter	Remark
1	Boiler#1	Boiler#1	2.115 meter	34.1 meter	16.28 meter	2.87 meter	18.65 meter for particulate matter	Yes, for particulate matter	SO2, NOx, SPM	SO2, NOx, SPM	
2	Boiler#2	Boiler#2	2.115 meter	34.1 meter	16.58 meter	2.67 meter	18.75 meter for particulate matter	Yes for particulate matter	SO2,NOx, SPM	SO2,NOx, SPM	
3	Boiler#3	Boiler#3	2.115 meter	34.1 meter	16.35 meter	2.60 meter	18.45 meter for particulate matter	Yes for particulate matter	SO2,NOx, SPM	SO2,NOx, SPM	
4	Boiler#4	Boiler#4	2.016 meter	40.0 meter	13.56 meter	6.39 meter	19.45meter for particulate matter	Yes for particulate matter	SO2,NOx, SPM	SO2,NOx, SPM	

b) Detail of the CEMS analyzers:

S. No.	Stack /Source emission point	Parameter Monitored	Name of the Analyser	Make & Model	Type of the analyzer/ instrument	Sampling Technique/ Process	Principle of Sampling	Mode of Communication RS232/RS485/ Ethernet/ USB	Indigenous / foreign instrument	Approving agency (TUV, MCERTS or USEPA) in case of foreign instrument

1	Boiler# 1, 2, 3 & 4	SO2	Gas Analyser	PRIMA, PSGM-1D-AGS	Online	Sample extraction based	Sample extraction based	RS485	Indigenous	No Info Provided
		NOx								
		SPM	Dust Monitor	CODEL, DCEM 2100	Online	Dual pass Transmission-meter	Opacity	RS232	Indigenous	TUV & MCERTS

c) Configuration details of the CEMS analyzers:

S. No.	Name of Stack	Parameter Monitored	Emission Limit Prescribed	Measurement range of the Instrument	Selected Measurement range	Dust Factor/ any other factor Set	Any CO2/O2 Correction required	Is Moisture correction required	Exceedances in last 3 months
1	Boiler#1 Stack	SO2	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		NOx	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		Particulate Matter	100 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	93	8% (O_2)	15 %	
2	Boiler#2 Stack	SO2	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		NOx	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		Particulate Matter	100 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	91	8% (O_2)	15 %	01
3	Boiler#3 Stack	SO2	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		NOx	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		Particulate Matter	100 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	93	8% (O_2)	15 %	02
4	Boiler#4 Stack	SO2	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	
		NOx	600 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	NA	8% (O_2)	15 %	

		Particulate Matter	100 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	90	8% (O_2)	15 %	

d) Details of isokinetic sampling:

Sr. No.	Name of Stack	Parameter Monitored	Date and Time	Temperature of Stack gases (K)	Displacement (mm H2O)	Velocity m/Sec	Duration (Min)	Analysis Results		Remarks Drift %
								CEMS	Lab	
1	Boiler no-1	Non operative	Non operative	NA	NA	NA	NA	NA	NA	NA
	Boiler no-2	PM	13.03.20223 at 1:00 PM to 3:00 PM	333	.029	3.0	90	5.1mg/Nm3	94mg/Nm3	95%
	Boiler no-3	PM	13.03.2023 at 3:19 PM to 3:57 PM	338	0.05	4.0	38	12.65 mg/Nm3	95mg/Nm3	87%
	Boiler no-4	PM	14.03.2023 at 3:47 PM to 4:13PM	338	0.17	6.0	26	34.79 mg/Nm3	86mg/Nm3	60%
2	Boiler no-1	Non operative	Non operative	NA	NA	NA	NA	NA	NA	NA
	Boiler no-2	SO2	13.03.20223 at 1:00 PM to 3:00 PM	333	.029	3.0	90	11 mg/Nm3	13 mg/Nm3	15%
	Boiler no-3	SO2	13.03.2023 at 3:19 PM to 3:57 PM	338	0.05	4.0	38	31mg/Nm3	26.2mg/Nm3	-18%
	Boiler no-4	SO2	14.03.2023 at 3:47 PM to 4:13PM	338	0.17	6.0	26	3mg/Nm3	15.72mg/Nm3	81%
3	Boiler no-1	Non operative	Non operative	NA	NA	NA	NA	NA	NA	NA
	Boiler no-2	NOx	13.03.20223 at 1:00 PM to 3:00 PM	333	.029	3.0	90	0mg/Nm3	48 mg/Nm3	100%
	Boiler no-3	NOx	13.03.2023 at 3:19 PM to 3:57 PM	338	0.05	4.0	38	0 mg/Nm3	51.58mg/Nm3	100%

	Boiler no-4	NOx	14.03.2023 at 3:47 PM to 4:13PM	338	0.17	6.0	26	0 mg/Nm3	118.56 mg/Nm3	100%

2. Continuous Effluent Quality Monitoring System(CEQMS):

e) Detail of the ETP/CETP etc.:

1	Mode of Treatment	Effluent Treatment Plant
2	Quantity of treated effluent	6300 KLD (Max.) per day
3	Effluent handling practices and mode of disposal of treated effluent	Approx. 2000 (KLD) Recycled and remaining discharge through outlet drain
4	Installation location of the probe with reference to ETP/CETP outlet	ETP Outlet (Gate no-3)
5	Location of the Probe in Open/ Closed Channel/ Sump	ETP Outlet (Gate no-3) open Channel
6	Average water Level in Open/ Closed Channel/ Sump	270 mm (open channel)
7	Average Water level at outlet channel	270 mm
8	Detail of Sample Collection along with date and time	Wastewater sampling from outlet of unit on31.01.2023 at 1:20 PM

f) Detail of the CEQMS analyzers:

Sr. No.	Name of the Outlet	Parameter Monitored	Name of the Analyser	Make & Model	Type of the analyzer/ instrument	Sampling Technique/ Process	Principle of Sampling	Mode of Communication RS232/RS485/ Ethernet/ USB	Indigenous / foreign instrument	Approving agency (TUV, MCERTS or USEPA) in case of foreign instrument	Appropriate site selection
1	ETP outlet	COD	Online effluent water monitoring system	Xylem WTW Germany 15221180	CarboVis 701 IQ TS & Sensolyt SEA	Inline	UV-Visible Spectrophotometer	Ethernet	Foreign	TUV	Yes
		BOD					COD comparative				Yes

		TSS					UV-Visible Spectrophotometer					Yes
		pH		WTW Germany 15251676			Potentiometer					Yes
		Flow	Flow meter	WTW Germany 15240724	.Open Channel flow	Ultrasonic pulse	Time required in by Ultrasonic pulse while travelling in between water surface and sensor	Ethernet	Foreign	TUV		Yes

g) Configuration details of the CEQMS analysers:

S. No.	Name of the Outlet	Parameter Monitored	Range of the analyzer/ instrument	Factor set during calibration	Calibration frequency	OCEMS Results at the time of Inspection	Laboratory results	Drift % if any	Exceedances in last 3 months
	ETP outlet	COD	800 mg/l	-	Half yearly	31.4 mg/litre	79.9 mg/litre	61%	**03**
		BOD	500 mg/l	-	Half yearly	7.1mg/litre	13.8 mg/litre	49%	**02**
		TSS	900 mg/l	-	Half yearly	26.2 mg/litre	22mg/litre	-19%	**09**
		pH	0 – 14 pH	-	Half yearly	8.20	8.24	0%	**01**
		Flow	9400 m^3/hr	-	Half yearly	94 m^3/hr	NA	NA	NA

3. Details of PTZ camera to visualize emission and effluent discharge points:

S. No.	Visualize	Location of the PTZ camera	Make Model	Night vision Facility	Name of the Covered emission/effluent discharge point	Connectivity Status	Remark
1	Emission Discharge points	ESP -4 top	Hikvision	Yes	Boiler Stacks	Not connected	Under maintenance
2	Effluent discharge points	Near gate no-3 (ETP outlet)	Hikvision	Yes	ETP Outlet		

- **Is all emission and effluent discharge point covered by PTZ camera/s: Yes for effluent discharge. However camera for emission discharge is under maintenance.**

Observation and compliance status shortcoming observed in ocems inspection report dated 13.09.2022 and show cause dated 07/12/2022: -

Shortcoming	Status
CEMS data from September, 12-13, 2022 for SO_2 in Boiler no. 2 and 3 is found static at 10 mg/Nm^3 whereas boiler no. 4 is at 13 mg/Nm^3 which can't overlook the possibility of capping or improper working of sensors.	CEMS data from 01.12.2023 to 14.03.2023 for SO_2 and NO_x in Boiler no. 2 and 3 is found zero at most of the time which can't overlook the possibility of improper working of sensors
Sensors are installed parallel to manual port holes which are not as per the CPCB guideline 2018.	Rectified, sensors are installed 500mm below the manual port holes for the particulate matter
Unit has selected the full range of sensor to measure the pollutant concentration which is not as per the CPCB guideline 2018.	Unit has still selected the full range of sensor to measure the pollutant concentration .
Display of camera for stack emission is too sketchy to observe.	Display of camera for stack emission is under maintenance
In CEQMS software no calibration history had found for the date on which calibration has been done as per the calibration certificate provided by the unit. Moreover, as per the calibration log of instrument the last calibration has been done only for pH sensor.	Rectified, last Calibration for CEMS were done on 03.10.2022 for all the stack and for CEQMS calibration were done on 28.11.2022 and same is available in sensor log also.
Calibration of pH sensor is being done with buffer of 4 and 7 only whereas the results are usually coming beyond pH 7.	Rectified, calibration of pH sensor is being done with buffer of 4 and 9.20

Only one sample analysis results were used to calibrate the sensor for BOD.	Rectified ,distilled water and standard of 63.00mg/l are used to calibrate the sensor for BOD.
Drift % is found quite high for Particulate matter measurement i.e. up to 87%, 84% and 41% (acceptable limit is 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results.	Drift % is found quite high for Particulate matter measurement i.e. up to 95%, 86% and 51% (acceptable limit is 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results
Flow meter is not calibrated since installation by the unit.	Rectified, flow meter is calibrated on 26.10.2022
A total number of 35 exceedences were observed during period of June 14 to September 13, 2022 out of which 20 exceedences (Stack1=7, Stack 2 =4 and Stack 3=9) has been observed in Stack for PM and total 15 exceedences (BOD=2, COD =3, TSS= 9 and pH= 1) in effluent water.	A total number of 7 exceedences were observed during period of 01.12.2023 to 14.03.2023 out of which 03 exceedences (Stack 2 =1 and Stack 3=2) has been observed in Stack for PM and total 04 exceedences (BOD=21 COD =1, TSS= 1 and pH= 1) in effluent water.
Cameras installed for CEMS and CEQMS are not connected with the RSPCB server.	Cameras installed for CEMS and CEQMS are not connected with the RSPCB server.

Inspecting Officials

Dr. Abhi Garg
Scientific Officer

Annexure- IV

Inspection Report
Shriram Rayons
(A unit of DCM Shriram Industries Ltd.) Captive Power Plant
Shriram Nagar, Tehsil- Ladpura, District-Kota

Aforesaid industry was inspected by the undersigned Official on 11/10/2023 in presence of Sh. Bhupendra Singh (Asst. Manager) in order to verify the rectification of non-compliances which were communicated to the unit by SCN issued to the industry vide H.O. letter dated 07/12/2022. Previously the verification was conducted by this Office during inspection dated 20/03/2023 and the IR was sent to H.O. vide this Office letter dated 29/03/2023.

Unit had submitted reply vide e-mail dated 13/12/2022 to show cause notice dated 07/12/2022. Comments on the reply submitted to show cause notice are as under:

Sr. No.	Sr. No. of SCN dated 07/12/2022	Comments/observations on Unit's reply as per Inspection dated 20/03/2023	Comments/observations on Unit's reply as per Inspection dated 11/10/2023
1.	8 (i)	The sump and large pond of untreated wastewater were found filled and levelled with sand and soil during inspection. The unit is constructing a new collection tank of 100 KL for collection of effluent generated from CS_2 plant. Currently the wastewater generated from CS_2 plant is being collected into the rain water collection tank inside the unit. As per representative the wastewater collected into the rain water collection tank is pumped to the ETP of the unit and the construction of new collection tank will be completed within next one month.	The sump and large pond of untreated wastewater were found filled and levelled with sand and soil during inspection. The construction work of new 100 KL collection tank for collection of effluent generated from CS_2 plant has been completed and the effluent generated from CS_2 plant is collected in this tank (photograph taken during inspection is enclosed). However, this new 100 KL collection tank has not been covered and the possibility mixing of rainwater/storm water with the process wastewater cannot be ruled out. Further, the legacy wastewater of the CS_2 plant, which was earlier collected into the rain water collection tank inside the unit is still stored in the same tank and has not been treated by the unit (photograph taken during inspection is enclosed).
2.	8 (ii)	As per representative, they have upgraded the	Sample of treated wastewater was collected

		physio chemical and biological treatment system of the ETP. Sample of treated wastewater was collected from the final outlet of the Shriram Rayons, Kota Complex on dated 20/03/2023 was sent to Regional Laboratory, Kota for analysis. Analysis report is awaited.	from the final outlet of the Shriram Rayons, Kota Complex on dated 11/10/2023 was sent to Regional Laboratory, Kota for analysis. As per analysis report dated 30/10/2023, the sample parameters are within prescribed standards.
3.	8 (iii)	The flexible pipelines were found removed during inspection.	Unit is still using flexible pipelines for transferring wastewater from new 100 KL collection tank of the CS_2 plant to the ETP (photograph taken during inspection is enclosed).
4.	8 (iv)	During inspection, it was observed that some the process drains (transferring wastewater generated from main plant and dipping plant to the ETP) have been lined and covered by the industry. However, most of the process drains of the industry are still in unlined and uncovered condition. Unit representative informed that the work of lining and covering of process drains of the industry shall be completed within next 3 months.	During inspection, it was observed that some the process drains (transferring wastewater generated from main plant and dipping plant to the ETP) have been lined and covered by the industry. However, most of the process drains of the industry are still unlined and the process of lining is still under has not been completed till date (photograph taken during inspection is enclosed).
5.	8 (v)	Housekeeping inside the industry was found satisfactory.	Housekeeping inside the industry was found satisfactory.
6.	8 (vi)	Unit has now provided a common retrofit wet scrubber with 30 TPH boiler no. 2 and 30 TPH boiler no. 3. During inspection the common wet scrubber was found to be operative. Further ambient air monitoring and stack monitoring of the unit was conducted by Regional Laboratory Kota on 13/03/2023 and 14/03/2023. The analysis report dated 28/03/2023 reveals that the ambient air samples of the unit are not complying	During inspection the common wet scrubber was found to be operative. Further ambient air monitoring and stack monitoring of the unit was conducted by Regional Laboratory Kota on 12/10/2023 and 17/10/2023. The analysis report dated 25/10/2023 (copy enclosed) reveals that the ambient air samples of the unit are not complying with the prescribed standards at all the locations. However, the stack air monitoring

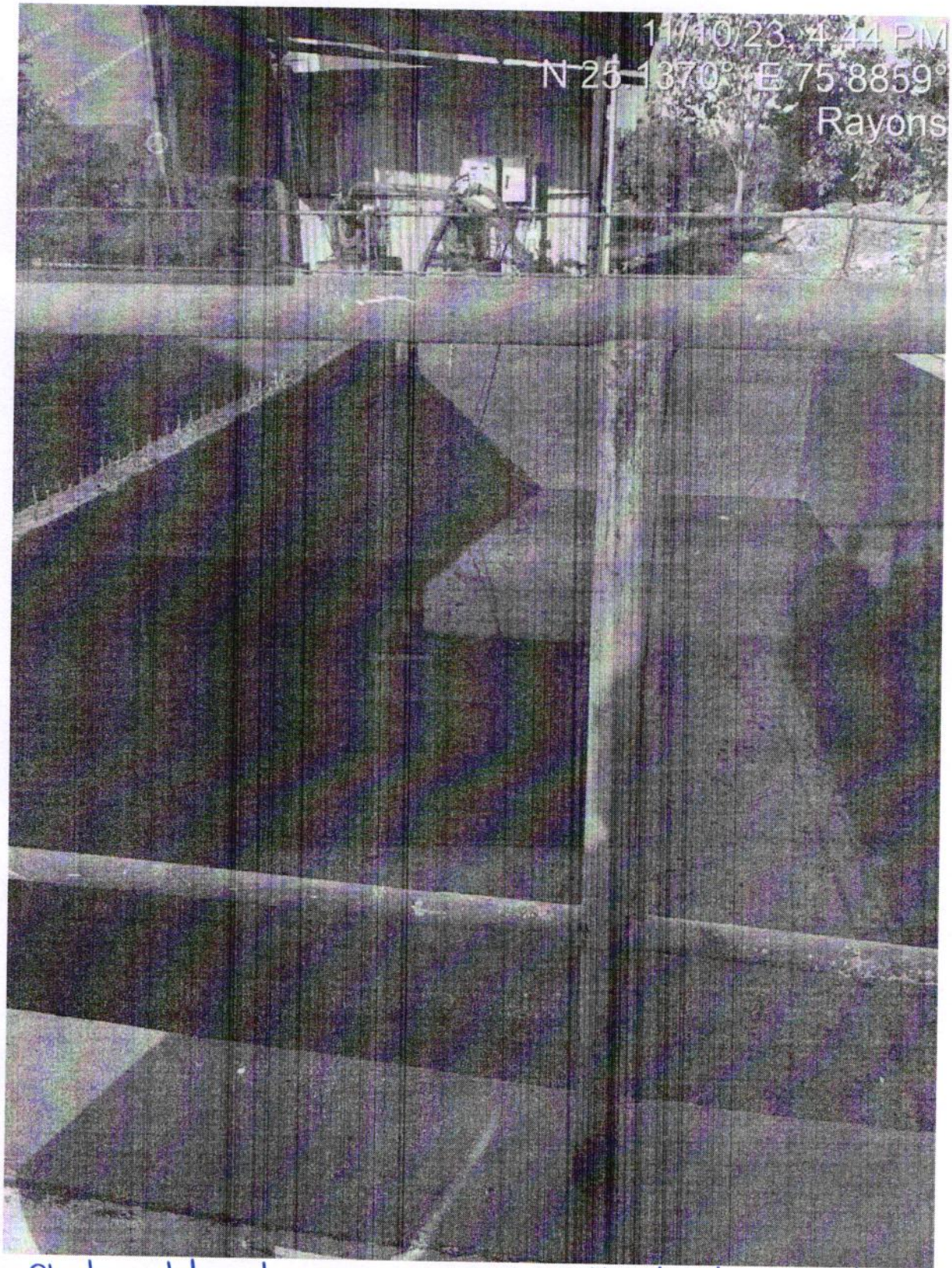
		with the prescribed standards at all the locations. However, the stack air monitoring of the boilers and CS_2 plant is complying with prescribed standards. Further, during inspection dated 20/03/2023 CEMS data of boiler no. 1, 2 & 3 were observed to be 101 mg/Nm^3, 191 mg/Nm^3 & 312 mg/Nm^3, respectively.	of the boilers are complying with prescribed standards. Further, during inspection dated 11/10/2023 CEMS data of boiler no 2, 3 & 4 were observed to be 86 mg/Nm^3, 118 mg/Nm^3 & 117 mg/Nm^3, respectively. Boiler no. 1 was found non-operational.
7.	8 (vii)	The sump and large pond of untreated wastewater were found filled and levelled during inspection (photograph taken during inspection is enclosed as Annex-I). The unit is constructing a new collection tank of 100 KL for collection of effluent generated from CS_2 plant (photograph taken during inspection is enclosed as Annex-II). Currently the wastewater generated from CS_2 plant is being collected into the rain water collection tank inside the unit. As per representative the wastewater collected into the rain water collection tank is pumped to the ETP of the unit and the construction of new collection tank will be completed within next one month.	The sump and large pond of untreated wastewater were found filled and levelled with sand and soil during inspection. The construction work of new 100 KL collection tank for collection of effluent generated from CS_2 plant has been completed and the effluent generated from CS_2 plant is collected in this tank (photograph taken during inspection is enclosed). However, this new 100 KL collection tank has not been covered and the possibility mixing of rainwater/storm water with the process wastewater cannot be ruled out. Further, the legacy wastewater of the CS_2 plant, which was earlier collected into the rain water collection tank inside the unit is still stored in the same tank and has not been treated by the unit (photograph taken during inspection is enclosed).
8.	8 (viii)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
9.	8 (ix)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
10.	8 (x)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)

11.	8 (xi)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
12.	8 (xii)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
13.	8 (xiii)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
14.	8 (xiv)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
15.	8 (xv)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
16.	8 (xvi)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
17.	8 (xvii)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)
18.	8 (xviii)	As per Inspection report of Online monitoring system (copy enclosed)	As per Inspection report of Online monitoring system (copy enclosed)

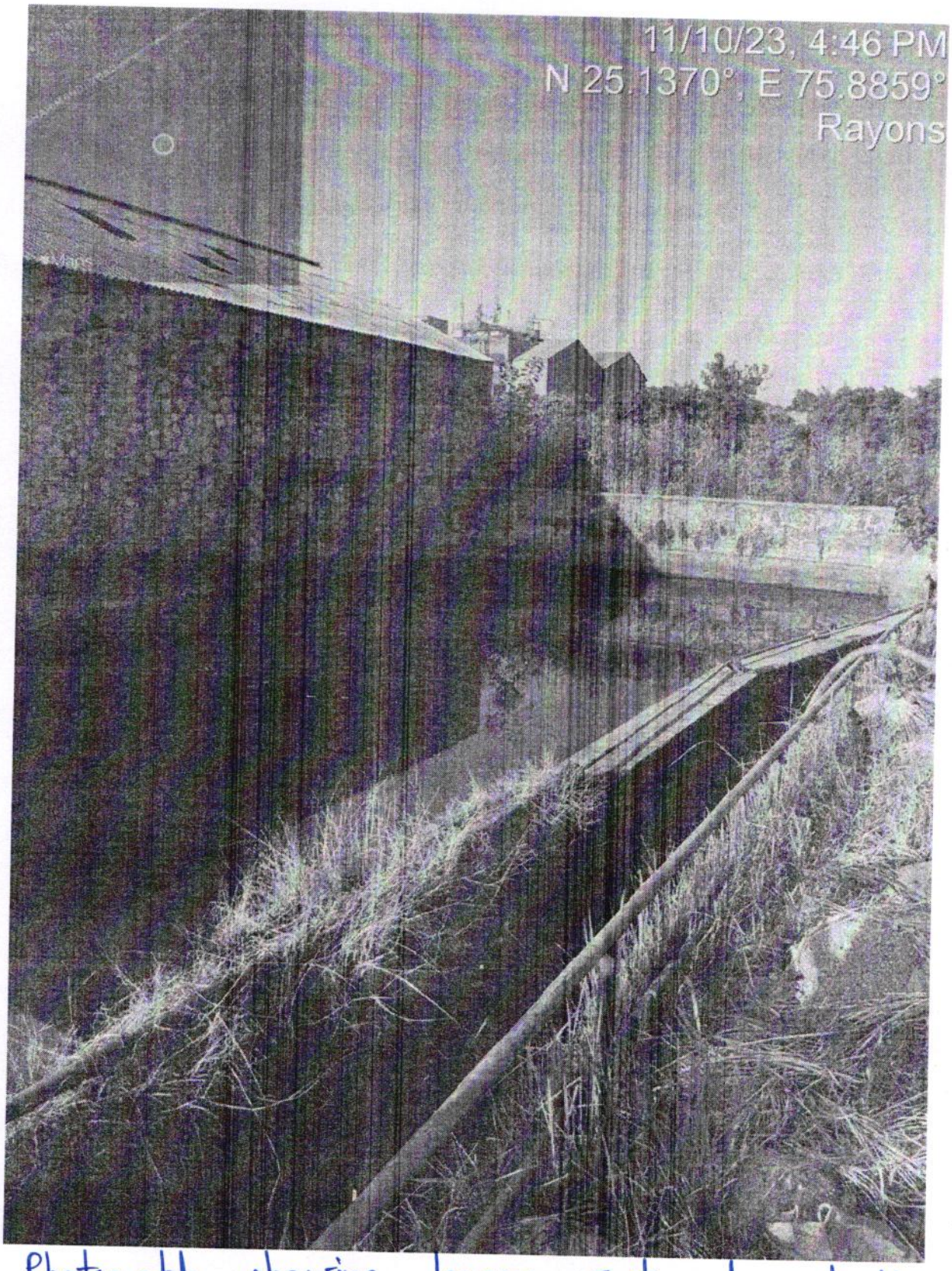
(Anurag Singh)
AEE, RSPCB, KOTA

Recommendation: The unit has failed to rectify the deficiencies communicated to the unit vide SCN dated 07/12/2022 so far. As such, if deemed fit, pending consent to operate application of CPP, CS_2 plant and rayon tyre cord of the unit may be refused, environmental compensation may be imposed on the unit in view of H.O. order dated 21/11/2023 and a show cause notice for intended revocation of various consent to operate of the unit along with intended direction for closure may be issued to the unit.

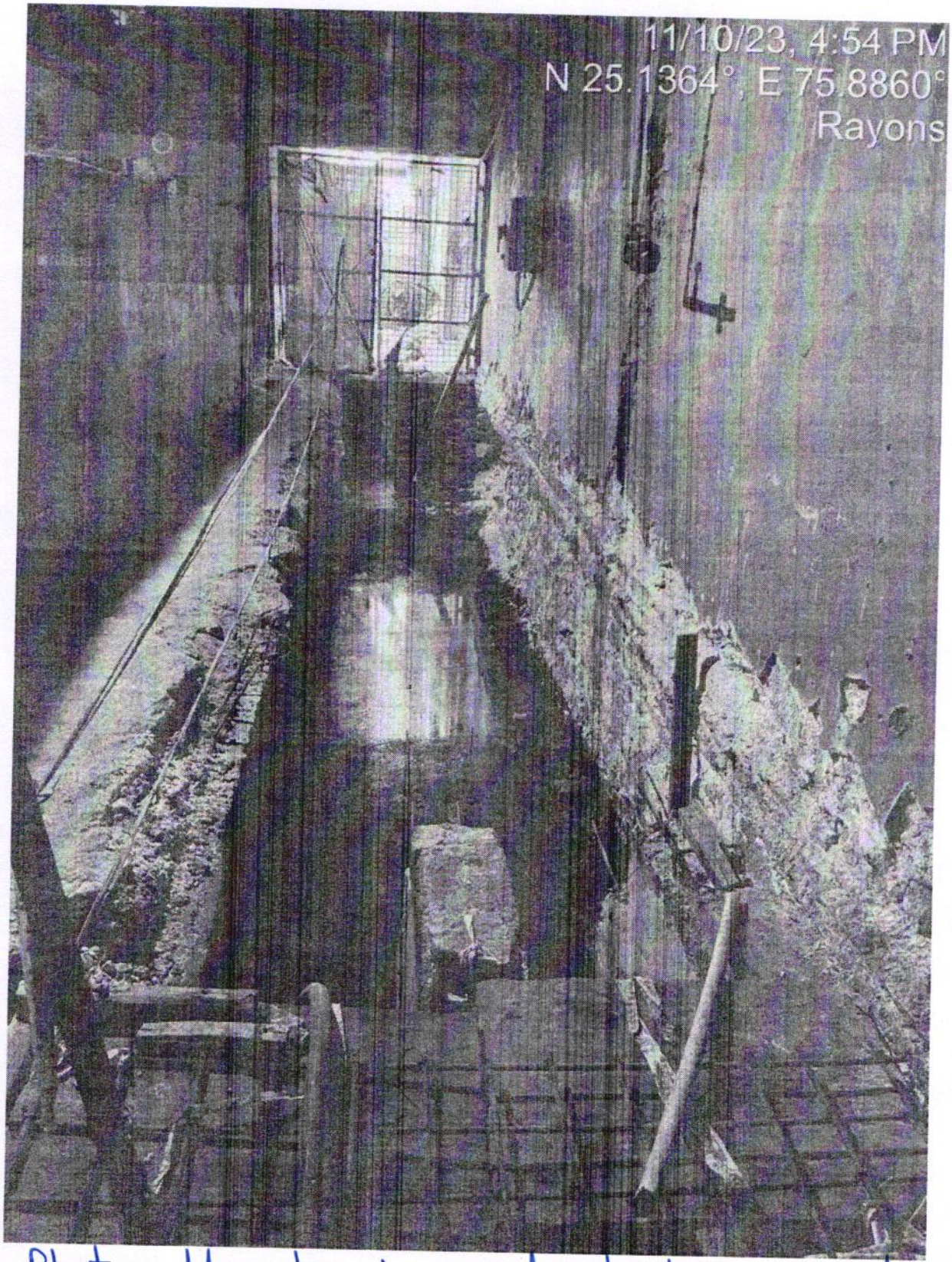
(Amit Soni)
Regional Officer



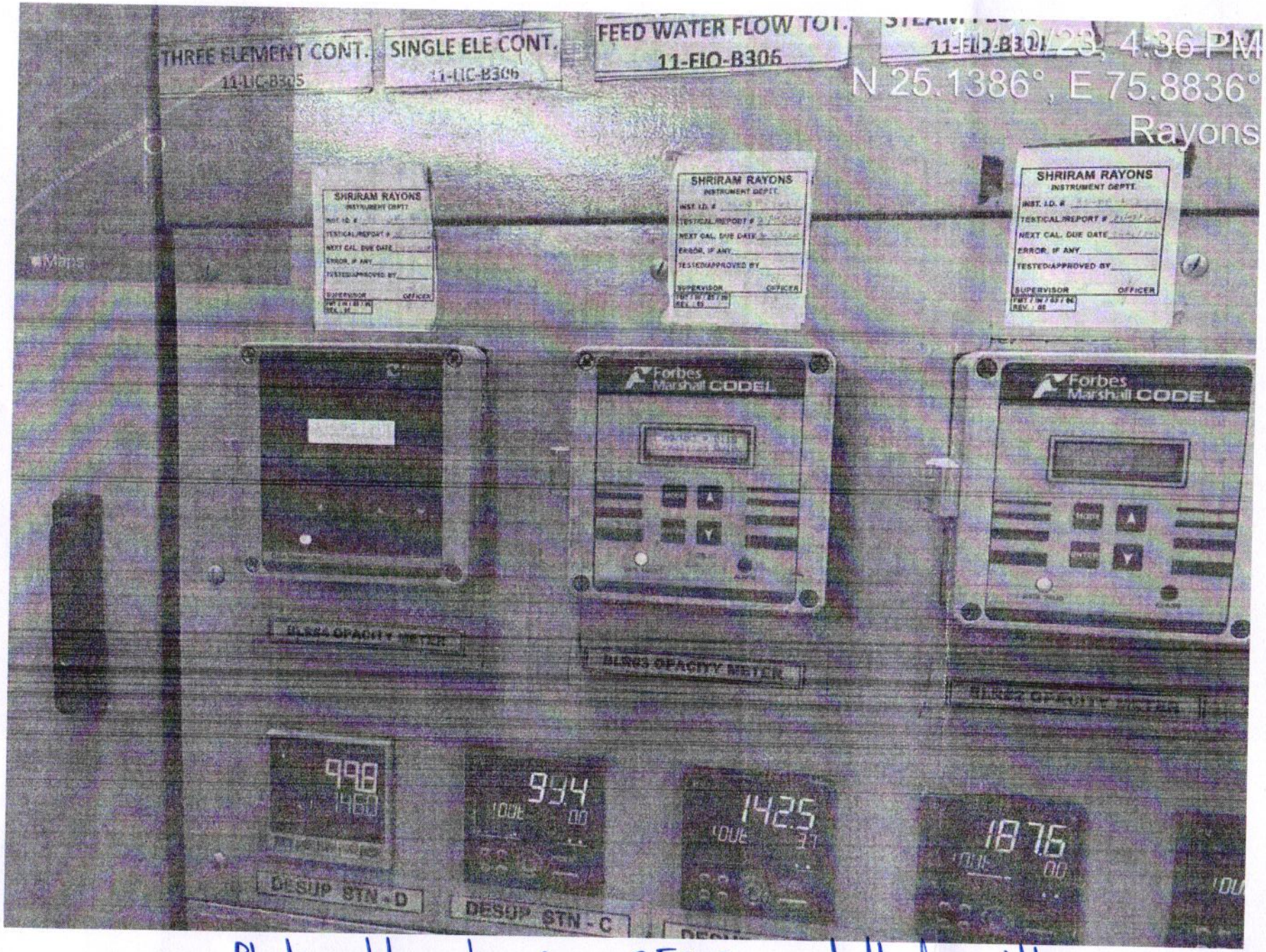
Photograph showing new 100 KL tanks constructed by the unit & flexible pipes installed with the Jaunder



Photograph showing legacy wastewater of the CS_2 plant collected in rainwater collection tanks of the unit



Photograph showing work of lining under progress



Photograph showing CEMS installed with the boiler.

General Details of Online Monitoring System:

1	Name and Address of the Unit/Industry	M/s Shriram Rayons, Kota
2	Contact Person of the Unit	Sh. Amit Katara-AGM (9929590854) & Sh. Bhupendra Singh-AM (9929590898)
3	Type/Category of the Unit/Industry (Ex. Cement/Power...etc.)	Rayon (Manmade Fiber)
4	Covered under: • CPCB directions (17 Category/GPI/CTDF/OCEMS-Red Category of NCR) • NGT Directions • Other Polluting industries directed by State Board.	Power Plant
5	Applicable for CEMS/CEQMS/Both	Both
6	Whether Unit Installed CAAQMS. If installed than connectivity status:	Not installed
7	Parameters required as per guidelines	Effluent water: COD, BOD, TSS, Flow, pH, Boiler Stack:, PM
8	Parameters Installed as per guidelines& Connectivity Status of the Industry	Effluent water -pH, TSS, BOD, Flow, COD Boiler Stack -PM Status is Connected
9	Number of Source emission point/s (Total name & number of applicable stacks)	4 nos. Stack – Boiler # 1, 2, 3 & 4
10	Number of Effluent discharge point/s (Total name & number of applicable outlets)	One
11	Is unit ZLD& Use of treated effluents	No
10	Total Number of exceedance in last 3 months	178 in Flue gas for PM 13 in Effluent water for BOD, COD, TSS and pH (17,July 2023 to October 17, 2023)
11	Date of Configuration of the unit Parameter wise.	11.07.2015
12	Details of Fee submitted regarding Online monitoring system	200000/- (Two Lacs Rupees)
13	Detail of Bank guarantee submitted regarding delayed installation of online monitoring system	Industry has Installed OEMS within time limit.

1. **Continuous Emission Monitoring System(CEMS):**

a) **Detail of the Stack/Source emission point:**

S. No.	Stack /Source emission point	Stack attached with (PCM)	Diameter of the Stack	Height of the stack	Height of the Port Hole from last disturbance point (Mtr)	Height of last disturbance in the stack (distance from the ground)	Height of the CEM from Ground Level	Appropriate site selection of OCEMS & Port Hole	Applicable Parameter	Process Parameter	Remark
1	Boiler#1	Boiler#1	2.115 meter	34.1 meter	16.28 meter	2.87 meter	18.65 meter for particulate matter	Yes, for particulate matter	SO2, NOx, SPM	SO2, NOx, SPM	
2	Boiler#2	Boiler#2	2.115 meter	34.1 meter	16.58 meter	2.67 meter	18.75 meter for particulate matter	Yes for particulate matter	SO2,NOx, SPM	SO2,NOx, SPM	
3	Boiler#3	Boiler#3	2.115 meter	34.1 meter	16.35 meter	2.60 meter	18.45 meter for particulate matter	Yes for particulate matter	SO2,NOx, SPM	SO2,NOx, SPM	
4	Boiler#4	Boiler#4	2.016 meter	40.0 meter	13.56 meter	6.39 meter	19.45meter for particulate matter	Yes for particulate matter	SO2,NOx, SPM	SO2,NOx, SPM	

b) **Detail of the CEMS analyzers:**

S. No.	Stack /Source emission point	Parameter Monitored	Name of the Analyser	Make & Model	Type of the analyzer/ instrument	Sampling Technique/ Process	Principle of Sampling	Mode of Communication RS232/RS485/ Ethernet/ USB	Indigenous / foreign instrument	Approving agency (TUV, MCERTS or USEPA) in case of foreign instrument
1	Boiler# 1, 2, 3 & 4	PM	Dust Monitor	CODEL, DCEM 2100	Online	Dual pass Transmission-meter	Opacity	RS232	Indigenous	TUV & MCERTS

c) **Configuration details of the CEMS analyzers:**

S. No.	Name of Stack	Parameter Monitored	Emission Limit Prescribed	Measurement range of the Instrument	Selected Measurement range	Dust Factor/ any other factor Set	Any CO2/O2 Correction required	Is Moisture correction required	Exceedances in last 3 months
1	Boiler#1 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-400 mg/Nm3	90	8% (O_2)	15 %	35
2	Boiler#2 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-400 mg/Nm3	89	8% (O_2)	15 %	31
3	Boiler#3 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-400 mg/Nm3	91	8% (O_2)	15 %	59
4	Boiler#4 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-1000 mg/Nm3	90	8% (O_2)	15 %	53

d) **Details of isokinetic sampling:**

Sr. No.	Name of Stack	Parameter Monitored	Date and Time	Temperature of Stack gases (K)	Displacement (mm H2O)	Velocity m/Sec	Duration (Min)	Analysis Results		Remarks Drift %
								CEMS	Lab	
1	Boiler no-1	Non operative	Non operative	NA	NA	NA	NA	NA	NA	NA
	Boiler no-2	PM	17.10.2023 at 1:02 PM to 1:27 PM	340	0.32	6.38	925	70 mg/Nm3	174 mg/Nm3	60%
	Boiler no-3	PM	17.10.2023 at 1:41 PM to 2:01PM	332	0.48	8.19	15	82mg/Nm3	166mg/Nm3	51%
	Boiler no-4	PM	12.10.2023 at 5:32 PM to 6:07PM	336	0.65	10.33	35	79 mg/Nm3	153 mg/Nm3	48%

Note : As per consent letter dated 16/06/2023 parameters of SO2 and NOx have been removed

2. **Continuous Effluent Quality Monitoring System(CEQMS):**

e) **Detail of the ETP/CETP etc.:**

1	Mode of Treatment	Effluent Treatment Plant
2	Quantity of treated effluent	6300 KLD (Max.) per day
3	Effluent handling practices and mode of disposal of treated effluent	Approx. 2000 (KLD) Recycled and remaining discharge through outlet drain
4	Installation location of the probe with reference to ETP/CETP outlet	ETP Outlet (Gate no-3)
5	Location of the Probe in Open/ Closed Channel/ Sump	ETP Outlet (Gate no-3) open Channel
6	Average water Level in Open/ Closed Channel/ Sump	270 mm (open channel)
7	Average Water level at outlet channel	270 mm
8	Detail of Sample Collection along with date and time	Wastewater sampling from outlet of unit on 11.10.2023 at 4:30 PM

f) **Detail of the CEQMS analyzers:**

Sr. No.	Name of the	Parameter Monitore	Name of the	Make & Model	Type of the analyzer/	Sampling Technique	Principle of Sampling	Mode of Communicati	Indigenous / foreign	Approving agency	Appropriate site selection

	Outlet	d	Analyser		instrument	/ Process		on RS232/RS485/ Ethernet/ USB	instrument	(TUV, MCERTS or USEPA) in case of foreign instrument	
1	ETP outlet	COD	Online effluent water monitoring system	Xylem WTW Germany 15221180	CarboVis 701 IQ TS & Sensolyt SEA	Inline	UV-Visible Spectrophotometer	Ethernet	Foreign	TUV	Yes
		BOD					COD comparative				Yes
		TSS					UV-Visible Spectrophotometer				Yes
		pH		WTW Germany 15251676			Potentiometer				Yes
		Flow	Flow meter	WTW Germany 15240724	.Open Channel flow	Ultrasonic pulse	Time required in by Ultrasonic pulse while travelling in between water surface and sensor	Ethernet	Foreign	TUV	Yes

g) **Configuration details of the CEQMS analysers:**

S. No.	Name of the Outlet	Parameter Monitored	Range of the analyzer/ instrument	Factor set during calibration	Calibration frequency	OCEMS Results at the time of Inspection	Laboratory results	Drift % if any	Exceedances in last 3 months
	ETP outlet	COD	800 mg/l	-	Half yearly	34.9mg/litre	89.8mg/litre	157%	**02**
		BOD	500 mg/l	-	Half yearly	14.7 mg/litre	11mg/litre	-25%	**02**
		TSS	900 mg/l	-	Half yearly	25.6mg/litre	8 mg/litre	-69%	**05**
		pH	0 – 14 pH	-	Half yearly	7.5	7.76	3%	05
		Flow	9400 m^3/hr	-	yearly	81.9m^3/hr	NA	NA	01

3. **Details of PTZ camera to visualize emission and effluent discharge points:**

S. No.	**Visualize**	Location of the PTZ camera	Make Model	Night vision Facility	Name of the Covered emission/effluent discharge point	Connectivity Status	Remark
1	Emission Discharge points	Top of ETP office	Hikvision	Yes	Boiler Stacks	Not connected	Under maintenance
2	Effluent discharge points	Near gate no-3 (ETP outlet)	Hikvision	Yes	ETP Outlet		

- **Is all emission and effluent discharge point covered by PTZ camera/s: Visualize all Emission Discharge points and Effluent discharge points.**

Observation and compliance status of shortcoming observed in ocems inspection report dated 13.03.2023

Shortcoming	Present Status
Unit has selected the full range of sensor to measure the pollutant concentration which is not as per the CPCB guideline 2018.	Unit selected range for measurement is not appropriate.
Drift % is found quite high for Particulate matter measurement i.e. up to 87%, 84% and 41% (acceptable limit is 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results.	Drift % is found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results. The results from the Particulate Matter monitoring system are not being compared on monthly basis i.e. last Friday of the month, at fixed time (replicate sample) starting 10.00 am. with standard isokinetic sampling method .
A total number of 35 exceedences were observed during period of June 14 to September 13, 2022 out of which 20 exceedences (Stack1=7, Stack 2 =4 and Stack 3=9) has been observed in Stack for PM and total 15 exceedences (BOD=2, COD =3, TSS= 9 and pH= 1) in effluent water.	A total number of 193 exceedences were observed during period of 17,July 2023 to October 17, 2023 out of which 178 exceedences (Stack1=35, Stack 2 =31, Stack 3 =59 and Stack 4=53) has been observed in Stack for PM and total 13 exceedences (BOD=2, COD =2, TSS= 5 ,pH= 5and flow=1) in effluent water.

Inspecting Officials

Anurag Singh
AEE

Dr. Abhi Garg
Senior Scientific Officer

Dr. Reenkoo Singhal
Senior Scientific Officer

Regional officer
C/s

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **8014**
Report On : **20/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **16/10/2023** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Backside of CS2 Plant (near waste yard)** Collected on **12/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	59.56
2	Nitrogen Dioxide as NO2 µg/M3	33.95
3	Particulate Matter (PM10) µg/m3	157
4	Sulphur Dioxide as SO2 ug/m3	9.2
5	Hydrogen Sulphide ppm	18.65

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **8015**
Report On : **20/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **16/10/2023** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Near Steel yard** Collected on **12/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	46.17
2	Nitrogen Dioxide as NO2 µg/M3	35.97
3	Particulate Matter (PM10) µg/m3	169
4	Sulphur Dioxide as SO2 ug/m3	10.7
5	Hydrogen Sulphide ppm	15.49

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **8016**
Report On : **20/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **16/10/2023** from **Ms Rinku Singhal, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 4** Collected on **12/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	153

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **8017**
Report On : **20/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **18/10/2023** from **Ms Rinku Singhal, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 2** Collected on **17/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	174

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **8018**
Report On : **20/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **18/10/2023** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 3** Collected on **17/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	166

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)
Final Report

Report No. : **8019**
Report On : **20/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **16/10/2023** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Behind NDU Plant** Collected on **12/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **20/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	47.70
2	Hydrogen Sulphide µg/m3	14.23
3	Nitrogen Dioxide as NO2 µg/M3	31.25
4	Particulate Matter (PM10) µg/m3	187
5	Sulphur Dioxide as SO2 ug/m3	9.8

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **20/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 24)
Final Report

Report No. : **5978**
Report On : **27/10/2023**

I hereby certify that I **Dr Manoj Kumar Meena**, State Board Analyst duly appointed **under sub Section(3) of Section 53 of the Water (Prevention & Control of Pollution) Act, 1974** received on the **11/10/2023** from **Shri Anurag Singh, JEE, Kota ,RSPCB Kota** a sample of **Waste Water** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **ETP ~~of~~ outlet** Collected on **11/10/2023**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **27/10/2023** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Zinc as Zn mg/l	0.496
2	pH	7.76
3	Total Suspended Solids mg/l	8
4	Chemical Oxygen Demand (COD) mg/l	89.8
5	Bio-Chemical Oxygen Demand (BOD) (3days at 27° C) mg/l	11
6	Oil & Grease mg/l	1.2
7	Copper as Cu mg/l	Not traceable
8	Total Chromium as Cr mg/l	Not traceable
9	Iron as Fe mg/l	0.211
10	Sulphides as S mg/l	0.5
11	Chloride as Cl mg/l	448
12	Sulphate as SO_4 mg/l	103
13	Ammonical Nitrogen as N mg/l	13.4

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **27/10/2023**

BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

Head Office (CD)

RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 141-2716906

Registered

File No : **F(Tech)/Kota(Ladpura)/6472(1)/2023-2024/6629-6631**
Order No : **2023-2024/CD/6966 Dated18/01/2024** **Date:** **18/01/2024**
Unit Id : 7182

M/s Shriram Rayons

Shriram Nagar , Tehsil:Ladpura
District:Kota

Sub: Refusal of Consent to Operate application under provisions of Air (Prevention & Control of Pollution) Act. 1981 and Water (Prevention & Control of Pollution) Act. 1974.

Ref: Your application No. **336099** dated 27/03/2023 for Consent to Operate

Sir,

Apropos above, it is to inform you that application for Consent to Operate for **Shriram Rayons (Main Plant)** situated at **Shriram Nagar, Kota, Rajasthan Kota Tehsil:Ladpura District:Kota** under reference is hereby refused under the provisions of Section 21(4) of Air (Prevention & Control of Pollution) Act,1981 and Section 25/26 of Water (Prevention & Control of Pollution) Act,1974 for the reasons that:

1 **Whereas, the industry has submitted CTO (exp) application dated 27/03/2023 for carrying out expansion in the existing Rayon Tyre Cord manufacturing plant.**

2 **And whereas, the application was examined and found to be incomplete and therefore a show cause notice for the intended refusal of Consent to Operate application was issued vide letter dated 19/05/2023 inter-alia communicating the deficiencies.**

3 **And whereas, the industry submitted a reply to the above-mentioned show cause notice dated 19/05/2023 vide its letter dated 30/05/2023, which on examination was found to be inadequate.**

Signature valid
Digitally signed by [illegible] Prakash Gupta
Date: 2024.01[illegible]:03:45 IST
Reason: SelfAttested
Location:

RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 141-2716906

Registered

File No : F(Tech)/Kota(Ladpura)/6472(1)/2023-2024/6629-6631
Order No : 2023-2024/CD/6966 Dated18/01/2024
Date: 18/01/2024
Unit Id : 7182

4 And whereas, the industry was inspected by the officials of the State Board on 11/10/2023 during which following non-compliances/ shortcomings were observed:

i. The industry constructed a new collection tank of 100 KL tank for collection for effluent generated from CS2 plant. This new 100 KL collection tank has not been covered and the possibility of mixing of rainwater/storm water with the process wastewater cannot be ruled out.

ii. The legacy wastewater of the CS2 plant, which was earlier, collected into the rain water collection tank inside the industry is still stored in the same tank and has not been treated by the industry.

iii. Industry is still using flexible pipelines for transferring wastewater from new 100 KL collection tank of the CS2 plant to the ETP of the main plant.

iv. It was observed that most of the process drains of the industry are still unlined and the process of lining has not been completed yet.

v. Ambient air monitoring of the industry was conducted by Regional Laboratory Kota on 12/10/2023. The analysis report reveals that the ambient air samples of the industry are not complying with the prescribed standards at all the locations.

vi. Industry selected inappropriate range of sensor to measure the pollutant concentration.

vii. Drift % is found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10 %) in boiler no. 2, 3 & 4 respectively with comparison to laboratory results.

viii. A total number of 193 exceedances were observed during period of 17 July 2023 to 17 October 2023 out of which 178 exceedances (Stack1=35, Stack2=31, Stack3=59 and Stack4=53) have been observed in Stack for PM and total 13 exceedances (BOD=2, COD=2, TSS=5, pH=5 and flow=1) have been observed in effluent water.

5 And whereas, it is evident that the industry has not rectified the non-compliances observed during last inspection dated 03.11.2022 even after repeated show cause notices issued vide letter dated 18.11.2022 and 19.05.2023.

6 Therefore, in light of the above, industry's long pending application of Consent to Operate (exp) dated 27/03/2023 is hereby refused.

Signature valid
Digitally signed by [redacted] Prakash Gupta
Date: 2024.01[redacted]:03:45 IST
Reason: SelfAttested
Location:

RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 141-2716906

Registered

File No : F(Tech)/Kota(Ladpura)/6472(1)/2023-2024/6629-6631
Order No : 2023-2024/CD/6966 Dated18/01/2024 **Date:** 18/01/2024
Unit Id : 7182

It may be noted that the industry's fresh application for grant of Consent to Operate, submitted soon after the refusal, shall not be treated as complete application unless it is supported with evidence-based proof for addressal of the issues/ reasons for the refusal of earlier consent application, and thus may again be refused without any further notice.

It is further to inform you that after refusal of Consent to Operate, you can not legally operate your plant.

Yours sincerely,

Group Incharge

Copy To:-

1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Kota
2 Master File.

Group Incharge

Signature valid
Digitally signed by [illegible] Prakash Gupta
Date: 2024.01[illegible]:03:45 IST
Reason: SelfAttested
Location:

Rajasthan State Pollution Control Board

Headquarter, 4, Institutional Area, Jhalana Doongri, Jaipur-302004
Phone: 0141-5159699,5159604 e-mail : member-secretary@rpcb.nic.in
TollFree HelpLine No. : 18001806127 Ext. 7

Registered A/D

F.Tech (CD-459)/RPCB/CD/1069-1071 Date. 18/1/2024

M/s Shriram Rayons,
(Rayon Tyre Cord Plant)
Shri Ram Nagar,
Tehsil – Ladpura, District – Kota
(Email- srsafety@dcmsr.com)

Sub.- Show cause notice for intended revocation of Consent to Operate under section 25/27 of the Water (Prevention & Control of Pollution) Act, 1974 & under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and for intended directions for closure under section 31 A of the Air (Prevention & Control of Pollution) Act, 1981 & section 33 A of the Water (Prevention & Control of Pollution) Act,1974 for your Rayon Tyre Cord & Sodium Sulphate manufacturing plant located at Shri Ram Nagar, Tehsil – Ladpura, District – Kota, regarding.

Ref.- i) Consent to Operate issued vide order no. 2022-2023/CD/6650 dated 11.04.2022.
ii) Inspection of the industry dated 11.10.2023.

Sir,

1. Whereas, the Water (Prevention and Control of Pollution) Act, 1974 (hereinafter referred to as the "Water Act") has come into force in whole of the State of Rajasthan w.e.f. 23/03/1974 & the Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred to as the "Air Act") has come to force in whole of the State of Rajasthan w.e.f. 16/05/1981.
2. And whereas the Water Act & the Air Act have been enacted to provide for the prevention, control and abatement of water and air pollution respectively and to carry out the aforesaid purpose, the Rajasthan State Pollution Control Board (hereinafter referred to as the "Board") has been conferred power to take such steps as are deemed necessary for the enforcement of the provisions of the aforesaid Acts.
3. And whereas, industry is being operated in the name & style of M/s Shriram Rayons (hereinafter referred to as the industry) at Shriram Nagar, Tehsil- Ladpura, District- Kota for production of Rayon Tyre Cord & Sodium Sulphate and the process is such that it generates polluted trade/domestic effluent & air emissions.
4. And whereas, Consent to Operate was issued to the industry vide no. 2022-2023/CD/6650 dated 11.04.2022, further amended vide letter dated 17.05.2023 which is valid up to 30.06.2026 along with conditions imposed therein. You were liable to

a) Collection tank of 100 KL capacity constructed for collection of effluent generated from CS2 plant has not been covered and the possibility mixing of rainwater/ storm water with the process waste water cannot be ruled out.

b) The legacy waste water of the CS2 plant, which was earlier, collected into the rain water collection tank inside the industry is still stored in the same tank and has not been treated by the industry.

c) Industry is still using flexible pipelines for transferring wastewater from new 100 KL collection tank of the CS2 plant to the ETP.

d) Most of the process drains of the industry are still unlined and the process of lining has not been completed yet.

e) Analysis reports dated 20.10.2023 reveals that the ambient air samples of the industry are not meeting with the prescribed standards at all the locations.

f) Installed range of sensor to measure the pollutant concentration is inadequate.

g) Drift % is found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10 %) in boiler no. 2, 3 & 4 respectively with comparison to laboratory results.

h) A total number of 193 exceedances were observed during period of 17 July, 2023 to 17 October, 2023 out of which 178 exceedances (Stack1 - 35, Stack2 - 31, Stack3 - 59 and Stack4 - 53) has been observed in Stack for PM and total 13 exceedances (BOD-2, COD-2, TSS-5, pH-5 and flow-1) has been observed in effluent water.

6. And whereas the above observations clearly indicate that the industry has not complied with the provisions of the Acts and conditions/directions issued by the State Board under the provisions of the Water Act & Air Act.
7. And whereas non-compliance of the provisions of the Water Act & Air Act and the conditions of consent to operate make industry liable to the legal action under provisions of the Acts including revocation of consent to operate.
8. And whereas the State Board may, in exercise of the powers conferred upon it under the provisions of section 33(A) of the Water Act, 1974 & 31 (A) of the Air Act, 1981 and in performance of its functions under the Acts, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions which includes the power to direct,-

   (a) The closure, prohibition or regulation of any industry, operation or process or

   (b) Stoppage or regulation of the supply of electricity or water or any other service.
9. Therefore, the Board intends to

Rajasthan State Pollution Control Board
Rajasthan State Pollution Control Board
Headquarter, 4, Institutional Area, Jhalana Doongri, Jaipur-302004
Phone: 0141-5159699,5159604 e-mail : member-secretary@rpcb.nic.in
TollFree HelpLine No. : 18001806127 Ext. 7

In view of above, this show cause notice is being issued as to why the consent to operate under reference may not be revoked & directions for closure may not be confirmed. In case, if you wish to submit any objection/clarification to intended actions, you may submit your reply along with the supporting documents/evidence within 15 days to this office as well as with a copy of it to the **Regional Officer, RSPCB, Kota** failing which actions intended herein may be confirmed without any further notice in the matter.

This bears approval of the competent authority.

Yours sincerely

(O.P. Gupta)
Group In-charge (CD)

Copy to:

1. Regional Officer, Rajasthan State Pollution Control Board, Kota to verify industry's reply, if received within the stipulated time and also forward the factsheet for imposition of Environmental Compensation to the industry.
2. Master File, CD cell, RSPCB, Jaipur.

Group In-charge (CD)

O/C

Rajasthan State Pollution Control Board

Headquarter, 4, Institutional Area, JhalanaDoongri, Jaipur-302004
Phone :0141-27168049,2716800 e-mail : member-secretary@rpcb.nic.in
HelpLineNo. : 0141-2716877

LiFE Lifestyle for Environment

Registered Post

F.Tech (CD - 459) RSCB/CD/1235-1237 Date. 05/03/2024

M/s Shriram Rayons.,
Village – Shriram Nagar,
Tehsil – Ladpura, District – Kota
Email- srsafety@dcmsr.com

Sub: Directions for deposition of Environmental Compensation under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 in compliance of orders of the Hon'ble Supreme Court in Writ Petition Civil No. 375/2012 Paryavaran Suraksha Samiti & Anr. Vs Union of India & Others and the Hon'ble National Green Tribunal in Original Application No. 606/2018 - Compliance of Municipal Solid Waste Management Rules, 2016.

Ref: i. Industry's inspection dated 11.10.2023.
ii. This office's letter dated 22.02.2024.
iii. Industry's reply dated 29.02.2024.

Sir,

1. Whereas section 24 of the Water (Prevention and Control of Pollution) Act, 1974 (hereinafter called as the Water Act) provides that no person can cause or permit any poisonous, noxious or polluting matter, determined in accordance with such standards as may be laid down by the State Board, to enter into any stream or well or sewer or on land.
2. And whereas, section 25/26 of the Water Act provides that no person shall without the previous consent of the State Board establish or take any steps to establish, any industry, operation or process or any treatment and disposal system or any extension or addition thereto, which is likely to discharge sewage or trade effluent into a stream or well or sewer or on land or bring into use any new or altered outlet for the discharge or sewage or trade effluent or begin to make any new discharge of sewage or trade effluent.

3. And whereas, section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (hereinafter called as the Air Act) provides that no person shall without previous consent of the State Board, establish or operate any industrial plant in an air pollution control area, which is likely to cause air pollution in environment and discharge or cause or permitted to be discharged the emission of any air pollutant in excess to the standards laid down by the State Board.
4. And whereas, you are operating the unit/establishment/ entity (hereinafter referred to as the industry) in the name of M/s Shriram Rayons, located at Village – Shriram Nagar, Tehsil – Ladpura, District –Kota which is engaged in production of tyre cord & nylon dipped fabric and during the process the industry discharges water and/or air pollutants.
5. And whereas, the industry was inspected by the officials of the Board on 11.10.2023 and during the course of inspection following non-compliances were observed:-
    a) Analysis reports dated 20.10.2023 reveals that the ambient air samples of the industry are not meeting with the prescribed standards at all the locations.
    b) A total number of 193 exceedances were observed during period of 17 July, 2023 to 17 October, 2023 out of which 178 exceedances (Stack1 = 35, Stack2 = 31, Stack3 = 59 and Stack4 = 53) has been observed in Stack for PM and total 13 exceedances (BOD=2, COD=2, TSS=5, pH=5 and flow=1) has been observed in effluent water.
    c) Installed range of sensor to measure the pollutant concentration is inadequate.
    d) Drift % is found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10 %) in boiler no. 2, 3 & 4 respectively with comparison to laboratory results.
    e) Any other violation of the Rules.
6. And whereas, the above observations indicate that the industry has failed to comply with the provisions of Air Act and Water Act and various directions of the Hon'ble Courts and Hon'ble National Green Tribunal (NGT) and/ or by making discharge of effluent/ emissions has caused grave damage to the environment which can be categorized as significantly huge with grave consequences on the environment, public health and flora & fauna.
7. And whereas, the Hon'ble Supreme Court in Writ Petition Civil No. 375/2012 Paryavaran Suraksha Samiti & Anr. Vs Union of India & Others and the Hon'ble NGT

in Original Application No. 606/2018 Compliance of Municipal Solid Waste Management Rules, 2016 and in several other cases has directed the Board to impose Environmental Compensation on all the individuals/ units /industries/ mines/ institution/ entities etc. who are causing damage to the environment on the principle of 'POLLUTER PAYS'.

8. And whereas, Hon'ble NGT has issued the directions to impose Environmental Compensation on the non complying polluting units and has directed the Board to implement the same for restoration of environmental damages caused to the environment.
9. And whereas, the industry is liable to pay damages i.e. Environmental Compensation on the basis of 'Polluter Pays Principle' as directed by the Hon'ble Supreme Court and Hon'ble NGT in various orders.
10. And whereas, in light of the factsheet forwarded by Regional Office, RSPCB, Kota, the Board considering non-compliance period of total 100 days, has estimated the amount of environmental compensation to be levied on the industry as Rs. **49,00,000/- (Rupees Fourty Nine Lakhs only)** on the basis of Polluter Pays Principle.
11. And whereas, show cause notice for intended directions for deposition of above mentioned Environmental Compensation under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 was issued to the industry vide letter dated 22.02.2024.
12. And whereas, industry's reply to aforementioned show cause notice was examined and was found to be inadequate as the industry failed to submit any valid justification for exemption from intended imposition of Environmental Compensation.
13. And whereas, the State Board in performance of its duties under the Acts, is competent to issue any directions under Section 33 A of the Water Act and Section 31 A of the Air Act in writing to any person, officer or authority and such person, officer or authority shall be bound to comply with such directions.

In view of the above, the State Board in exercise of the powers conferred upon it under Section 33A of the Water Act and 31A of the Air Act and for performance of functions under the Acts, hereby directs the industry to deposit the amount of **Rs. 49,00,000/- (Rupees Fourty Nine Lakhs only)** as Environmental Compensation on the basis of 'Polluter Pays Principle' in Regional office of the RSPCB at **Kota** within 60 days. The Environmental Compensation may be deposited through a demand draft drawn in favour of the Member Secretary, Rajasthan State Pollution Control Board, Jaipur.

Rajasthan State Pollution Control Board
Headquarter, 4, Institutional Area, JhalanaDoongri, Jaipur-302004
Phone :0141-27168049,2716800 e-mail : member-secretary@rpcb.nic.in
HelpLineNo. : 0141-2716877

Please be informed that in case of failure to deposit the Environmental Compensation, the industry will be liable for following actions:-

i. Consent to establish and/ or consent to operate shall be refused/ revoked without any further notice.
ii. Legal action including filing of Execution Application before the Hon'ble NGT may be initiated against the industry and its owners/ occupiers.
iii. Any application for grant/ renewal of consent to establish or consent to operate shall not be entertained by the Board.
iv. After 60 days the industry shall be liable to pay additional amount @ 1.5% of the Environmental Compensation amount per month till deposition of the Environmental Compensation.

It may be further noted that failure to comply with these directions is a criminal offence, punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine under Section 41(2) of the Water Act and Section 39 of the Air Act and the industry shall be closed immediately without any prior notice.

This bears approval of the competent authority.

Yours sincerely,

(O.P. Gupta)
Group In-charge (CD)
O/C

Copy to following for information and necessary action:-

1. Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Kota. Please forward the demand drafts received from the industry to Accounts Section of Head Office with a statement of amount deposited to Group In-charge (CD).
2. Master File, Rajasthan State Pollution Control Board, Jaipur.

Group In-charge (CD)

O/C

Inspection Report
Shriram Rayons
(A unit of DCM Shriram Industries Ltd.) Rayon Tyre Cord Plant
Shriram Nagar, Tehsil- Ladpura, District-Kota

Aforesaid industry was inspected by the undersigned Official on 01/03/2024 in presence of Sh. Bhupendra Singh (Asst. Manager) in order to verify the rectification of non-compliances which were communicated to the unit by SCN issued to the industry vide H.O. letter dated 18/01/2024.

Unit had submitted reply vide e-mail dated 01/02/2024 to show cause notice dated 18/01/2024. Comments on the reply submitted to show cause notice are as under:

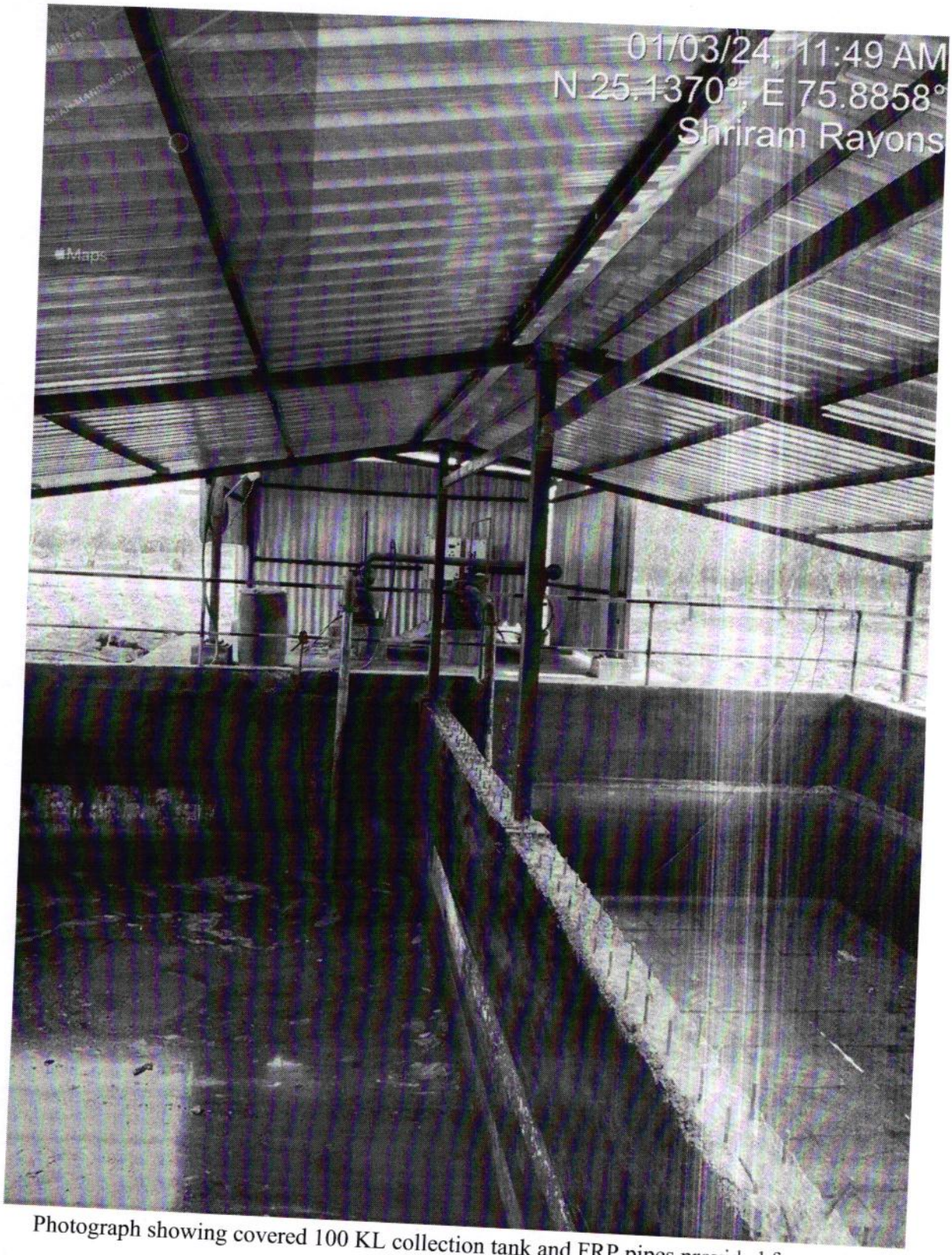
Sr. No.	Sr. No. of SCN dated 18/01/2024	Comments/observations on Unit's reply as per Inspection dated 01/03/2024
1.	5 (a)	The 100 KL collection tank (for collection of effluent generated from CS_2 plant) has now been covered (photograph enclosed).
2.	5 (b)	As per representative, the legacy wastewater of the CS_2 plant, which was earlier collected into the rain water collection tank inside the unit has now been treated by the unit in its ETP. The rain water collection tank was found empty during inspection.
3.	5 (c)	Now the flexible pipelines have been completely removed and unit has provided FRP pipelines in place of flexible pipelines (photograph taken during inspection is enclosed).
4.	5 (d)	During inspection, it was observed that most of the process drains (transferring wastewater generated from main plant and dipping plant to the ETP) have been lined and covered by the industry and the work of lining is almost complete.
5.	5 (e)	Ambient air monitoring and stack monitoring of the unit was conducted by Regional Laboratory Kota on 29/02/2024 and 01/03/2024. The analysis report dated 02/03/2024 (copy enclosed) reveals that the ambient air samples of the unit are complying with the prescribed standards at all the locations. Further, the stack air monitoring of the boilers are complying

		with prescribed standards.
6.	5 (f)	As per Inspection report of Online monitoring system (copy enclosed)
7.	5 (g)	As per Inspection report of Online monitoring system (copy enclosed)
8.	5 (h)	As per Inspection report of Online monitoring system (copy enclosed)

(Anurag Singh)
AEE, RSPCB, KOTA

C/s

(Amit Soni)
Regional Officer



Photograph showing covered 100 KL collection tank and FRP pipes provided for tranfer of effluent to ETP

General Details of Online Monitoring System:

1	Name and Address of the Unit/Industry	M/s Shriram Rayons, Kota
2	Contact Person of the Unit	Sh. Amit Katara-AGM (9929590854) & Sh. Bhupendra Singh-AM (9929590898)
3	Type/Category of the Unit/Industry (Ex. Cement/Power...etc.)	Rayon (Manmade Fiber)
4	Covered under: • CPCB directions (17 Category/GPI/CTDF/OCEMS-Red Category of NCR) • NGT Directions • Other Polluting industries directed by State Board.	Power Plant
5	Applicable for CEMS/CEQMS/Both	Both
6	Whether Unit Installed CAAQMS. If installed than connectivity status:	Not installed
7	Parameters required as per guidelines	Effluent water: COD, BOD, TSS, Flow, pH, Boiler Stack:, PM
8	Parameters Installed as per guidelines& Connectivity Status of the Industry	Effluent water -pH, TSS, BOD, Flow, COD Boiler Stack -PM Status is Connected
9	Number of Source emission point/s (Total name & number of applicable stacks)	4 nos. Stack – Boiler # 1, 2, 3 & 4
10	Number of Effluent discharge point/s (Total name & number of applicable outlets)	One
11	Is unit ZLD& Use of treated effluents	No
10	Total Number of exceedance in last 3 months	09 in Flue gas for PM 02in Effluent water for pH (01,Dec 2023 to 01,March, 2024)
11	Date of Configuration of the unit Parameter wise.	11.07.2015
12	Details of Fee submitted regarding Online monitoring system	200000/- (Two Lacs Rupees)
13	Detail of Bank guarantee submitted regarding delayed installation of online monitoring system	Industry has Installed OEMS within time limit.

1. Continuous Emission Monitoring System(CEMS):

a) Detail of the Stack/Source emission point:

S. No.	Stack /Source emission point	Stack attached with (PCM)	Diameter of the Stack	Height of the stack	Height of the Port Hole from last disturbance point (Mtr)	Height of last disturbance in the stack (distance from the ground)	Height of the CEM from Ground Level	Appropriate site selection of OCEMS & Port Hole	Applicable Parameter	Process Parameter	Remark
1	Boiler#1	Boiler#1	2.115 meter	34.1 meter	16.28 meter	2.87 meter	18.65 meter for particulate matter	Yes, for particulate matter	PM	PM	
2	Boiler#2	Boiler#2	2.115 meter	34.1 meter	16.58 meter	2.67 meter	18.75 meter for particulate matter	Yes for particulate matter	PM	PM	
3	Boiler#3	Boiler#3	2.115 meter	34.1 meter	16.35 meter	2.60 meter	18.45 meter for particulate matter	Yes for particulate matter	PM	PM	
4	Boiler#4	Boiler#4	2.016 meter	40.0 meter	13.56 meter	6.39 meter	19.45meter for particulate matter	Yes for particulate matter	PM	PM	

b) Detail of the CEMS analyzers:

S. No.	Stack /Source emission point	Parameter Monitored	Name of the Analyser	Make & Model	Type of the analyzer/ instrument	Sampling Technique/ Process	Principle of Sampling	Mode of Communication RS232/RS485/ Ethernet/ USB	Indigenous / foreign instrument	Approving agency (TUV, MCERTS or USEPA) in case of foreign instrument
1	Boiler# 1, 2 & 3	PM	Dust Monitor	CODEL, DCEM 2100	Online	Dual pass Transmission-meter	Opacity	RS232	Indigenous	
2	Boiler# 4	PM	Dust Monitor	CODEL, DCEM 21XX	Online	Dual pass Transmission-meter	Opacity	RS232	Indigenous	

c) Configuration details of the CEMS analyzers:

S. No.	Name of Stack	Parameter Monitored	Emission Limit Prescribed	Measurement range of the Instrument	Selected Measurement range	Dust Factor/ any other factor Set	Any CO2/O2 Correction required	Is Moisture correction required	Exceedances in last 3 months
1	Boiler#1 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-750 mg/Nm3	134	4% (O_2)	15 %	3
2	Boiler#2 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-750 mg/Nm3	129	4% (O_2)	15 %	3
3	Boiler#3 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-750 mg/Nm3	131	4% (O_2)	15 %	1
4	Boiler#4 Stack	Particulate Matter	250 mg/Nm^3	0-1000 mg/Nm3	0-750 mg/Nm3	144	4% (O_2)	15 %	2

d) Details of isokinetic sampling:

Sr. No.	Name of Stack	Parameter Monitored	Date and Time	Temperature of Stack gases (K)	Displacement (mm H2O)	Velocity m/Sec	Duration (Min)	Analysis Results		Remarks Drift %
								CEMS	Lab	
1	Boiler no-1	PM	29.02.2024 at 12:45 PM to 1:25 PM	398	1.45	5	40	136mg/Nm3	149 mg/Nm3	8.72
	Boiler no-2	PM	01.03.2024 at 3:45 PM to 4:20 PM	323	2	5	35	167mg/Nm3	171 mg/Nm3	2.34
	Boiler no-3	PM	01.03.2024 at 1:00 PM to 1:43PM	333	1.125	4	43	162mg/Nm3	169 mg/Nm3	4.14
	Boiler no-4	PM	29.02.2024 at 04:45 PM to 05:08 PM	335	3.975	7	23	136mg/Nm3	145 mg/Nm3	6.21

Note : As per consent letter dated 16/06/2023 parameters of SO2 and NOx have been removed

2. Continuous Effluent Quality Monitoring System(CEQMS):

e) Detail of the ETP/CETP etc.:

1	Mode of Treatment	Effluent Treatment Plant
2	Quantity of treated effluent	6300 KLD (Max.) per day
3	Effluent handling practices and mode of disposal of treated effluent	Approx. 2000 (KLD) Recycled and remaining discharge through outlet drain
4	Installation location of the probe with reference to ETP/CETP outlet	ETP Outlet (Gate no-3)
5	Location of the Probe in Open/ Closed Channel/ Sump	ETP Outlet (Gate no-3) open Channel
6	Average water Level in Open/ Closed Channel/ Sump	270 mm (open channel)
7	Average Water level at outlet channel	270 mm
8	Detail of Sample Collection along with date and time	Wastewater sampling from outlet of unit on 01.03.2024 at 3:56 PM

f) Detail of the CEQMS analyzers:

Sr. No.	Name of the Outlet	Parameter Monitored	Name of the Analyser	Make & Model	Type of the analyzer/ instrument	Sampling Technique / Process	Principle of Sampling	Mode of Communication RS232/RS485/ Ethernet/ USB	Indigenous / foreign instrument	Approving agency (TUV, MCERTS or USEPA) in case of foreign instrument	Appropriate site selection
1	ETP outlet	COD	Online effluent water monitoring system	Xylem WTW Germany 15221180	CarboVis 701 IQ TS & Sensolyt SEA	Inline	UV-Visible Spectrophotometer	Ethernet	Foreign	TUV	Yes
		BOD					COD comparative				Yes
		TSS					UV-Visible Spectrophotometer				Yes
		pH		WTW Germany 15251676			Potentiometer				Yes
		Flow	Flow meter	WTW Germany 15240724	.Open Channel flow	Ultrasonic pulse	Time required in by Ultrasonic pulse while travelling in between water surface and sensor	Ethernet	Foreign	TUV	Yes

g) Configuration details of the CEQMS analysers:

S. No.	Name of the Outlet	Parameter Monitored	Range of the analyzer/ instrument	Factor set during calibration	Calibration frequency	OCEMS Results at the time of Inspection	Laboratory results	Drift % if any	Exceedances in last 3 months
	ETP outlet	COD	800 mg/l	-	Half yearly	74.8	79.4	5.79	-
		BOD	500 mg/l	-	Half yearly	22.7	21.5	-5.58	-
		TSS	900 mg/l	-	Half yearly	12.5	13.7	8.76	-
		pH	0 – 14 pH	-	Half yearly	7.32	7.8	6.15	**02**
		Flow	9400 m^3/hr	-	yearly	168 m^3/hr	-	-	-

3. Details of PTZ camera to visualize emission and effluent discharge points:

S. No.	**Visualize**	Location of the PTZ camera	Make Model	Night vision Facility	Name of the Covered emission/effluent discharge point	Connectivity Status	Remark
1	Emission Discharge points	Top of ETP office	Hikvision	Yes	Boiler Stacks	**Connected**	
2	Effluent discharge points	Near gate no-3 (ETP outlet)	Hikvision	Yes	ETP Outlet		

- **Is all emission and effluent discharge point covered by PTZ camera/s: Visualize all Emission Discharge points and Effluent discharge points.**

Observation and compliance status of shortcoming observed in ocems Show cause notice dated 18/01/2024

Shortcoming	Present Status
Unit has selected the full range of sensor to measure the pollutant concentration which is not as per the CPCB guideline 2018.	Rectified
Drift % is found quite high for Particulate matter measurement i.e. up to 60%, 51% and 48% (acceptable limit is 10%) in boiler no. 2, 3 and 4 respectively with comparison to laboratory results.	Drift % is for Particulate matter measurement i.e. up to 8.72%, 2.33% and 4.41% and 6.2% (acceptable limit is 10%) in boiler no. 1, 2, 3 and 4 respectively with comparison to laboratory results
A total number of 193 exceedences were observed during period of 17,July 2023 to October 17, 2023 out of which 178 exceedences (Stack1=35, Stack 2 =31, Stack 3 =59 and Stack 4=53) has been observed in Stack for PM and total 15 exceedences (BOD=2, COD =2, TSS= 5 ,pH= 5and flow=1) in effluent water.	A total number of 11 exceedences were observed during period of 01,Dec ,2023 to 01,March, 2024 out of which 09 exceedences (Stack1=3, Stack 2 =3, Stack 3 =1 and Stack 4=2) has been observed in Stack for PM and total 02 exceedences (pH= 2) in effluent water. As per CPCB,data reporting protocol said exceedences are not even fall in yellow category .

Inspecting Officials

Dr. Abhi Garg
Senior Scientific Officer

Dr. Reenkoo Singhal
Senior Scientific Officer

Regional officer
C/s

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8252**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Near Steel yard** Collected on **29/02/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	43.87
2	Hydrogen Sulphide µg/m3	14.72
3	Nitrogen Dioxide as NO2 µg/M3	36.65
4	Particulate Matter (PM10) µg/m3	91
5	Sulphur Dioxide as SO2 ug/m3	12.68

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area,
Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8253**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Bhupendra Kumar Sharma**, JSO, **Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Back side of CS2 Plant(Near waste yard)** Collected on **29/02/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	56.05
2	Hydrogen Sulphide µg/m3	20.06
3	Nitrogen Dioxide as NO2 µg/M3	36.92
4	Particulate Matter (PM10) µg/m3	84
5	Sulphur Dioxide as SO2 ug/m3	12.23

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8254**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Ambient Air Quality** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Behind NDU plant** Collected on **29/02/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	carbon di sulphide ug/m3	45.00
2	Hydrogen Sulphide µg/m3	15.10
3	Nitrogen Dioxide as NO2 µg/M3	36.42
4	Particulate Matter (PM10) µg/m3	89
5	Sulphur Dioxide as SO2 ug/m3	11.88

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8255**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Boiler no. 1** Collected on **29/02/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	149

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8256**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Bhupendra Kumar Sharma, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 4** Collected on **29/02/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	145

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8257**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Ms Abhi Garg, JSO, Kota ,RSPCB** Kota a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 2** Collected on **01/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	171

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8258**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack attached with Husk Fired Boiler no. 3** Collected on **01/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Particulate Matter mg/Nm3	169

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 10)

Report No. : **8259**
Report On : **02/03/2024**

I hereby certify that I **Ms Rinku Singhal**, State Board Analyst duly appointed **under sub Section(2) of Section 29 of the Air (Prevention & Control of Pollution) Act, 1981** received on the **01/03/2024** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Source Emission (Stack)** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Stack of CS2 Plant** Collected on **01/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **02/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Carbon di sulphide Kg/MT	3.51
2	Hydrogen Sulphide Kg/MT	0.91

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **02/03/2024**

Ms Rinku Singhal
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873

FORM - X
RAJASTHAN STATE POLLUTION CONTROL BOARD
REPORT OF THE STATE BOARD ANALYST
(See Rule - 24)

Report No. : **6280**
Report On : **12/03/2024**

I hereby certify that I **Om Prakash Shardul**, State Board Analyst duly appointed **under sub Section(3) of Section 53 of the Water (Prevention & Control of Pollution) Act, 1974** received on the **01/03/2024** from **Ms Abhi Garg, JSO, Kota ,RSPCB Kota** a sample of **Waste Water** of **M/S Shriram Rayons , Plant - , , Tehsil- Ladpura , District- Kota** Collected from **Final outlet of Industry** Collected on **01/03/2024**. The Sample was in a condition fit for analysis as reported below :-

I further certify that I have analyzed the aforementioned sample on **12/03/2024** and declare the result of the analysis to be as below :-

S. No.	Parameters	Result
1	Zinc as Zn mg/l	0.811
2	pH	7.8
3	Total Suspended Solids mg/l	13.7
4	Chemical Oxygen Demand (COD) mg/l	79.4
5	Bio-Chemical Oxygen Demand (BOD) (3days at 27° C) mg/l	21.5
6	Oil & Grease mg/l	NT
7	Copper as Cu mg/l	NT
8	Total Chromium as Cr mg/l	NT
9	Iron as Fe mg/l	0.097
10	Sulphides as S mg/l	0.32
11	Chloride as Cl mg/l	420
12	Sulphate as SO_4 mg/l	284
13	Ammonical Nitrogen as N mg/l	13.2

The condition of the seals, fastening and container on receipt was as follows : **Intact**
Signed This On **12/03/2024**

Om Prakash Shardul
BOARD ANALYST
Rajasthan State Pollution Control Board
Regional Office Kota
SPL-2A, Road no. 6, Indrapasth Ind. Area, Kota
Phone: 0744-2490873