ENVIRONMENTAL STATEMENT FORM- V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING 31st MARCH 2026.

(2025-2026)

PART- A

1	Name and Address of the owner occupier of the industry in operation or process	**Govind Pandey** **Chief Environment Officer &** **Chief Mechanical Engineer Planning** **Administrative Building** **Rail Wheel Factory, Yelahanka Newtown,** **Bengaluru 560064.**
2	Industrial Category	LARGE, Red Category
3	Production Capacity	Cast Wheels: 97000 TPA Forged Axles: 1,65,000 axles/ Annum (80,850 TPA)
4	Year Of Commencement	1984
5	Date of Last Environmental Statement Submitted	20.06.2025

PART-B

1. Water and Raw Material Consumption

a. Water Consumption in m^3/day

Source	Water Consumption in Kilo Ltrs/day	
	2024-2025	2025-2026
a) Process/Cooling Water	198 KL/day	156.3 KL/day
b) Domestic	138 KL/day	147.3 KL/day

b. Water consumption per unit of product-

2024-25	2025-26
0.514 KL /MT	0.381 KL/MT

मुख्य यांत्रिक इंजीनियर – योजना
Chief Mechanical Engineer - Planning
रेल पहिया कारखाना (भारतीय रेल)
RAIL WHEEL FACTORY (Indian Railways)
यलहंका, बेंगलूरु - 560 064
Yelahanka, Bengaluru - 560 064

2. Raw Material Consumption

a. Raw Material Consumption for Wheel Making during FY 2025-26

Wheel production in MT: 84459.79

Raw Material	Consumption (MT)	Consumption/unit of Product (MT/MT)	Remarks
Steel Scrap (Inhouse + other Railways)	169676.5	2.009	RWF is a Biggest recycler of Indian Railways, consumes majority of steel scrap generated across railways
Calcined Lime	8387.22	0.099	Used as flux for steel slag generation
Dolomite	492.18	0.006	
Graphite Electrode	594.46	0.007	Electricity based steel making no use of fossil fuels
Ferro Alloys	2441.215	0.029	Fe-Mn, Fe-Si, Si-Mn for desired steel grade
Graphite Powder	1797.72	0.021	For Re-carburization
Graphite Mould	709.22	0.008	Unlike traditional sand mould, casting RWF uses reusable Graphite moulds.
Silica Sand	7318	0.087	Sand is used only for riser preparation and the used sand is recycled completely in-house reclamation plant.
Refractories	7405	0.088	Furnace, ladle lining and casting facilitations pouring tubes, ingates

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b. Raw Material Consumption for Forged Axle during FY 2025-26

Axle production in MT: 65154.71

Raw Material	Consumption (MT)	Consumption/unit of Product (MT/MT)	Remarks
Blooms	93116.81	1.429	Steel blooms from integrated steel plants for forging of axles
Inserts (LNUX, Milling works etc)	40.3	0.0006	For facilitating machining operations of forged axles.
Cutting Oil	23.15	0.00035	
Castor Oil	50.7	0.00077	

PART-C

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

Pollutants	Quantity of Pollutants discharged per mass/ day (Kg/day)	Concentration of Pollutants discharged mass/ volume (mg/Nm^3)	Percentage of variations from prescribed standards with reasons
1. Water	RWF has adopted zero effluent generation process. Domestic Sewage is treated in-house and treated water is being used for process, gardening and other non-potable uses. Analysis report for the month **March 2026** is enclosed as **Annexure-I.**		
2. Air	All the oil-fired furnaces have been converted to PNG. Pollutant emissions from Stack are within the KSPCB Norms and achieved through providing requisite APC measures and adequate stack heights. Stack & Ambient monitoring report for the month of **March 2026** is enclosed as **Annexure-II**		

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PART-D

HAZARDOUS WASTES GENERATION

(As specified under the Hazardous Waste/ Management and Handling Rules, 2016)

Hazardous Wastes	Schedule I Category	Waste	Type	2024-25 (MT/A)	2025-26 (MT/A)
From process	5.2	Wastes Residue containing Oil	Coolant Mixed Grinding Waste	49.14	61.05
	5.1	Used spent oil	Hydraulic Oil + Transformer Oil	10.25	121.5*
	5.3	Waste Cutting Oil	Water based Coolant Oil	30.35	43.14
	15.2	Discarded Asbestos	Used Asbestos Gaskets	17.55	19.97**
	3.3 & 33.2	Sludge & filters contaminated with Oil	Paper based Oil filter	29.55	27.45***
		Contaminated Cotton Rag & other cleaning materials	Oil soaked cotton waste, gunny bags, Dust masks, Gloves, Aprons, Foams & loose plastics		
		E-Waste	Computers, Xerox, cables Etc.	5.9	3.55

* Generation exceeded the authorized quantity of 95 MT on account of annual shutdown activities undertaken at both the Axle and Wheel Shops, wherein hydraulic oil and transformer oil in the power packs were fully replaced.

** Asbestos gaskets are used as sealing material between the pouring tube and mould. Ongoing indigenization trials of pouring tubes have resulted in increased gasket consumption to prevent metal leakage. Simultaneously, trials for the development of non-asbestos gaskets are also in progress.

*** The incinerable/ Co-processing Wastes (includes non-hazardous gunny bags, plastics, etc.

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PART-E

SOLID WASTE GENREATION

	Waste Type	Quantity of Generation	
1	**Process Waste**	**2024-25 (MT/A)**	**2025-26 (MT/A)**
	Foundry skull	7914.57	7868.85
	Foundry slag	16893.99	23641.61
	Used Refractory Bricks.	970.67	1249.21
	Condemned Graphite Mould Blanks & electrodes	54.24	113.43
	Condemned Graphite Riser bits	28.23	48.51
	Mill scales (Forged scales)	1460.19	1821.52
	Packing Wood	465.13	1733.94
	Packing Cardboard	38.68	46.39
	Waste Plastic items	5.06	6.18
2	**Pollution Control Facility Waste**	**2024-25 (MT/A)**	**2025-26 (MT/A)**
	Fume Extraction Dust	1326.08	1250
3	**Quantity recycled or reutilized within the unit**	**2024-25 (MT/A)**	**2025-26 (MT/A)**
	Condemned wheels	4180.43	2762.93
	Condemned Axles	1057.96	1304.81
	Graphite mould dust re-utilized	374.18	523.41
	Turnings & borings compacted & used in Steel Melting Shop.	12291.8	14317.39
	Hub cuts and Risers	43485.3	44863.17
	Axle End Cuts	5056.52	7794.69
	Process sand reclaimed	6717.25	5672.75

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PART-F

Please specify the characterization (in terms of Composition and quantum) of Hazardous as well as Solid wastes indicate disposal adopted for both these categories of wastes.

Wastes	Characteristics	Haz Or Non-Haz	Disposal procedure
Used spent oil	Liquid spent mineral/lubricating oil combustible in nature	H	Disposed to authorized recyclers/ re-processors
Wastes Residue containing Oil	Semi-solid metallic sludge containing grinding fines, metal particles and residual coolant/oil; oily and combustible in nature	H	Disposed to authorized recycler/ARF for co-processing
Discarded Asbestos	Solid fibrous sealing waste comprising asbestos fiber matrix with binder/filler	H	Disposed to authorized TSDF
Waste Cutting Oil	Spent water-based cutting fluid/emulsion comprising oil-water mixture, emulsifiers, additives, and suspended metal fines/contaminants	H	Disposed to authorized recyclers /re-processors/ Treatment facilities
Sludge & filters contaminated with Oil	Solid oil contaminated from filtration and cleaning activities Combustible in nature	H	Disposed to authorized incinerators/ARF for co-processing
Contaminated Cotton Rag & other cleaning materials		H	
Fume extraction Dust	Fine particulate dust containing metal oxides, from EAF fume extraction	NH	Disposed through authorized reuse/ recyclers/ARF for co-processing
Foundry skull	Solidified excess molten metal mass consisting predominantly of ferrous alloy/steel with oxide scale and impurities.	NH	Auctioned through IREPS registered vendors for metal recovery/recycling.
Foundry slag	Granular/lumpy non-metallic by-product containing metal oxides, silica, lime, alumina, and entrapped metal traces.	NH	

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Wastes	Characteristics	Haz Or Non-Haz	Disposal procedure
Condemned Fire Bricks.	Inert refractory ceramic waste composed mainly of alumina, silica, magnesia, and other refractory mineral constituents.	NH	Auctioned through IREPS registered vendors recycling/Reuse
Condemned Graphite Mould Blanks & electrodes	Solid carbonaceous graphite waste consisting predominantly of graphite/carbon with minor ash and process impurities.	NH	Auctioned through IREPS registered vendors recycling/Reuse. Proposal to crush and use it internally is in progress
Condemned Graphite Riser bits	Carbonaceous graphite off-cuts containing predominantly graphite with minor process impurities	NH	Auctioned through IREPS registered vendors recycling/Reuse
Mill scales (Forged scales)	Flaky/powdery iron oxide scale consisting mainly of iron oxides generated during forging/heat treatment.	NH	Auctioned through IREPS registered vendors for metal recovery/recycling
Packing Wood	Wooden packing waste comprising timber, plywood, pallets, and crates, occasionally mixed with nails/fasteners.	NH	Auctioned through IREPS registered vendors recycling/Reuse
Packing Cardboard	Dry recyclable paperboard / corrugated cardboard packaging waste composed predominantly of cellulose fiber, paper pulp, and adhesives, generated from packing and unpacking activities.	NH	
Waste Plastic	Recyclable plastic waste consisting predominantly of High-Density Polyethylene (HDPE) such as containers, liners, covers, and packaging materials generated from stores / packing activities.	NH	

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PART-G

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

I. **Natural Resource Conservation:**

Foundry Sand is an important consumable in the process of wheel casting. A thermal sand reclamation plant has been commissioned in 2019-20 to recover used baked sand. The reclamation plant has a capacity of 2 MT/hr and operates on PNG. It recovers 90% of the sand charged. This will reduce the environmental footprint of RWF. During the year 2025-26, 5672.75 MT of waste sand reclaimed and reused.

II. **Effective dispersion of stack emissions:**

Pollutant emissions from Stack are within the KSPCB Norms and achieved through providing requisite APC measures and adequate stack heights.

Steel Melt Shop: The steel melting process through Electric Arc Furnace(EAF) generates fumes primarily composed of iron oxides and other particulate matter, varying in proportion based on the operational regime. To ensure No direct emission to atmosphere each EAF is equipped with primary fume extraction system of capacity of 1,60,000 m3/hr and a secondary system of capacity 4,50000 Nm3/hr. The fumes extracted from the furnace are passed through bag filters to separate suspended particulate matter before being discharged through chimneys.

Transition to Cleaner Fuel: HSD to PNG: All the HSD fired heating and heat treatment furnaces in RWF have been converted to PNG fired furnaces in a phased manner.

III. **Greenbelt:**

- Over the year's RWF has developed extensive green belt (36.54% of total plant area) and approximately around 46,000 trees have been accounted.
- Green House has been set up with an area of 400 sqm housing 6000 saplings.
- Retirement functions are being organized with tree plantations by retirees.
- Miyawaki forest with 35000 saplings through at zero cost to RWF. Eco-friendly refrigerant for air conditioners have been adopted.

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III) Reutilization of Process effluent and domestic effluent:

- Process Effluent: RWF has adopted zero effluent discharge manufacturing process. The process water is utilized mainly for cooling purpose and the cooling water is circulated in a closed loop system, minimizing the overall water demand.
- Domestic Sewage is treated in-house and treated water is being used for process, gardening and other non-potable uses. Setting up of STP's for residential colonies are under progress.

PART-H

Additional measures/investment proposal for Environmental protection including the pollutants abatement of pollution, prevention of pollution.

- **Upgradation of the Primary Fume Extraction Systems** attached to Electric Arc Furnaces A & B is under progress. Intimation regarding the proposed upgradation was submitted to the Board on 09.11.2026. Upon completion, the system's dust extraction capacity will be enhanced from the existing 1,60,000 m^3/hr to 2,20,000 m^3/hr.

- **CAAQMS & CEMS**: In compliance with Environmental Clearance conditions, procurement of CAAQMS (Continuous Ambient Air Quality Monitoring System) and CEMS (Continuous Emission Monitoring System) for the Electric Arc Furnace systems is under progress.
- **Graphite Mould Crushing Machine** is proposed for crushing used graphite moulds into powder form for utilization in the Electric Arc Furnace (EAF) as a re-carburizer.

PART – I

Any other particulars in respect of Environmental Protection and Abetment of pollution.

- **Rain water Harvesting:**
  RWF has embraced Rain Water Harvesting (RWH) techniques to achieve its goal of becoming self-reliant on process water requirement. Both surface runoff harvesting and Roof top harvesting have been adopted. In the year 2025-26, 03 Nos of Rainwater Harvesting Ponds with combined harvesting capacity of 7.5 lakh litres erected near the pump house.
  Water conservation efforts have paid rich dividends to RWF, as it has become almost self-sufficient for raw water (about 2-3 lakh liters per day) and procurement from Bangalore Water Supply Board (BWSSB) for process water requirement has been stopped.

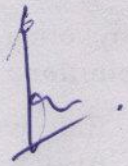
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- **Energy Conservation measures 2025-26:**

a) RWF has taken steps to replace old inefficient appliances by new energy efficient ones, and fit energy efficient systems in old ones.
b) 11 nos. of 150 kVAR IGBT Automatic Dynamic Power Factor Control (APFC) panels were installed. This resulted in Power Factor improvement across wheel shop substations upto 0.99.
c) Energy Efficient VFDs in place of PCB based Card Control system for LT and CT Motors in EOT cranes (2 & 3).
d) VFD based control system for Hoist operation in MRS Crane-1 in place of conventional Contactor system.
e) Continuous operation of PFES ID fan modified with Speed control interface of Roof movement of EAF.
f) In house Modification in Axle Loading conveyor of Assembly Shop, to prevent idle running of Hydraulic Motor. As a result annual energy saving of 22,104 units was achieved.

- **GreenCo Gold Certification:** RWF has successfully retained its GreenCo Gold Rating in the recertification audit conducted in **April 2025**, with the certification remaining valid up to April 2028. Further, in recognition of its continual adoption of environmental best practices, RWF was conferred the **GreenCo Champion Award** by the Confederation of Indian Industry on 12 June 2025.

- **BEE Shunya Rating :** RWF Administrative Building, KV School & hospital have been certified by BEE for Shunya rating for converting existing building to net zero energy building. The electricity demand of above 3 buildings are being met through in-house solar.



Place : Bengaluru
Date :

(Govind Pandey)
CME/Plg & Chief Environment Officer

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NAL LABS LLP
Formerly - **NATIONAL ANALYTICAL LABORATORIES AND RESEARCH CENTER**
#1064, 1st, 2nd and 3rd floor, Rajgopal Nagar Main Road, 2nd Stage,
Peenya Industrial Area, Bengaluru, Karnataka, India- 560058.
T : 080 41214555 I M : +91 70901 54555 / 95383 24580
E-mail : info.nalrc15@gmail.com / patil.hrb@gmail.com Web : www.nalrcindia.com

TEST REPORT

Name & Address of the Customer : **M/s. Rail Wheel Factory**
Yelahanka, Bangaluru--560064
Particulars of sample : **STP Sludge Sample**
Date of Sample Collection : 12.03.2026
Date of Sample Receipt : 12.03.2026
Sample Code / ID : NAL/2026/03/1444
Date of Analysis Started : 13.03.2026
Date of Completion : 17.03.2026
Report No : NAL/2026/07677
Report Date : 17.03.2026
Page No : 1/1

Sl No	Parameters	Unit	Results	CPCB Std. For Direct Landfill Disposal	Test Method
1	Corrosive (I) pH Value @ 25°C	---	6.7	4.0 – 12.0	USEPA 1998: SW-846:9040B, 9045C
2	Calorific Value	Kcal/kg	476.0	<2500	IS: 1350 (Part II)-1970 (RA-2000)
3	Flash Point (Flammable)	°C	54.0	<60	USEPA 1998: SW-846: 1020A
4	Reactive Cyanide	mg/kg	6.8	250	USEPA 1998: SW-846; Ch 7 (7.3.4), 9034
5	Reactive Sulfide	mg/kg	2.7	500	USEPA 1998: SW-846; Ch 7 (7.3.4), 9034
6	Sulphides as H_2S	mg/L	1.1	5.0	APHA 23rd Edition 2017:4500S^2 F
7	Total Phenols	mg/L	BDL(DL=1)	<100	APHA 23rd Edition 2017:5530D
8	Cyanide as CN	mg/L	BDL(DL=2)	<2	APHA 23rd Edition 2017:4500CN-C
9	Nitrate as NO_3	mg/L	26.8	<30	APHA 23rd Edition 2017:4500NO_3-E
10	Arsenic as As	mg/L	0.688	<1.0	APHA 23rd Edition 2017: 3500-As B
11	Cadmium as Cd	mg/kg	2.102	--	USEPA 1998: SW-846; 3050B, 7130
12	Copper as Cu	mg/kg	7.32	--	USEPA 1998: SW-846; 3050B, 7210
13	Hexavalent Chromium as Cr6+	mg/L	BDL(DL=0.5)	<0.50	APHA 23rd Edition 2017: 3500-Cr B
14	Lead as Pb	mg/kg	BDL(DL=0.1)	--	USEPA 1998: SW-846; 3050B, 7420
15	Mercury as Hg	mg/L	BDL(DL=0.1)	<0.1	APHA 23rd Edition 2017: 3112-B, 3500-
16	Silver as Ag	mg/L	1.566	5	USEPA 1998: SW-846; 3050A, 7760A
17	Selenium as Se	mg/L	0.32	1	APHA 23rd Edition 2017: 3500-Se C
18	Barium as Ba	mg/L	76.44	100	USEPA 1998: SW-846; 3050A, 7080A
19	Antimony as Sb	mg/L	3.22	15	USEPA 1998: SW-846; 3050A, 7040
20	Beryllium as Be	mg/L	BDL(DL=0.1)	0.75	USEPA 1998: SW-846; 3050A, 7090

Note: BDL= Below Detection Limit, DL: Detection Limit.
Remarks: The given sample is non hazardous as per above tested parameters.

Verified By

***** End of the Report *****

NAL LABS LLP Bangalore-58

Authorized Signatory

Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

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#1064, 1st, 2nd and 3rd floor, Rajgopal Nagar Main Road, 2nd Stage,
Peenya Industrial Area, Bengaluru, Karnataka, India- 560058.
T : 080 41214555 I M : +91 70901 54555 / 95383 24580
E-mail : info.nalrc15@gmail.com / patil.hrb@gmail.com Web : www.nalrcindia.com

TEST REPORT

Name & Address of the Customer	: **M/s. Rail Wheel Factory** Yelahanka, Bangaluru--560064
Particulars of sample	: **STP Sludge Sample**
Date of Sample Collection	: 12.03.2026
Date of Sample Receipt	: 12.03.2026
Sample Code / ID	: NAL/2026/03/1444
Date of Analysis Started	: 13.03.2026
Date of Completion	: 17.03.2026
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Sl No	Parameters	Unit	Results	CPCB Std. For Direct Landfill Disposal	Test Method
1	Corrosive (I) pH Value @ 25°C	---	6.7	4.0 – 12.0	USEPA 1998: SW-846:9040B, 9045C
2	Calorific Value	Kcal/kg	476.0	<2500	IS: 1350 (Part II)-1970 (RA-2000)
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6	Sulphides as H_2S	mg/L	1.1	5.0	APHA 23rd Edition 2017:4500S^2 F
7	Total Phenols	mg/L	BDL(DL=1)	<100	APHA 23rd Edition 2017:5530D
8	Cyanide as CN	mg/L	BDL(DL=2)	<2	APHA 23rd Edition 2017:4500CN-C
9	Nitrate as NO_3	mg/L	26.8	<30	APHA 23rd Edition 2017:4500NO_3-E
10	Arsenic as As	mg/L	0.688	<1.0	APHA 23rd Edition 2017: 3500-As B
11	Cadmium as Cd	mg/kg	2.102	--	USEPA 1998: SW-846; 3050B, 7130
12	Copper as Cu	mg/kg	7.32	--	USEPA 1998: SW-846; 3050B, 7210
13	Hexavalent Chromium as Cr6+	mg/L	BDL(DL=0.5)	<0.50	APHA 23rd Edition 2017: 3500-Cr B
14	Lead as Pb	mg/kg	BDL(DL=0.1)	--	USEPA 1998: SW-846; 3050B, 7420
15	Mercury as Hg	mg/L	BDL(DL=0.1)	<0.1	APHA 23rd Edition 2017: 3112-B, 3500-
16	Silver as Ag	mg/L	1.566	5	USEPA 1998: SW-846; 3050A, 7760A
17	Selenium as Se	mg/L	0.32	1	APHA 23rd Edition 2017: 3500-Se C
18	Barium as Ba	mg/L	76.44	100	USEPA 1998: SW-846; 3050A, 7080A
19	Antimony as Sb	mg/L	3.22	15	USEPA 1998: SW-846; 3050A, 7040
20	Beryllium as Be	mg/L	BDL(DL=0.1)	0.75	USEPA 1998: SW-846; 3050A, 7090

Note: BDL= Below Detection Limit, DL: Detection Limit.
Remarks: The given sample is non hazardous as per above tested parameters.

Verified By

***** End of the Report *****

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#1064, 1st, 2nd and 3rd floor, Rajgopal Nagar Main Road, 2nd Stage,
Peenya Industrial Area, Bengaluru, Karnataka, India- 560058.
T : 080 41214555 I M : +91 70901 54555 / 95383 24580
E-mail : info.nalrc15@gmail.com / patil.hrb@gmail.com Web : www.nalrcindia.com

TC-17354

TEST REPORT

Name & Address of the Customer	**M/s. Rail Wheel Factory** Yelahanka, Bangaluru--560064		
Discipline	**Chemical**	Sample ID	NAL/2026/03/203
Product or Material	Waste water (Effluents/Sewage)	Report No	NAL/2026/01044
Particulars of Sample	STP Raw Water	ULR No	TC173542600000313F
Sampling Point	Before Filtration tank	Date of Sample Collection	12.03.2026
Sample submitted by	Customer	Date of sample Receipt	12.03.2026
Sample collected by	Our Representative	Date of Analysis Started	12.03.2026
Sample Qty	2Ltrs	Date of Completion	17.03.2026
Page No	1/2	Report Date	18.03.2026
Sample package	Water Sample Collected in PET Bottle		
Description	Greyish colored liquid having objectionable odor.		

Sl. No	Parameters	Unit	Result	Test Method
1	pH Value @ 25°C	---	7.6	IS 3025(P-11) 2022
2	Total Suspended Solids	mg/L	228.0	IS 3025(P-17) 2022
3	Bio-Chemical Oxygen Demand (5days @ 20°C)	mg/L	120.0	APHA 24th EDITION 5210 BOD B
4	Chemical Oxygen Demand	mg/L	240.0	IS 3025(P-58) 2023
5	Ammonical Nitrogen as N	mg/L	5.9	IS 3025(P-34) 1988
6	Total Nitrogen as N	mg/L	17.7	IS 3025(P-34) 1988

NAL LABS LLP Bangalore-58

Verified By

Hanumantha Raju C K
Sr. Analyst
Authorized Signatory

Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

NAL LABS LLP
Formerly - **NATIONAL ANALYTICAL LABORATORIES AND RESEARCH CENTER**
#1064, 1st, 2nd and 3rd floor, Rajgopal Nagar Main Road, 2nd Stage,
Peenya Industrial Area, Bengaluru, Karnataka, India- 560058.
T : 080 41214555 I M : +91 70901 54555 / 95383 24580
E-mail : info.nalrc15@gmail.com / patil.hrb@gmail.com Web : www.nalrcindia.com

TC-17354

TEST REPORT

Name & Address of the Customer	**M/s. Rail Wheel Factory** Yelahanka, Bangaluru--560064		
Discipline	**Biological**	Sample ID	NAL/2026/03/203
Product or Material	Waste water (Effluents/Sewage)	Report No	NAL/2026/01044
Particulars of Sample	STP Raw Water	ULR No	TC1735426000000313F
Sampling Point	Before Filtration tank	Date of Sample Collection	12.03.2026
Sample submitted by	Customer	Date of sample Receipt	12.03.2026
Sample collected by	Our Representative	Date of Analysis Started	12.03.2026
Sample Qty	2Ltrs	Date of Completion	16.03.2026
Page No	2/2	**Report Date**	**18.03.2026**
Sample package	Water Sample Collected in PET Bottle		
Description	Greyish colored liquid having objectionable odor.		

Sl. No	Parameters	Unit	Result	Test Method
7	Faecal Coliform	MPN/100ml	>1600	IS 1622-1981 RA 2019

**** End of the Report*****

Verified By

NAL LABS LLP Bangalore-58

ANUSHA H.S
Sr. Micrgbiologist
Authorized Signatory

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E-mail : info.nalrc15@gmail.com / patil.hrb@gmail.com Web : www.nalrcindia.com
TC-17354

TEST REPORT

Name & Address of the Customer	**M/s. Rail Wheel Factory** Yelahanka, Bangaluru--560064		
Discipline	**Chemical**	Sample ID	NAL/2026/03/204
Product or Material	Waste water (Effluents/Sewage)	Report No	NAL/2026/01045
Particulars of Sample	STP Treated Water	ULR No	TC1735426000000314F
Sampling Point	After Filtration tank	Date of Sample Collection	12.03.2026
Sample submitted by	Customer	Date of sample Receipt	12.03.2026
Sample collected by	Our Representative	Date of Analysis Started	12.03.2026
Sample Qty	2Ltrs	Date of Completion	17.03.2026
Page No	1/2	Report Date	**18.03.2026**
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless liquid having unobjectionable odor.		

Sl. No	Parameters	Unit	Result	Standards as per KSPCB	Test Method
1	pH Value @ 25°C	---	7.7	6.5-8.5	IS 3025(P-11) 2022
2	Total Suspended Solids	mg/L	3.0	<10	IS 3025(P-17) 2022
3	Bio-Chemical Oxygen Demand (5days @ 20°C)	mg/L	2.9	<10	APHA 24th EDITION 5210 BOD B
4	Chemical Oxygen Demand	mg/L	18.0	<50	IS 3025(P-58) 2023
5	Ammonical Nitrogen as N	mg/L	1.8	<5	IS 3025(P-34) 1988
6	Total Nitrogen as N	mg/L	4.1	<10	IS 3025(P-34) 1988

Remarks: The above **sample meets to the KSPCB Limits** as per above tested Physio chemical parameters

Verified By

NAL LABS LLP Bangalore-58

Hanumantha Raju C K
Sr. Analyst
Authorized Signatory

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TC-17354

TEST REPORT

Name & Address of the Customer	**M/s. Rail Wheel Factory** Yelahanka, Bangaluru--560064		
Discipline	**Biological**	Sample ID	NAL/2026/03/204
Product or Material	Waste water (Effluents/Sewage)	Report No	NAL/2026/01045
Particulars of Sample	STP Treated Water	ULR No	TC1735426000000314F
Sampling Point	After Filtration tank	Date of Sample Collection	12.03.2026
Sample submitted by	Customer	Date of sample Receipt	12.03.2026
Sample collected by	Our Representative	Date of Analysis Started	12.03.2026
Sample Qty	2Ltrs	Date of Completion	16.03.2026
Page No	2/2	Report Date	**18.03.2026**
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless liquid having unobjectionable odor.		

Sl. No	Parameters	Unit	Result	Standards as per KSPCB	Test Method
7	Faecal Coliform	MPN/100ml	06	<100	IS 1622-1981 RA 2019
Remarks: The above **sample meets to the KSPCB Limits** as per above tested biological parameters					

**** End of the Report*****

Verified By

NAL LABS LLP Bangalore-58

ANUSHA H.S
Sr. Microbiologist
Authorized Signatory

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RAIL WHEEL FACTORY
METALLURGICAL LAB

No.RWF/AED (M&C) /31

Date.17/04/2026

To,
The Environmental Officer KSPCB,
Regional Office, Yelahanka, Bangalore - 64

Sir,
Sub:- Pollution Monitoring Report for the month of MARCH 2026.

Please find enclosed copy of the test report pertaining to Pollution Monitoring of Stack and Ambient air quality carried out by M/s ECO GREEN SOLUTIONS Pvt. Ltd., BANGALORE at various Chimneys and Ambient locations in RWF/YNK for the month of MARCH -2026.

17/4/26

C&M Supdt /Ref./M.LAB

रसायन व धातुविद अधीक्षक-I / रिफ्रैक्टरी
Chemical And Metallurgical SUPDT-I / Refractory
रेल पहिया कारखाना (भारतीय रेल)
Rail Wheel Factory (Indian Railways)
यलहंका, बेंगलोर - 560 064.
Yelahanka, Bangalore - 560 064.

23/04/2026

CMT/LAB

रसायन व धातुविद
Chemist and Metallurgist
रेल पहिया कारखाना (भारतीय रेल)
Rail Wheel Factory (Indian Railways)
यलहंका, बेंगलोर - 560 064
Yelahanka, Bangalore - 560 064

Encl: As stated above

Copy to: 1. C& MS REFRACTORY
2. M/s ECO GREEN SOLUTIONS Pvt. Ltd., BANGALORE

ECO GREEN SOLUTION SYSTEMS PVT LTD

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027
An ISO 9001:2015 & ISO 45001:2018 Certified Company
48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

EGSSPL

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000837F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	10.03.2026
2	Stack Location	Normalizing Furnace (Wheel) Location: Wheel Shop	10	Sample Receipt On	10.03.2026
3	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3015/25-26	12	Sample RC No	4234
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	10.03.2026
2	Stack Gas Temperature (°C)	361
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	9.6
5	Stack Diameter (m)	2
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	3.143
8	Gas Discharge (Nm^3/hr)	108622.1

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	33.1
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	12.6
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	19.0

Opinion & Interpretation	Within the Requirements

Declaration

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Green Solution Systems

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000838F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	10.03.2026
2	Stack Location	Draw Furnace Location: Wheel Shop	10	Sample Receipt On	10.03.2026
3	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3016/25-26	12	Sample RC No	4235
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	10.03.2026
2	Stack Gas Temperature (°C)	142
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	8.1
5	Stack Diameter (m)	0.25
6	Stack Height (m)	18mtrs from AGL
7	Cross Sectional Area (m^2)	0.049
8	Gas Discharge (Nm^3/hr)	1428.8

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	31.4
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	13.0
3	Oxides of Nitrogen-NO_x (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	17.4

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems * Doddaballapur *

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000839F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	10.03.2026
2	Stack Location	Sand Drier Location: Wheel Shop Molding Room	10	Sample Receipt On	10.03.2026
3	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3017/25-26	12	Sample RC No	4236
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	10.03.2026
2	Stack Gas Temperature (°C)	39
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	6.5
5	Stack Diameter (m)	1
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	0.786
8	Gas Discharge (Nm^3/hr)	18392.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	37.0
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit **DL:** Detection limit

Opinion & Interpretation	Within the Requirements

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000840F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	10.03.2026
2	Stack Location	Sand Silo Batch Heater Location: Wheel Shop Molding Room	10	Sample Receipt On	10.03.2026
3	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3018/25-26	12	Sample RC No	4237
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	10.03.2026
2	Stack Gas Temperature (°C)	61
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	7.3
5	Stack Diameter (m)	0.6
6	Stack Height (m)	16mtrs from AGL
7	Cross Sectional Area (m^2)	0.283
8	Gas Discharge (Nm^3/hr)	7437.2

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	38.3
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000841F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	10.03.2026
2	Stack Location	Sand Silo Cyclone Location: Wheel Shop Molding Room	10	Sample Receipt On	10.03.2026
3	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3019/25-26	12	Sample RC No	4238
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	10.03.2026
2	Stack Gas Temperature (°C)	43
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	5.8
5	Stack Diameter (m)	0.25
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.049
8	Gas Discharge (Nm^3/hr)	1023.1

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	45.7
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation	Within the Requirements

Declaration

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000842F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	10.03.2026
2	Stack Location	Rotoclone Cyclone Location: Wheel Shop Molding Room	10	Sample Receipt On	10.03.2026
3	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3020/25-26	12	Sample RC No	4239
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	10.03.2026
2	Stack Gas Temperature (°C)	54
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	7.4
5	Stack Diameter (m)	0.2
6	Stack Height (m)	16mtrs from AGL
7	Cross Sectional Area (m^2)	0.031
8	Gas Discharge (Nm^3/hr)	825.8

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	44.1
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	10.4
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	17.7

Option & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt Ltd Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027
An ISO 9001:2015 & ISO 45001:2018 Certified Company
48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

EGSSPL

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000809F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	07.03.2026
2	Stack Location	Cope Cleaner Location: Wheel Shop Molding Room	10	Sample Receipt On	07.03.2026
3	Date of Analysis Completed/Date of Report	09.03.2026/11.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-2990/25-26	12	Sample RC No	4199
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	07.03.2026
2	Stack Gas Temperature (°C)	60
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	6.3
5	Stack Diameter (m)	0.25
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.049
8	Gas Discharge (Nm^3/hr)	1111.3

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	53.2
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	18.1
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	25.0

Opinion & Interpretation	Within the Requirements

Declarations

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC148542600000810F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	07.03.2026
2	Stack Location	Drag Cleaner Location: Wheel Shop Molding Room	10	Sample Receipt On	07.03.2026
3	Date of Analysis Completed/Date of Report	09.03.2026/11.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-2991/25-26	12	Sample RC No	4200
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	07.03.2026
2	Stack Gas Temperature (°C)	42
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	6.5
5	Stack Diameter (m)	0.25
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.049
8	Gas Discharge (Nm^3/hr)	1146.6

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	55.0
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	22.0
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	26.1

Opinion & Interpretation: Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd.

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

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EGSSPL

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000811F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	07.03.2026
2	Stack Location	Sprue Wash and Hub Cutting Location: Wheel Shop Molding Room	10	Sample Receipt On	07.03.2026
3	Date of Analysis Completed/Date of Report	09.03.2026/11.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-2992/25-26	12	Sample RC No	4201
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	07.03.2026
2	Stack Gas Temperature (°C)	68
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	7.2
5	Stack Diameter (m)	2.4
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	4.526
8	Gas Discharge (Nm^3/hr)	117313.9

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	48.3
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	17.0
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	24.1

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC148542600000812F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	07.03.2026
2	Stack Location	CTA Rollover Location: Wheel Shop Molding Room	10	Sample Receipt On	07.03.2026
3	Date of Analysis Completed/Date of Report	09.03.2026/11.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-2993/25-26	12	Sample RC No	4202
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	07.03.2026
2	Stack Gas Temperature (°C)	54
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	6.8
5	Stack Diameter (m)	0.25
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.049
8	Gas Discharge (Nm^3/hr)	1199.5

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	52.9
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	20.8
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	27.3

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt Ltd

Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

TC-14864

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Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000813F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	07.03.2026
2	Stack Location	Thermal Sand Reclamation Plant Location: Wheel Shop Molding Room	10	Sample Receipt On	07.03.2026
3	Date of Analysis Completed/Date of Report	09.03.2026/11.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-2994/25-26	12	Sample RC No	4203
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	07.03.2026
2	Stack Gas Temperature (°C)	62
3	Ambient Temperature (°C)	31
4	Stack Gas Velocity (m/s)	6.7
5	Stack Diameter (m)	0.5
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	4727.5

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	47.0
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit **DL:** Detection limit

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd.

Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000956F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	Wheel Cleaner - I Location: Wheel Shop WFPS	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3066/25-26	12	Sample RC No	4339
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	53
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	6.7
5	Stack Diameter (m)	0.5
6	Stack Height (m)	16mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	4727.5

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	55.7
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	19.2
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	28.7

Opinion & Interpretation	Within the Requirements

Declaration

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(S. Asokan)
Technical Manager

End of Report

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TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000957F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	Wheel Cleaner - II Location: Wheel Shop WFPS	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3067/25-26	12	Sample RC No	4340
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	46
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	6.0
5	Stack Diameter (m)	0.5
6	Stack Height (m)	16mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	4233.6

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	60.8
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	23.2
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	34.4

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems Pvt Ltd Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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EGSSPL

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000958F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	Wheel Peener - I Location: Wheel Shop WFPS	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3068/25-26	12	Sample RC No	4341
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	67
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	14.2
5	Stack Diameter (m)	0.5
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	10019.5

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	53.7
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	19.3
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	25.4

Opinion & Interpretation	Within the Requirements

Declaration

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(S. Asokan)
Technical Manager

End of Report

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000959F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	Wheel Peener - II Location: Wheel Shop WFPS	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3069/25-26	12	Sample RC No	4342
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	72
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	14.9
5	Stack Diameter (m)	0.5
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	10513.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	66.5
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	23.9
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	35.8

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027

An ISO 9001:2015 & ISO 45001:2018 Certified Company

48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203

E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000928F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	12.03.2026
2	Stack Location	RMT & HMT Graphite Block Drilling Machine Location: Wheel Shop MRS	10	Sample Receipt On	12.03.2026
3	Date of Analysis Completed/Date of Report	13.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3043/25-26	12	Sample RC No	4311
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	12.03.2026
2	Stack Gas Temperature (°C)	64
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	8.0
5	Stack Diameter (m)	0.8
6	Stack Height (m)	20mtrs from AGL
7	Cross Sectional Area (m^2)	0.503
8	Gas Discharge (Nm^3/hr)	14486.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	49.4
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NO_x (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems Pvt. Ltd.

Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC148542600000929F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	12.03.2026
2	Stack Location	Graphite Block Machine VTL - II Radial Drill & Ingate Lathe Location: Wheel Shop MRS	10	Sample Receipt On	12.03.2026
3	Date of Analysis Completed/Date of Report	13.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3044/25-26	12	Sample RC No	4312
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	12.03.2026
2	Stack Gas Temperature (°C)	65
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	7.8
5	Stack Diameter (m)	0.8
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.503
8	Gas Discharge (Nm^3/hr)	14124.2

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	58.4
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation	Within the Requirements

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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EGSSPL

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000930F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	12.03.2026
2	Stack Location	Graphite Block Machine VTL - III Location: Wheel Shop MRS	10	Sample Receipt On	12.03.2026
3	Date of Analysis Completed/Date of Report	13.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3045/25-26	12	Sample RC No	4313
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	12.03.2026
2	Stack Gas Temperature (°C)	69
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	7.8
5	Stack Diameter (m)	0.15
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.0177
8	Gas Discharge (Nm^3/hr)	497

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	47.3
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation	Within the Requirements

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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EGSSPL

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000931F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	12.03.2026
2	Stack Location	Graphite Block Machine VTL - IV Location: Wheel Shop	10	Sample Receipt On	12.03.2026
3	Date of Analysis Completed/Date of Report	13.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3046/25-26	12	Sample RC No	4314
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	12.03.2026
2	Stack Gas Temperature (°C)	73
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	8.7
5	Stack Diameter (m)	0.15
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.0177
8	Gas Discharge (Nm^3/hr)	554.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	60.4
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation
Declaration: Within the Requirements

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000932F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	12.03.2026
2	Stack Location	Graphite Block Machine VTL - V Location: Wheel Shop MRS	10	Sample Receipt On	12.03.2026
3	Date of Analysis Completed/Date of Report	13.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3047/25-26	12	Sample RC No	4315
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	12.03.2026
2	Stack Gas Temperature (°C)	76
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	9.0
5	Stack Diameter (m)	0.15
6	Stack Height (m)	17mtrs from AGL
7	Cross Sectional Area (m^2)	0.0177
8	Gas Discharge (Nm^3/hr)	573.5

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	54.8
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	BDL (DL: 2.0)
3	Oxides of Nitrogen-NOx (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	BDL (DL: 2.0)

BDL: Below detection limit

DL: Detection limit

Opinion & Interpretation	Within the Requirements

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Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000001066F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	24.03.2026
2	Stack Location	Rotary Hearth Furnace Location: New Axle Forge Shop	10	Sample Receipt On	24.03.2026
3	Date of Analysis Completed/Date of Report	25.03.2026/27.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3139/25-26	12	Sample RC No	4442
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	24.03.2026
2	Stack Gas Temperature (°C)	228
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	12.2
5	Stack Diameter (m)	1.5
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	1.768
8	Gas Discharge (Nm^3/hr)	77650.6

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	43.8
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	15.4
3	Oxides of Nitrogen-NO_x (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	28.5

Opinion & Interpretation: Within the Requirements

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC148542600000l068F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	24.03.2026
2	Stack Location	• Rotary Hearth Furnace Location: Axle Forge Shop	10	Sample Receipt On	24.03.2026
3	Date of Analysis Completed/Date of Report	25.03.2026/27.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3141/25-26	12	Sample RC No	4444
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	24.03.2026
2	Stack Gas Temperature (°C)	221
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	12.8
5	Stack Diameter (m)	1.5
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	1.768
8	Gas Discharge (Nm^3/hr)	81469.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	40.1
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	14.2
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	25.0

Opinion & Interpretation: Within the Requirements

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000001067F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	24.03.2026
2	Stack Location	Normalizing Furnace (Axle) Location: New Axle Forge Shop	10	Sample Receipt On	24.03.2026
3	Date of Analysis Completed/Date of Report	25.03.2026/27.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3140/25-26	12	Sample RC No	4443
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	24.03.2026
2	Stack Gas Temperature (°C)	225
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	9.8
5	Stack Diameter (m)	1.5
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	1.768
8	Gas Discharge (Nm^3/hr)	62375

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	46.9
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	18.3
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	31.0

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000001069F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	24.03.2026
2	Stack Location	Normalizing Furnace (Axle) Location: Axle Forge Shop	10	Sample Receipt On	24.03.2026
3	Date of Analysis Completed/Date of Report	25.03.2026/27.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3142/25-26	12	Sample RC No	4445
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	24.03.2026
2	Stack Gas Temperature (°C)	223
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	10.1
5	Stack Diameter (m)	1.5
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	1.768
8	Gas Discharge (Nm^3/hr)	64284.5

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	44.5
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	17.8
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	26.3

Opinion & Interpretation: Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027
An ISO 9001:2015 & ISO 45001:2018 Certified Company
48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000001070F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	24.03.2026
2	Stack Location	Tempering Furnace Location: Axle Forge Shop	10	Sample Receipt On	24.03.2026
3	Date of Analysis Completed/Date of Report	25.03.2026/27.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3143/25-26	12	Sample RC No	4446
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
8	Instruments Calibrated Date	31.10.2025	16	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	24.03.2026
2	Stack Gas Temperature (°C)	229
3	Ambient Temperature (°C)	30
4	Stack Gas Velocity (m/s)	12.4
5	Stack Diameter (m)	1
6	Stack Height (m)	30mtrs from AGL
7	Cross Sectional Area (m^2)	0.786
8	Gas Discharge (Nm^3/hr)	35087

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	150	37.0
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	100	12.8
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	50	22.6

Opinion & Interpretation: Within the Requirements

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC148542600000954F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	1750 KW DG Set - II	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3064/25-26	12	Sample RC No	4337
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit & Flue Gas Analyser	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009 & FGA-53X
8	Instruments Calibrated Date	31.10.2025 & 09.09.2025	16	Instruments Calibration Due Date	30.10.2026 & 08.09.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	125
3	Ambient Temperature (°C)	32
4	Stack Gas Velocity (m/s)	9.9
5	Stack Diameter (m)	0.5
6	Stack Height (m)	27mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	6985.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	75	48.9
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	Not Specified	66.9
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	710	224
4	Carbon Monoxide	mg/Nm^3	USEPA Method 10:2017	150	56.4

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EGSSPL

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	1750 KW DG Set - II	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No	EGSSPL/SE-3064/25-26	12	Sample RC No	4337
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit & Flue Gas Analyser	15	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009 & FGA-53X
8	Instruments Calibrated Date	31.10.2025 & 09.09.2025	16	Instruments Calibration Due Date	30.10.2026 & 08.09.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	125
3	Ambient Temperature (°C)	32
4	Stack Gas Velocity (m/s)	9.9
5	Stack Diameter (m)	0.5
6	Stack Height (m)	27mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	6985.4

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
5	Non-Methane Hydrocarbon (as C)	mg/Nm^3	USEPA Method 25:2017	100	14.0

Opinion & Interpretation	Within the Requirements

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TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC148542600000953F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	1750 KW DG Set - I	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3063/25-26	12	Sample RC No	4336
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit & Flue Gas Analyser	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009 & FGA-53X
8	Instruments Calibrated Date	31.10.2025 & 09.09.2025	16	Instruments Calibration Due Date	30.10.2026 & 08.09.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	120
3	Ambient Temperature (°C)	32
4	Stack Gas Velocity (m/s)	9.7
5	Stack Diameter (m)	0.5
6	Stack Height (m)	27mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	6844.3

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	75	52.4
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	Not Specified	70.2
3	Oxides of Nitrogen-NO_x (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	710	226
4	Carbon Monoxide	mg/Nm^3	USEPA Method 10:2017	150	60.2

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EGSSPL

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	1750 KW DG Set - I	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No	EGSSPL/SE-3063/25-26	12	Sample RC No	4336
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit & Flue Gas Analyser	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009 & FGA-53X
8	Instruments Calibrated Date	31.10.2025 & 09.09.2025	16	Instruments Calibration Due Date	30.10.2026 & 08.09.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	120
3	Ambient Temperature (°C)	32
4	Stack Gas Velocity (m/s)	9.7
5	Stack Diameter (m)	0.5
6	Stack Height (m)	27mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	6844.3

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
5	Non-Methane Hydrocarbon (as C)	mg/Nm^3	USEPA Method 25:2017	100	15.2

Opinion & Interpretation	Within the Requirements

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Technical Manager

End of Report

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TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000955F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	2400 KW DG Set - III	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No.	EGSSPL/SE-3065/25-26	12	Sample RC No	4338
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit & Flue Gas Analyser	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009 & FGA-53X
8	Instruments Calibrated Date	31.10.2025 & 09.09.2025	16	Instruments Calibration Due Date	30.10.2026 & 08.09.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	151
3	Ambient Temperature (°C)	32
4	Stack Gas Velocity (m/s)	10.5
5	Stack Diameter (m)	0.5
6	Stack Height (m)	27mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	7408.8

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
1	Particulate Matter as PM	mg/Nm^3	IS 11255 (P-1):1985 (RA 2024)	75	63.2
2	Sulphur dioxide as SO_2	ppm	IS 11255 (P-2):1985 (RA 2024)	Not Specified	74.4
3	Oxides of Nitrogen-NO_X (as NO_2)	ppm	IS 11255 (P-7):2005 (RA 2022)	710	276
4	Carbon Monoxide	mg/Nm^3	USEPA Method 10:2017	150	69.7

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Technical Manager

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Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	9	Sample Collected On	13.03.2026
2	Stack Location	2400 KW DG Set - III	10	Sample Receipt On	13.03.2026
3	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	11	Sample Collected By	Mr. Abhilash
4	Unique Identification No	EGSSPL/SE-3065/25-26	12	Sample RC No	4338
5	Data/Information obtained from the Customer (If Any)	NA	13	Condition of Test Item	Good
6	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	14	Sampling Plan Reference	EGSSPL/F/SOP/01
7	Particulars of the Instrument Used	Stack Monitoring Kit & Flue Gas Analyser	15	Instrument Sl. No./Model	001-DTE-2015/EGSS-009 & FGA-53X
8	Instruments Calibrated Date	31.10.2025 & 09.09.2025	16	Instruments Calibration Due Date	30.10.2026 & 08.09.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	13.03.2026
2	Stack Gas Temperature (°C)	131
3	Ambient Temperature (°C)	32
4	Stack Gas Velocity (m/s)	10.5
5	Stack Diameter (m)	0.5
6	Stack Height (m)	27mtrs from AGL
7	Cross Sectional Area (m^2)	0.196
8	Gas Discharge (Nm^3/hr)	7408.8

Sl. No.	Parameters	Unit	Method	Standard Limits	Results
5	Non-Methane Hydrocarbon (as C)	mg/Nm^3	USEPA Method 25:2017	100	16.1

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC148542600000772F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	05.03.2026
2	Stack Location	Electric Arc Furnace 'A' & 'B' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	05.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	06.03.2026/09.03.2026	11	Sample RC No	4162
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/ 01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No/Model	001-DTE-2015/ EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	05.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen- NO_X (as NO_2)
1	With Lancing	2975	30	130	14.6	660784.3	77.1	23.5	28.4
2	Without Lancing	2976	30	102	13.2	597421.4	54.1	15.5	24.7
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

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Technical Manager

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Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000773F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	05.03.2026
2	Stack Location	Electric Arc Furnace 'C' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	05.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	06.03.2026/09.03.2026	11	Sample RC No	4163
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	05.03.2026
2	Stack Diameter (m)	2
3	Stack Height (m)	30mtrs from AGL
4	Cross Sectional Area (m^2)	3.143

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NO_x (as NO_2)
1	With Lancing	2977	30	128	14.9	168590.5	70.5	22.8	26.9
2	Without Lancing	2978	30	109	13.0	147092.4	51.6	19.2	23.5
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027
An ISO 9001:2015 & ISO 45001:2018 Certified Company
48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

EGSSPL

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000774F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	05.03.2026
2	Stack Location	Secondary Fume Extraction System for EAF - A, B & C Location: Wheel Shop SMS	9	Sample Receipt On	05.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	06.03.2026/09.03.2026	11	Sample RC No	4164
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/ 01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	05.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NOx (as NO_2)
1	With Lancing	2979	30	135	14.8	669836.2	72.0	21.1	29.3
2	Without Lancing	2980	30	108	13.5	610999.2	51.0	19.8	22.5
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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EGSSPL

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000829F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	09.03.2026
2	Stack Location	Electric Arc Furnace 'A' & 'B' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	09.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	10.03.2026/12.03.2026	11	Sample RC No	4219
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	09.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NOx (as NO_2)
1	With Lancing (Running at the Same Time)	3009	30	153	14.5	656258.4	113	20.6	34.3
2	Without Lancing	3010	30	121	13.1	592895.5	57.8	18.4	21.9
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Bengaluru

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991

EGSSPL/FRM/055

ULR NO: TC1485426000000830F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	09.03.2026
2	Stack Location	Electric Arc Furnace 'C' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	09.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	10.03.2026/12.03.2026	11	Sample RC No	4220
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	09.03.2026
2	Stack Diameter (m)	2
3	Stack Height (m)	30mtrs from AGL
4	Cross Sectional Area (m^2)	3.143

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NOx (as NO_2)
1	With Lancing	3011	30	132	13.3	150486.8	71.6	17.0	23.4
2	Without Lancing	3012	30	114	10.7	121068.4	53.8	11.8	20.1
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt Ltd

Reviewed & Authorized Signatory

(S. Asokan)

Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000831F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	09.03.2026
2	Stack Location	Secondary Fume Extraction System for EAF - A, B & C Location: Wheel Shop SMS	9	Sample Receipt On	09.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	10.03.2026/12.03.2026	11	Sample RC No	4221
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/ 01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	09.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen- NO_X (as NO_2)
1	With Lancing	3013	30	139	13.6	615525.1	76.0	17.4	22.6
2	Without Lancing	3014	30	104	12.2	552162.2	54.2	14.0	19.7
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000994F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	16.03.2026
2	Stack Location	Electric Arc Furnace 'A' & 'B' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	16.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	17.03.2026/20.03.2026	11	Sample RC No	4375
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/ 01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	16.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen- NOx (as NO_2)
1	With Lancing	3081	30	141	13.6	615525.1	79.3	25.1	30.7
2	Without Lancing	3082	30	121	12.3	556688.2	56.9	17.4	26.5
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

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EGSSPL

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000995F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	16.03.2026
2	Stack Location	Electric Arc Furnace 'C' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	16.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	17.03.2026/20.03.2026	11	Sample RC No	4376
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	16.03.2026
2	Stack Diameter (m)	2
3	Stack Height (m)	30mtrs from AGL
4	Cross Sectional Area (m^2)	3.143

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NOx (as NO_2)
1	With Lancing	3083	30	130	12.8	144829.4	72.7	24.1	28.3
2	Without Lancing	3084	30	108	12.3	139172	53.8	21.7	25.9
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation: Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapura

Reviewed & Authorized Signatory
(S.Asokan)
Technical Manager

End of Report

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000996F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	16.03.2026
2	Stack Location	Secondary Fume Extraction System for EAF - A, B & C Location: Wheel Shop SMS	9	Sample Receipt On	16.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	17.03.2026/20.03.2026	11	Sample RC No	4377
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	16.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NOx (as NO_2)
1	With Lancing	3085	30	148	14.3	647206.6	74.3	23.4	32.6
2	Without Lancing	3086	30	128	13.2	597421.4	58.9	21.7	24.3
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation: Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC148542600000105 5F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	23.03.2026
2	Stack Location	Electric Arc Furnace 'A' & 'B' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	23.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	24.03.2026/26.03.2026	11	Sample RC No	4431
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/ 01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	23.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen- NOx (as NO_2)
1	With Lancing	3124	32	142	13.6	615525.1	76.7	22.8	28.3
2	Without Lancing	3125	32	114	12.3	556688.2	54.5	18.7	26.3
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation	Within the Requirements

Declaration

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000001056F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	23.03.2026
2	Stack Location	Electric Arc Furnace 'C' (Primary Fume Extraction System) Location: Wheel Shop SMS	9	Sample Receipt On	23.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	24.03.2026/26.03.2026	11	Sample RC No	4432
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	23.03.2026
2	Stack Diameter (m)	2
3	Stack Height (m)	30mtrs from AGL
4	Cross Sectional Area (m^2)	3.143

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen-NO_x (as NO_2)
1	With Lancing	3126	32	128	13.0	147092.4	68.9	23.7	29.9
2	Without Lancing	3127	32	108	11.9	134646.1	55.3	19.9	24.3
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Opinion & Interpretation: Within the Requirements

Declaration

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027
An ISO 9001:2015 & ISO 45001:2018 Certified Company
48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC148542600000105 7F

TEST REPORT OF PROCESS EMISSION

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	8	Sample Collected On	23.03.2026
2	Stack Location	Secondary Fume Extraction System for EAF - A, B & C Location: Wheel Shop SMS	9	Sample Receipt On	23.03.2026
			10	Sample Collected By	Mr. Abhilash
3	Date of Analysis Completed/Date of Report	24.03.2026/26.03.2026	11	Sample RC No	4433
4	Data/Information obtained from the Customer (If Any)	NA	12	Condition of Test Item	Good
5	Sampling Methodology	IS 11255 Part-3:2008 (RA 2023)	13	Sampling Plan Reference	EGSSPL/F/SOP/ 01
6	Particulars of the Instrument Used	Stack Monitoring Kit	14	Instrument Sl. No./Model	001-DTE-2015/ EGSS-009
7	Instruments Calibrated Date	31.10.2025	15	Instruments Calibration Due Date	30.10.2026

DATA COLLECTED DETAILS

1	Date of Monitoring	23.03.2026
2	Stack Diameter (m)	4
3	Stack Height (m)	36mtrs from AGL
4	Cross Sectional Area (m^2)	12.572

Sl. No.	Process	Unique Identification No.	Ambient Temp (°C)	Stack Temp (°C)	Velocity (m/s)	Gas Discharge (Nm^3/hr)	Particulate Matter as PM	Sulphur dioxide as SO_2	Oxides of Nitrogen- NO_x (as NO_2)
1	With Lancing	3128	32	144	14.0	633628.8	77.2	25.6	34.8
2	Without Lancing	3129	32	108	12.7	574791.8	61.3	23.1	26.8
						Method	IS 11255 (P-1):1985 (RA 2024)	IS 11255 (P-2):1985 (RA 2024)	IS 11255 (P-7):2005 (RA 2022)
						Unit	mg/Nm^3	ppm	ppm
						Standard Limits	With Lancing 400	100	50
							Without Lancing 150		

Ophion & Interpretation — Within the Requirements

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000779F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	02.03.2026
2	Date of Analysis Completed/Date of Report	04.03.2026/06.03.2026	8	Sample Receipt On	03.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4169
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	765	58.2	27.1	12.9	22.8
2	Near M Lab	766	55.0	24.6	11.3	20.5
3	Near Axle Shop RHF & Scrap Cutting	767	62.0	29.6	14.5	24.1
NAAQ Standards			100	60	80	80
Unit			µg/m³	µg/m³	µg/m³	µg/m³
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

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EGSSPL

TC-14884

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000814F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	05.03.2026
2	Date of Analysis Completed/Date of Report	07.03.2026/09.03.2026	8	Sample Receipt On	06.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4204
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	768	60.3	30.3	15.1	23.9
2	Near M Lab	769	54.4	26.2	16.1	21.7
3	Near Axle Shop RHF & Scrap Cutting	770	66.1	32.1	16.5	22.9
NAAQ Standards			100	60	80	80
Unit			µg/m³	µg/m³	µg/m³	µg/m³
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

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Eco Green Solution Systems Pvt. Ltd.

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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EGSSPL

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000843F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	09.03.2026
2	Date of Analysis Completed/Date of Report	11.03.2026/13.03.2026	8	Sample Receipt On	10.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4240
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	771	63.9	29.9	14.4	21.1
2	Near M Lab	772	60.5	28.3	12.9	19.9
3	Near Axle Shop RHF & Scrap Cutting	773	66.7	32.9	15.0	18.8
NAAQ Standards			100	60	80	80
Unit			µg/m³	µg/m³	µg/m³	µg/m³
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

Declaration

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Eco Green Solution Systems Pvt. Ltd.

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000960F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	12.03.2026
2	Date of Analysis Completed/Date of Report	14.03.2026/16.03.2026	8	Sample Receipt On	13.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4343
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	788	67.1	33.3	17.7	25.3
2	Near M Lab	789	65.8	30.3	15.0	22.0
3	Near Axle Shop RHF & Scrap Cutting	790	68.1	34.9	17.1	26.3
NAAQ Standards			100	60	80	80
Unit			µg/m³	µg/m³	µg/m³	µg/m³
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation: Within the Requirements

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Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000000997F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	16.03.2026
2	Date of Analysis Completed/Date of Report	18.03.2026/20.03.2026	8	Sample Receipt On	17.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4378
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	801	64.8	31.1	15.0	22.8
2	Near M Lab	802	62.7	28.2	12.9	20.6
3	Near Axle Shop RHF & Scrap Cutting	803	72.4	36.1	19.3	28.1
NAAQ Standards			100	60	80	80
Unit			µg/m³	µg/m³	µg/m³	µg/m³
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

Declaration

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(S. Asokan)
Technical Manager

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TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000001071F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	17.03.2026
2	Date of Analysis Completed/Date of Report	20.03.2026/23.03.2026	8	Sample Receipt On	18.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4447
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	820	66.8	32.9	17.7	23.6
2	Near M Lab	821	63.2	30.4	14.4	22.3
3	Near Axle Shop RHF & Scrap Cutting	822	74.7	38.0	22.4	33.8
NAAQ Standards			100	60	80	80
Unit			$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

Declaration

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Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

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E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14864

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC1485426000001096F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	23.03.2026
2	Date of Analysis Completed/Date of Report	25.03.2026/27.03.2026	8	Sample Receipt On	24.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4477
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	834	65.4	30.4	15.2	22.8
2	Near M Lab	835	64.4	28.6	12.8	25.2
3	Near Axle Shop RHF & Scrap Cutting	836	68.1	31.8	17.0	26.6
NAAQ Standards			100	60	80	80
Unit			$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

Declaration

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4. The test report should not be reproduced for the court of law as evidence without written approval from the laboratory.
5. The total liability of our laboratory is limited to invoiced amount only.
6. The results are only relevant to the items tested.

Eco Green Solution Systems Pvt. Ltd. Bengaluru

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report

ECO GREEN SOLUTION SYSTEMS PVT LTD

EGSSPL

Recognized by Ministry Of Environment, Forest & Climate Change (MOEFCC) Govt. Of India, New Delhi, Dt: 27.11.2024 to 21.11.2027
An ISO 9001:2015 & ISO 45001:2018 Certified Company
48/A-4, KIADB Industrial Area, Doddaballapur, Bengaluru-561203
E-mail: lab@egsspl.in, ecogreen@egsspl.in

TC-14854

Ministry of Environment, Forest & Climate Change

CIN NO: U74140KA2005PTC036991
EGSSPL/FRM/055
ULR NO: TC148542600000118F

Ambient Air Quality Analysis Report

1	Customer Name & Address	M/s. RWF HQ – Mechanical Office of the Chief Mechanical Engineer, Rail Wheel Factory Bangalore, 560064 Karnataka, India	7	Sample Collected On	26.03.2026
2	Date of Analysis Completed/Date of Report	28.03.2026/31.03.2026	8	Sample Receipt On	27.03.2026
3	Sampling Methodology	IS 5182 Part-5: 2020 (RA 2024)	9	SRC Code	4497
4	Sampling Plan Reference	EGSSPL/F/SOP/01	10	Sample Collected By	Mr. Abhilash
5	Data/Information obtained from the Customer (If Any)	NA	11	Condition of Test Item	Good
6	Monitoring Done By	M/s. Eco Green Solution Systems Pvt. Ltd.	12	Monitoring Duration	24hrs

Instrument Details	**$PM_{2.5}$ (Fine Particulate Sampler)**	**PM_{10} (Respirable Dust Sampler)**
Make/Model No.	Eco Green Instruments/ EGSS-007	Eco Green Instruments/ EGSS-NL-011
Sl. No.	001, 002, 003	001, 002, 003
Instrument Calibrated Date	31.10.2025	31.10.2025
Instrument Calibration Due Date	30.10.2026	30.10.2026

Sl. No.	**Name of the Location**	**Unique Identification No.**	**Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**	**Sulphur Dioxide as SO_2**	**Nitrogen Dioxide as NO_2**
1	Near RT Shop	848	68.2	34.5	19.3	25.2
2	Near M Lab	849	64.9	32.8	16.1	24.6
3	Near Axle Shop RHF & Scrap Cutting	850	70.4	36.2	22.5	28.1
NAAQ Standards			100	60	80	80
Unit			µg/m³	µg/m³	µg/m³	µg/m³
Method			IS 5182 (Part 23):2006 2022	IS 5182 (Part 24):2019 2024	IS 5182 (Part 2):2018 2023	IS 5182 (Part 6):2006 2022

Opinion & Interpretation	Within the Requirements

Declaration

1. Sample collected by EGSSPL Laboratory.
2. Sample collected and tested will be stored for a period of 15 days from the date of report.
3. This test report is subjected to Bengaluru jurisdiction only
4. The test report should not be reproduced for the court of law as evidence without written approval from the laboratory.
5. The total liability of our laboratory is limited to invoiced amount only
6. The results are only relevant to the items tested.

Eco Green Solution Systems Pvt. Ltd. Doddaballapur

Reviewed & Authorized Signatory
(S. Asokan)
Technical Manager

End of Report