

0/c

RELIANCE

Rosa Power Supply
Company Limited
CIN: U3110MH1994PLC243148

Administrative Block, Hardoi Road,
P.O. Rausar Kothi, Tehsil-Sadar,
District – Shahjahanpur
Uttar Pradesh 242 406

Tel: +91 05842 306600
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www.reliancepower.co.in

Ref: RPSCL/Env/Statement/5/2022/5

Date: 12.05.2022

To,
The Member Secretary
Uttar Pradesh Pollution Control Board
TC 12 B- Vibhuti Khand
Gomati Nagar, Lucknow

Sub: Submission of Environment Statement (FORM V) of FY 2021-22 for Stage I & II

Dear Sir,

This is with reference to the Air Consent Ref No- 138588/UPPCB / Bareilly (UPPCBRO) / CTO / air / SHAHJAHANPUR / 2021 and Air Consent Application No- 13679028 Dt: 03.01.2022 along with Water Consent Ref No- 138607 / UPPCB / Bareilly (UPPCBRO) / CTO / water / SHAHJAHANPUR / 2021 Dt: 10.01.2022 and Consent Application No-13684029/Water for **Stage-I** and Air Consent Ref No- 138611 / UPPCB / Bareilly (UPPCBRO) / CTO / air / SHAHJAHANPUR / 2021 and Air Consent Application No- 13684651 Dt: 10.01.2022 along with Water Consent Ref No- 138612 / UPPCB / Bareilly (UPPCBRO) / CTO / water / SHAHJAHANPUR / 2021 Dt: 10.01.2022 and Consent Application No- 13684765/Water for **Stage-II** issued to us and Environmental Clearance J-13011/19/2005-IA.II(T) dated 14-3-2006 for Stage I & Environmental Clearance J-13011/73/2007-IA.II(T) dated 20-7-2009 for stage II.

As advised, please find enclosed the Environmental Statement for the Stage I & II of the FY 2021-22 both in soft as well as hard copy.

Thanking You,

For Rosa Power Supply Co. Ltd.


(Authorized Signatory)



Cc: (I) Regional Officer UPPCB Bareilly
(II) Regional Officer MoEF Lucknow



Registered Office: Ground Floor, Reliance Centre, 19, Walchand Hirachand Marg, Ballard Estate, Mumbai 400 001
Lucknow Office: 520F, Kasmanda Apartments, 2 Park Road, Hazratganj, Lucknow 226 001, Fax: 0522 3031062/2239508

ENVIRONMENTAL STATEMENT

OF

Rosa Power Supply Company Ltd.
Shahjahanpur (U.P.)

2 x 300 MW (STAGE-I)

FINANCIAL YEAR ENDING THE 31st MARCH, 2022

Prepared by:

Rosa Power Supply Company Ltd.
Shahjahanpur (U.P.)



(FORM – V)
(See Rule 14)

Environmental Statement Report for the Financial Year ending 31st March, 2022.

PART – A

- (i) Name and address of the : Mr. H S Tomar
Owner/occupier of the Industry Rosa Power Supply Co. Ltd.
operation or process P.O.-Rausar Kothi
Hardoi Road
Distt. – Shahjahanpur (U.P.)
- (ii) Production Capacity : 2X300 MW
- (iii) Year of Establishment : March 2010
- (iv) Date of Last environmental statement : 06.05.2021
submitted
- (v) Industry category : Thermal Power Plant Coal Based
Primary : (STC Code)
Secondary : (SIC Code)



PART – B

(Water and Raw Material Consumption)

1. Water Drawn M³/Day

(All values indicate Annual consumption)

			FY 2020-21	FY 2021-22	Remarks
(I)	Gross Energy Generation (MU)	:	3297.55	3160.00	Unit Generation is less than previous year.
(ii)	Water consumption	:	7815178 M ³	9549480 M ³	RSPCL is taking most of the water from Stage-1 for whole station (Stage - 1 & Stage - 2) water make up of cooling towers & DM cycle due to availability of clarified water from Stage-1. Hence Stage-1 total water consumption is high as compared to Stage-2.
(iii)	Process	:	1688078 M ³	2062688 M ³	-do-
(iv)	Condenser Cooling	:	6104436 M ³	7459099 M ³	-do-
(v)	Domestic	:	22664 M ³	27693 M ³	-do-

S.No.	Name of the product	Process water Consumption per unit of product output.	
		2020-21	2021-22
1	Electricity	0.51 Ltr/Unit	0.65 Ltr/ Unit*

*The specific process water consumption was more due to more PLF in summer season.

2. Raw Material Consumption

Name of Raw Material	Name of the product	Consumption of Raw Material unit of output			
		2020-21		2021-22	
Coal	Electricity	Total Consumption (MT)	1928052	Total Consumption (MT)	1999932
		Specific Consumption per kw	0.58	Specific Consumption per kw	0.63

*The Specific Coal consumption was almost same as compared to previous year due to efficient Operation.



PART – C

Pollution discharged to Environment / Unit of output
(Parameter as specified in the consent issued)

Pollutants		Quantity of Pollutions discharged (mass/day) Kg/day	Concentration of Pollutants in discharge (mass/volume) Kg/m3	Percentage of variation from prescribed Standards
Treated Effluent Discharge*				
Unit	Limit			% below –
pH	5.5. to 9.0	----	----	
SS	< 100 mg/l	0.02	0.023	70%
Oil & Grease	< 10 mg/l	0.00	0.000	95%
BOD _{3 day}	< 30 mg/l	0.00	0.007	86.7%
COD	< 250 mg/l	0.02	0.048	82.4%
Air**				
SPM-Unit 1		1523.60	43.53	
SPM- Unit 2		1732.60	47.46	
		Kg/ day	mg/Nm ³	-

*-Above data taken from test report of MoEF approved Laboratory M/s Ecomen Laboratory Pvt Ltd for the sample taken on 26.03.2022 and average treated effluent flow is 0.13 CuM/day. (Refer Annexure_1.)

** - As per Test Report of MoEF approved Laboratory dated 04.02.2022 for Unit 1 and 08.02.2022 for Unit 2 of Stage_1 (Enclosed as Annexure_2)



PART – D

HAZARDOUS WASTES

(As specified under Hazardous wastes/management
& Handling Rules, 1989)

Hazardous Wastes	Total Qty (KG)	
	2020-21	2021-22
(a) From Process	13.19 KL (Spent oil) 937.82 kg (Waste containing oil)	9.66KL (Spent oil) 754.17kg (Waste containing oil)
(b) From Pollution Control facilities	2.64 KL	1.93 KL

The RPSCL has obtained Hazardous Waste Authorization from UPPCB for Collection & Storage of Hazardous waste.

Waste/ Spent Oil is collected at centrally located point in isolated stores area meant for them in sealed drums, which is further sent to authorized recycler for disposal as per norms of MoEF.



PART – E

SOLID WASTES

Total Quantity

Solid Wastes:

Solid Wastes:	Total Qty (Metric tonne or MT)	
	2020-21	2021-22
(i) From Process	137361 MT (Bottom Ash)	145515 MT (Bottom Ash)
(ii) From Pollution Control Facilities		
• Ash	• 549444 MT	• 582060 MT
• STP Sludge	• 31 MT	• 20.81 MT
c)		
I. Quantity recycled or re-utilized within unit	I. 2884 34	IV. 16097 38
II. Sold*	II. 244524 -----	V. 442859 -----
III. Disposed	III. (-)1761321 -----	VI. 115647 -----

* The ash is given to various agencies free of cost.



PART – F

Indicate disposal practice adopted for Hazardous as well as solid waste

- a) **Coal Ash:** As per MoEF guidelines, ash is being given to outside brick unit other than brick kiln; various cement industries for using ash as ingredients in their cement manufacturing units from our silo in closed trucks. Pond ash is lifted for Ash Pond dyke bund rising.
- b) **Used Batteries:** Collected centrally at store in isolated place for disposal to authorized agencies as per MoEF guidelines.
- c) **Hazardous waste:** Waste oil, Oil soaked cotton is collected in store for disposal to authorized agencies as per latest guidelines of MoEF.
- d) **E-Waste-** E-Waste is collected in store for disposal to authorized agencies as per latest guideline of MoEF.
- e) **Bio-Medical Waste-** Bio-medical waste is picked up by authorized agencies on daily basis from health centre.



PART – G

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

Pollution Control facilities such as ETP/ STP help in conservation of water resources. The treated water from ETP & STP is used for Ash Handling & Horticulture. Also, the plant is operated on a CoC of more than 5 as against the designed CoC of more than 4 which is helping in further water conservation. All these measures effectively reduce the fresh water intake.



PART – H

Additional investment proposal for environmental protection abatement of pollution, prevention of pollution

1. Tree Plantation is being carried out in and around the plant premises. Total 8850 nos. of trees and shrubs have been planted in the FY 2021-22 (common for stage 1 & 2). Total 610602 trees has been planted so far in area of 283 Ha i.e approx 46% against 33% greenbelt of MoEF Guideline.
2. During Financial year 2021-22 total expenditure of Rs 1.5Cr approximately done on horticulture & greenery development (common for stage 1 & 2).
3. Company has successfully passed the surveillance Audit for the Environment Management System Certification (ISO 14001:2015).
4. Continuous Air Quality Monitoring Stations (CAAQMS) have been installed in FY 2013-14, Continuous Effluent Monitoring System (CEMS) have been installed in FY 2014-15, and Connected data of Stack Emission, Effluent with CPCB Server in FY 2015-16, Online Coal Ash Analyser in FY 2017-18, Remote Calibration Facility in FY 2019-20 of CEMS and modification STP in FY 2020-21 with an approximate investment of Rs 1.5 crore, 13 Lacs, 5 Lacs, 34 Lacs, 23.50 Lacs and 18 Lacs approximately respectively. One CAAQM Station with online weather station has been upgraded with E Series costing approx 45 Lacs



PART – I

Any other particulars for improving the quality of environment.

- (1) We are complying with all the directions and conditions of state and central pollution boards and regular Water & Air consents are in force.
- (2) Regular monitoring of Noise level, AAQ, Waste and Stack Gases is being done. Waste water treatment and recycling is in practice.
- (3) Almost 8850 Tree and shrubs Plantation has been done in the year 2021-22 for improving the quality of environment (commonly for Stage 1 & 2).
- (4) Water conservation by Ash water recirculation.
- (5) To further improve the treated water quality at plant STP, Dual Media Filter has been provided.
- (6) Tree plantation, Prabhat Pheri and Quiz programmes organized on World Environment Day-2021 to increase environmental awareness among employees (Photographs enclosed as **Annexure_3**)
- (7) Training to employees from different departments has been given on Environmental Management System (ISO 14001:2015) and environmental aspect impact assessment
- (8) Good Practices/ Environmental Improvement Plans were made to achieve continual Improvement of Environment.

Note: Environmental Monitoring reports (AAQ, Noise, STP, and ETP) are enclosed as Annexure 3.

Following Environmental Improvement Plans were done during the FY 2021-22

- (1) Waste Disposal - Different color coding of drums for Oily waste and General Waste, Segregation of E-waste, Electrical waste
 - (2) PCC of the oil storage shed at maintenance yard of all contractors' area
 - (3) Agreement for Biomedical waste disposal with approved agency and renewal of Bio Medical Waste Authorization
 - (4) Remote Calibration facility with CPCB server upgraded for online Stack Emission Data as per CPCB Guideline.
 - (5) Re-utilising the treated effluent from Coal Settling Pit for dust suppression in CHP Area
 - (6) Interconnecting sewage water of admin building, AAC Block, AHP Area and fire station with STP for optimum utilization of Sewage Treatment Plant. Also new STP of 10 KLD installed at CHP area to treat sewage water.
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ENVIRONMENTAL STATEMENT

OF

**Rosa Power Supply Company Ltd.
Shahjahanpur (U.P.)**

2 x 300 MW (Stage-II)

FINANCIAL YEAR ENDING THE 31st MARCH, 2022

Prepared by:

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(FORM – V)
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Environmental Statement Report for the Financial Year ending the 31st March, 2022.

PART – A

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operation or process
Rausar Kothi
Hardoi Road
Distt. – Shajahanpur(U.P.)
- (ii) Production Capacity : 2X300 MW
- (iii) Year of Establishment : Jan 2012
- (iv) Date of Last environmental statement : 06.05.2021
submitted
- (v) Industry category : Thermal Power Plant
Primary : (STC Code)
Secondary : (SIC Code)



PART – B

(Water and Raw Material Consumption)

1. Water Drawn M³/Day

(All values indicate Annual consumption)

			FY 2020-21	FY 2021-22	Remarks
(i)	Gross Energy Generation (MU)	:	3453.51	2609.70	Unit Generation is less than previous year.
(ii)	Water consumption	:	6388105 M ³	2552675 M ³	RSPCL is taking most of the water from Stage-1 for whole station (Stage-1 & Stage-2) water make up of cooling towers & DM cycle due to availability of clarified water from stage-1 .Hence stage-1 total water consumption is high as compared to stage-2.
(iii)	Process	:	1379831 M ³	551378 M ³	-do-
(iv)	Condenser Cooling	:	4989749 M ³	1993894 M ³	-do-
(v)	Domestic	:	18526 M ³	7403 M ³	-do-

S.No.	Name of the product	Process water Consumption per unit of product output.	
		FY 2020-21	FY 2021-22
1	Electricity	0.40 Ltr/Unit	0.21 Ltr/Unit

2. Raw Material Consumption

Name of Raw Material	Name of the product	Consumption of Raw Material unit of output			
		FY 2020-21		FY 2021-22	
Coal	Electricity	Total Consumption(MT):	2092675	Total Consumption(MT)	1651653
		Specific Consumption per kw:	0.61Kg/Unit*	Specific Consumption per kw	0.63Kg/Unit*

*Sp. Coal consumption was almost same compared to the previous year due to efficient operation.



PART – C

Pollution discharged to Environment/Unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutions discharged (mass/day)	Concentration of Pollutants in discharge (mass/volume)	Percentage of variation from prescribed Standards												
Water Treated Effluent Discharge* <table><tr><td>Unit</td><td>Limit</td></tr><tr><td>pH</td><td>5.5. to 9.0</td></tr><tr><td>SS</td><td>< 100 mg/l</td></tr><tr><td>Oil & Grease</td><td>< 10 mg/l</td></tr><tr><td>BOD₅</td><td>< 30 mg/l</td></tr><tr><td>COD</td><td>< 250 mg/l</td></tr></table>	Unit	Limit	pH	5.5. to 9.0	SS	< 100 mg/l	Oil & Grease	< 10 mg/l	BOD ₅	< 30 mg/l	COD	< 250 mg/l	The Effluent Treatment facility for Stage I and II is common. Please refer Env Statement of Stage I.		
Unit	Limit														
pH	5.5. to 9.0														
SS	< 100 mg/l														
Oil & Grease	< 10 mg/l														
BOD ₅	< 30 mg/l														
COD	< 250 mg/l														
Air** SPM-Unit 3 SPM-Unit 4	1703.23 1725.31 kg/day	44.1 44.4 mg/Nm ³	-												

* Report Enclosed as Annexure 1 of Stage_1

** - As per Test Report of MoEF approved Laboratory dated 14.02.2022 of Unit 3 & dated 21.02.2022 of Unit 4 of Stage-2 respectively (Enclosed as **Annexure 2**).



PART – D

HAZARDOUS WASTES

**(As specified under Hazardous wastes/management
& Handling Rules, 1989)**

Hazardous Wastes	Total Qty (KG)	
	FY 2020-21	FY 2021-22
(a) From Process	13.81 KL(Spent Oil) 982.18 kg (Waste containing oil)	7.93 KL(Spent Oil) 622.83 kg (Waste containing oil)
(b) From Pollution Control facilities	2.76 KL (Apportioned in the ratio of generation)	1.60 KL (Apportioned in the ratio of generation)

The RPSCL has obtained Hazardous Waste Authorization from UPPCB for Collection & Storage of Hazardous waste.

- RPSCL has obtained renewed Hazardous Waste Authorization from UPPCB for Collection & Storage of Hazardous waste in 2020.
- Waste / Spent Oil is collected at centrally located point in isolated storage area meant for them in sealed Drums, which is further sent to authorized recycler for disposal as per norms of MoEF.



PART – E

SOLID WASTES

Total Quantity

Solid Wastes:

Solid Wastes:	Total Qty (Metric tonne or MT)	
	FY 2020-21	FY 2021-22
(i) From Process	143857 MT (Bottom Ash)	120174 MT (Bottom Ash)
(ii) From Pollution Control Facilities		
• Ash	575430 MT(Fly Ash)	480697MT(Fly Ash)
c)	Ash in MT	Ash in MT
I. Quantity recycled or re-utilized within unit	I. 3021	IV. 13294
II. Sold*	II. 2560891	V. 365737
III. Disposed	III. (-) 1844624	VI. 95508

* The ash is given to various agencies free of cost.



PART – F

Indicate disposal practice adopted for Hazardous as well as solid waste

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