JSW Energy (Barmer) Limited
Vill. & Post: Bhadresh, Post Box No.30, Distt: Barmer-344001 (Raj.)
CIN: U31102MH1996PLC185098
Phone: +91 2982 229100
Website : www.jsw.in

Ref: JSWE(B)L/ENV/2026-27/010 **Date: 23.06.2026**

To,

Member Secretary
Rajasthan State Pollution Control Board
4-Institutional Area, Jhalana Doongari,
Jaipur - 302004

Sub: Environmental Statement 2025 - 2026. **UNIT ID – 5276**

Dear Sir,

We herewith enclose duly filled Form-V of Environmental statement of JSWE(B)L for the financial year 2025 - 2026.

Please acknowledge the same.

Thanking You,

For JSW Energy (Barmer) Ltd.

Sharad Chandra Totla
GM- Environment & Chemistry

Enclosure

Form – V
Annexure I CEMS Data for Eight Units
Annexure II Water Utilization Data
Annexure III Effluent Water Quality
Annexure IV Ash Management Data
Annexure V Form-4 of Haz. Waste Management
Annexure VI Characterization of solid waste **– Fly Ash & Bed Ash**

CC. Regional Officer, RSPCB - Balotara

F O R M - V
(See Rule 14)

From:

Sharad Totla
General Manager (ENV & CHEM),
JSW Energy (Barmer) Limited
Village Bhadresh
Tehsil-Barmer
Dist. Barmer – 344001

To:

Senior Environment Engineer
Rajasthan State Pollution Control Board, 4,
Institutional Area",
Jhalan Dungari,
Jaipur, Rajasthan-302 004

Environmental Statement for the financial year 2025-2026

PART – A

(i)	**Name and address of the owner / occupier of the industry operation or process**	**:**	**VIJAY CHINTALA JSW Energy (Barmer) Limited Village- Bhadresh, Tehsil- Barmer. Dist. – Barmer-344 001**
(ii)	**Industry category – Primary – (STC Code) Secondary – (SIC Code)**	**:**	**8 x 135 MW (1080 MW) Lignite based Power Plant.**
(iii)	**Production capacity Units**	**:**	**8 x 135 MW**
(iv)	**Year of establishment**	**:**	**28.2.2007**
(v)	**Date of the last Environmental Statement submitted**	**:**	**21.06.2025**

PART – B

Water and Raw Material Consumption

(1) Water consumption M^3 / day

Water Consumption (m^3/day)	During the current financial year (2024-25)	During the current financial year (2025-26)
Process (for DM Water)	**2050**	**2044**
Cooling (From CW)	**43597**	**42806**
Domestic	**107**	**109**

Name of Products	Raw water consumption	
	During the Previous financial year (2024-25)	During the current financial year (2025-26)
Power - KL/MW	**2.47**	**2.57**

(ii) Raw material consumption

Name of raw material	***Name of products***	Consumption of raw material per unit of output	
		During the Previous financial year (2024-25)	During the current financial year (2025-26)
		(1)	(2)
Coal Cons. MT/MW	Power	**0.874**	**0.883**
Oil Cons. KL/MW		**0.0001217**	**0.0001763**

a.

b. PART – C

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

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharged (mass / volume)		Percentage of variation from prescribed standards with reasons
(a) Water		**Suspended Solids**	**38.6 mg/lit**	**Within limit**
		Oil & Grease	**BDL**	
		Total Copper	**BDL**	
		Total Iron	**0.012 mg/lit.**	
		Free available Chlorine	**<0.18 mg/lit**	
		Zinc	**0.112 mg/lit**	
		Hexavalent Chromium	**ND**	
		Total Chromium	**ND**	

(b) Air **SPM** **SO2** **NOx**		SPM: ⇒ Unit-1 38.60 mg/Nm³ ⇒ Unit-2 37.6 mg/Nm³ ⇒ Unit-3 37.4 mg/Nm³ ⇒ Unit-4 37.2 mg/Nm³ ⇒ Unit-5 40.5 mg/Nm³ ⇒ Unit-6 37.8 mg/Nm³ ⇒ Unit-7 33.8 mg/Nm³ ⇒ Unit-8 36.4 mg/Nm³ SO2: at 6% O2 Ref. ⇒ Unit-1 424.6 mg/Nm³ ⇒ Unit-2 439.4 mg/Nm³ ⇒ Unit-3 452.0 mg/Nm³ ⇒ Unit-4 439.6 mg/Nm³ ⇒ Unit-5 449.1 mg/Nm³ ⇒ Unit-6 465.9 mg/Nm³ ⇒ Unit-7 413.7 mg/Nm³ ⇒ Unit-8 406.0 mg/Nm³ NOx: at 6% O2 Ref. ⇒ Unit-1 116.6 mg/Nm³ ⇒ Unit-2 123.9 mg/Nm³ ⇒ Unit-3 114.0 mg/Nm³ ⇒ Unit-4 118.7 mg/Nm³ ⇒ Unit-5 118.8 mg/Nm³ ⇒ Unit-6 119.4 mg/Nm³ ⇒ Unit-7 114.5 mg/Nm³ ⇒ Unit-8 118.1 mg/Nm³	Within limit

PART – D

[As specified under Hazardous Wastes (Management and Handling) Rules, 1989]

Hazardous Waste		Total Quantity (Kg.)	
		During the current financial year (2024-25)	During the current financial year (2025-26)
(a)	**From process** **(i) Waste oil** **(ii) Used Batteries (lead acid)** **(iii) Waste Resin** **(iv) Discarded drum**	**0.0**	**11180**
(b)	**From pollution control facilities**	---N. A---	---N. A---

PART – E

Solid Waste

	Total Quantity (MT.)	
	During the current financial year (2024-25)	During the current financial year (2025-26)
(a) From process	**807620**	**933027**
(b) From pollution control facilities		
(c) (1) Quantity recycled or re-utilized within the unit.	**Nil**	**Nil**
(2) Solid (Sold to cement & ash-based manufacturer units)	**840177**	**921937**
(3) Disposed (In Ash Pond)	**0.0**	**0.0**

PART – F

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

1. Characterizations of Hazardous waste**: - USED Lubricating Oil**

2. Disposal Method**: - --- N.A --- (Selling to PCB approved/Authorized oil Recycler)**

3. Characterizations of solid waste**: - The constituents of fly ash and bottom ash generated are enclosed herewith – Annexure – I**

4. Disposal Method**: -**

   (a) Dry Ash Disposal**: - Fly ash & bed ash is collected in silos & dispose through closed container.**

   (b) Ash utilized / disposal off as under.

      (i) Giving to nearby cement industries and manufacturing of ash-based products like bricks etc.

      (ii) Utilized in miscellaneous work like concrete, approach road, filling in low-lying area etc. in the power plant.

PART – G

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

1. **Adopted Dry Ash Disposal**

   (b) Reduce the cost of generation

   (c) Reduce consumption of water.

   (d) Appropriate utilization

2. **Using high purity lime for reduction and controlling of SO2 emission.**

3. **CFBC technology is adopted for reduction and controlling of NOx emission.**

4. **High efficiency electro static precipitators (ESP) are installed with 99.9 % efficiency.**

5. **A 122-meter-high Chimney is erected for better dispersion of emission.**

6. **Continuous emission monitors (CEMS) are installed to monitor the emission levels from stacks.**

   - **Three Continuous ambient air quality monitoring stations (CAAQMS) are installed inside the plant area to monitor the ambient air quality.**
   - **Three continuous ambient air quality monitoring station (CAAQMS) are installed our side the surrounding pant area to monitor the ambient air quality.**

6. **For reducing fugitive emission. Dust extraction systems are provided at each transfer points of coal conveyer belt, ash handling system. Bag filters are provided at strategic locations.**

7. **For reuse of waste water generated – Effluent Treatment Plant is in operation**

8. **Dust Suppression Water Spraying system at Ash Pond & Lignite area provided for fugitive emission control.**

9. **Installed sensor-based vehicle water washing auto system, every ash bulker pass though water washing auto system to eliminate possibility of fugitive dust emissions**

PART – H

Additional measure / investment proposal for environmental protection including abatement of pollution prevention ofpollution.

1) **A green belt had been developed all around the plant boundary and ash pond covering an area of more than 154 Ha to control fugitive emission and sound pollution.**

2) **Three Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed outside the plant area in the impact zone.**

3) **RCC roads are being provided at all required location within the plant to control fugitive emissions.**

For JSW Energy (Barmer) Limited.

(Sharad Chandra Totla)
GM- Environment & Chemistry

ANNEXURE-_I

Unit # 1 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	452.28	128.54	40.06
	Max	506.26	153.66	46.63
May-25	Average	408.88	137.89	38.84
	Max	501.53	148.59	46.12
Jun-25	Average	454.80	111.00	41.91
	Max	513.82	135.22	45.48
Jul-25	Average	433.56	109.75	39.71
	Max	515.84	122.41	44.93
Aug-25	Average	416.12	113.18	42.58
	Max	516.72	131.17	45.91
Sep-25	Average	464.17	107.33	38.68
	Max	521.09	122.05	45.78
Oct-25	Average	428.22	109.97	38.65
	Max	517.18	123.48	43.54
NOv-25	Average	357.40	115.70	38.10
	Max	466.60	129.20	44.30
Dec-25	Average	325.74	117.32	27.39
	Max	422.11	132.88	45.73
Jan-26	Average	476.20	117.03	35.47
	Max	527.62	128.87	44.21
Feb-26	Average	411.20	116.75	42.68
	Max	505.25	127.41	45.48
Mar-26	Average	466.55	116.67	39.08
	Max	522.83	137.31	41.54

ANNEXURE-_I

Unit # 2 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	382.73	141.69	37.18
	Max	443.40	160.35	44.59
May-25	Average	334.56	134.56	37.39
	Max	440.83	157.46	45.89
Jun-25	Average	366.97	118.23	41.78
	Max	442.92	143.96	45.63
Jul-25	Average	407.76	112.47	41.64
	Max	446.90	126.34	45.72
Aug-25	Average	379.48	107.88	41.42
	Max	437.10	122.41	45.30
Sep-25	Average	399.23	108.08	39.50
	Max	443.55	122.45	44.21
Oct-25	Average	412.78	104.69	38.41
	Max	445.76	123.20	45.77
NOv-25	Average	430.91	115.09	34.99
	Max	440.77	127.61	39.78
Dec-25	Average	322.76	118.24	22.92
	Max	441.79	132.39	38.83
Jan-26	Average	352.63	114.56	35.70
	Max	447.42	137.41	44.78
Feb-26	Average	386.42	127.36	40.96
	Max	467.62	143.96	44.43
Mar-26	Average	347.13	118.79	38.95
	Max	419.05	127.23	40.38

ANNEXURE-_I

Unit # 3 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	482.74	142.14	35.68
	Max	525.85	171.54	41.09
May-25	Average	457.64	131.85	38.30
	Max	513.49	146.64	42.48
Jun-25	Average	478.88	117.10	35.27
	Max	531.70	133.54	43.09
Jul-25	Average	478.08	114.15	40.84
	Max	518.75	138.87	44.67
Aug-25	Average	419.03	116.31	42.33
	Max	514.61	129.41	45.41
Sep-25	Average	457.52	116.13	43.92
	Max	510.82	125.54	45.76
Oct-25	Average	453.44	106.46	34.46
	Max	517.21	147.50	45.12
NOv-25	Average	465.88	112.41	35.87
	Max	511.55	122.45	40.67
Dec-25	Average	439.12	107.68	37.85
	Max	508.77	136.69	42.62
Jan-26	Average	414.28	111.24	30.30
	Max	494.09	126.45	40.21
Feb-26	Average	490.41	117.28	40.06
	Max	521.78	128.29	45.39
Mar-26	Average	422.96	120.77	33.53
	Max	498.96	130.28	38.58

ANNEXURE-_I

Unit # 4 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	364.78	137.69	40.02
	Max	397.78	163.10	42.39
May-25	Average	332.69	139.84	37.50
	Max	433.78	164.21	43.75
Jun-25	Average	412.23	127.93	33.92
	Max	472.40	148.71	41.23
Jul-25	Average	382.56	123.32	37.20
	Max	468.27	153.57	43.71
Aug-25	Average	476.25	124.36	35.73
	Max	519.51	138.91	42.85
Sep-25	Average	489.06	114.46	35.11
	Max	519.37	130.21	42.24
Oct-25	Average	472.01	115.18	38.86
	Max	513.39	129.31	45.12
Nov-25	Average	431.12	110.91	40.07
	Max	517.78	126.42	45.78
Dec-25	Average	464.42	115.45	34.01
	Max	512.42	122.71	43.20
Jan-26	Average	422.68	117.60	40.45
	Max	515.86	131.21	45.94
Feb-26	Average	447.03	113.67	38.72
	Max	507.66	123.47	45.78
Mar-26	Average	398.47	124.43	37.73
	Max	482.50	142.21	41.33

ANNEXURE-_I

Unit # 5 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	477.13	106.56	44.34
	Max	526.34	151.99	46.68
May-25	Average	404.83	115.80	40.78
	Max	511.27	153.19	45.12
Jun-25	Average	469.84	110.78	41.42
	Max	522.83	145.41	45.89
Jul-25	Average	468.09	119.27	40.59
	Max	523.41	142.21	44.93
Aug-25	Average	471.38	113.23	37.00
	Max	523.27	136.41	42.15
Sep-25	Average	492.51	131.91	40.62
	Max	530.74	141.11	44.56
Oct-25	Average	484.57	121.32	41.13
	Max	529.51	141.87	46.88
Nov-25	Average	458.61	119.06	39.08
	Max	520.84	128.61	44.53
Dec-25	Average	375.31	119.67	42.88
	Max	469.31	137.18	45.10
Jan-26	Average	398.83	115.96	41.66
	Max	513.36	136.46	45.24
Feb-26	Average	476.12	116.03	40.20
	Max	520.84	125.78	46.87
Mar-26	Average	395.23	120.61	40.68
	Max	437.85	139.56	44.15

ANNEXURE-_I

Unit # 6 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	457.51	144.92	32.57
	Max	514.78	165.72	37.50
May-25	Average	467.14	128.09	36.66
	Max	569.44	155.78	38.35
Jun-25	Average	511.56	144.22	36.58
	Max	569.51	156.21	45.12
Jul-25	Average	481.89	118.36	36.60
	Max	505.15	125.64	39.05
Aug-25	Average	451.45	114.14	39.02
	Max	502.64	122.45	40.78
Sep-25	Average	486.94	116.22	38.57
	Max	544.12	145.20	39.69
Oct-25	Average	484.49	110.79	36.89
	Max	586.75	129.54	39.83
Nov-25	Average	478.68	117.67	37.36
	Max	523.99	133.95	40.21
Dec-25	Average	437.12	107.89	38.53
	Max	507.48	122.78	39.78
Jan-26	Average	452.43	122.50	37.35
	Max	584.28	137.21	39.68
Feb-26	Average	448.73	118.12	37.84
	Max	507.12	124.80	40.07
Mar-26	Average	425.47	124.54	39.14
	Max	486.45	139.80	39.93

ANNEXURE-_I

Unit # 7 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	388.66	109.69	25.35
	Max	453.58	145.78	35.75
May-25	Average	308.98	135.60	30.29
	Max	419.45	147.45	35.88
Jun-25	Average	345.02	119.06	34.27
	Max	554.74	151.91	36.50
Jul-25	Average	408.61	109.60	32.55
	Max	459.78	121.15	35.81
Aug-25	Average	382.46	114.82	33.80
	Max	443.22	133.54	39.87
Sep-25	Average	459.71	111.32	27.64
	Max	524.82	145.41	35.79
Oct-25	Average	471.51	111.49	32.16
	Max	526.46	122.45	35.27
Nov-25	Average	383.13	118.56	34.45
	Max	523.65	137.33	35.30
Dec-25	Average	SHUT DOWN		
	Max			
Jan-26	Average	345.80	112.83	31.47
	Max	356.15	115.45	32.45
Feb-26	Average	488.17	112.38	38.11
	Max	512.45	128.46	41.37
Mar-26	Average	439.32	120.38	39.53
	Max	523.55	136.75	42.24

ANNEXURE-_I

Unit # 8 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Apr-25	Average	458.99	115.00	37.10
	Max	531.60	125.33	43.19
May-25	Average	394.72	113.61	30.77
	Max	507.05	122.25	35.63
Jun-25	Average	447.25	105.56	25.16
	Max	511.72	122.78	32.45
Jul-25	Average	398.12	115.35	29.45
	Max	520.51	148.21	41.14
Aug-25	Average	448.15	114.79	34.38
	Max	519.13	132.05	39.41
Sep-25	Average	410.07	130.85	33.51
	Max	507.11	144.19	42.78
Oct-25	Average	365.07	111.75	42.55
	Max	510.08	122.82	44.94
Nov-25	Average	358.71	118.43	39.25
	Max	429.52	137.90	43.92
Dec-25	Average	359.14	116.86	42.24
	Max	469.00	133.60	44.62
Jan-26	Average	348.08	124.03	40.84
	Max	469.26	141.42	45.14
Feb-26	Average	478.92	116.71	37.69
	Max	512.78	127.21	44.21
Mar-26	Average	446.81	126.93	38.99
	Max	502.90	140.15	41.87

ANNEXURE- II

Water Utilization Data- April 2025 – MAR 2026

Month	Inlet Water-Total Consumed (For Industrial Cooling + DM water + Domestic)	Water Consumed for Industrial Cooling	For DM water Process	Domestic Water Consumption
	(KL)	(KL)	(KL)	(KL)
Apr-25	1387396	1305682	78505	3209
May-25	1518929	1452005	63604	3320
Jun-25	1503763	1440818	59432	3513
Jul-25	1261272	1200279	57722	3271
Aug-25	1351458	1288247	60001	3210
Sep-25	1391588	1331426	56931	3231
Oct-25	1313250	1245036	64933	3281
Nov-25	1236577	1166993	66386	3198
Dec-25	1225755	1157388	65091	3276
Jan-26	1266822	1200830	62691	3301
Feb-26	1414723	1351986	59548	3189
Mar-26	1538274	1483618	51138	3518
Total	16409807	15624308	745982	39517

ANNEXURE- III

Effluent Water Quality APR, 2025 – SEPT, 2025

SN	Parameters	UoM	CPCB Limits	Results					
				April	May	June	July	Aug	Sept
1.	pH		**6.5-8.5**	7.24	7.84	7.82	7.77	7.54	7.78
2.	Biochemical Oxygen Demand (BOD) @ 27Deg C for 3 days	mg/L	**< 30.0**	19.55	18.80	18.90	15.15	17.13	25.48
3.	Chemical Oxygen Demand (COD)	mg/L	**< 250**	106.40	102.25	106.00	102.50	110.70	114.15
4.	Total Kjeldhal Nitrogen as NH3	mg/L	**< 100**	16.00	16.28	15.90	15.98	16.00	15.78
5.	Free Available Chlorine	mg/L	**< 0.5**	BDL	BDL	BDL	BDL	BDL	BDL
6.	Oil & Grease	mg/L	**< 20**	BDL	BDL	BDL	BDL	BDL	BDL
7.	Copper as Cu	mg/L	**< 1**	BDL	BDL	BDL	BDL	BDL	BDL
8.	Zinc as Zn	mg/L	**< 1**	0.12	0.123	0.119	0.115	0.120	0.117
9.	Iron as Fe	mg/L	**< 1**	BDL	BDL	BDL	BDL	BL	BDL
10.	Total SuspendedSolid	mg/L	**< 100**	38.18	40.90	42.00	37.95	38.00	39.50
11.	Ammonical Nitrogen as N	mg/L	**< 50**	7.94	8.53	7.96	7.92	7.94	7.95
12.	Nitrate Nitrogen	mg/L	**< 10**	1.30	1.34	1.30	1.26	1.26	1.29
13.	Total Chromium as Cr	mg/L	**< 1**	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01

ANNEXURE- III

Effluent Water Quality OCT, 2025 – MARCH, 2026

SN	Parameters	UoM	CPCB Limits	Results					
				Oct	Nov	Dec	Jan	Feb	Mar
1.	pH		**6.5-8.5**	7.88	7.84	8.02	8.15	7.95	7.76
2.	Biochemical Oxygen Demand (BOD) @ 27Deg C for 3 days	mg/L	< **30.0**	23.32	23.45	22.75	23.21	22.05	23.15
3.	Chemical Oxygen Demand (COD)	mg/L	< **250**	128.3	128.25	127.25	128.21	126.78	125.41
4.	Total Kjeldhal Nitrogen as NH3	mg/L	< **100**	17.15	17.85	20.25	18.45	19.05	18.21
5.	Free Available Chlorine	mg/L	< **0.5**	BDL	BDL	BDL	BDL	BDL	BDL
6.	Oil & Grease	mg/L	< **20**	BDL	BDL	2.0	BDL	BDL	BDL
7.	Copper as Cu	mg/L	< **1**	BDL	BDL	0.08	BDL	BDL	BDL
8.	Zinc as Zn	mg/L	< **1**	0.123	0.125	0.19	0.21	0.18	0.16
9.	Iron as Fe	mg/L	< **1**	BDL	BDL	0.37	BDL	BDL	BDL
10.	Total SuspendedSolid	mg/L	< **100**	39.85	42.9	50.75	52.21	55.05	51.45
11.	Ammonical Nitrogen as N	mg/L	< **50**	7.84	7.79	9.12	8.21	8.38	8.06
12.	Nitrate Nitrogen	mg/L	< **10**	2.41	2.34	2.85	2.64	2.07	2.19
13.	Total Chromium as Cr	mg/L	< **1**	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01

ANNEXURE-IV

Ministry of Environment, Forest and Climate Change
Monthly Abstract of Ash Generation and Utilization

(For the Period from April, 2025 to March, 2026)

Name of Thermal Power Plant: JSW Energy (Barmer) Limited – Jalipa-Kapurdi Thermal Plant Lignite Coal Base Thermal Plant

Sl. No.	ASH GENERATION AND UTILIZATION							Mode of Ash Utilization and Utilization in Each Mode (IN LAKH TON)					
	Month	Coal consumed (Lakh Ton)	Lime Coal Consumed (Lakh Ton)	Ash content of coal (%)	Total Ash content Coal + lime (%)	Ash Generation (Lakh Ton)	Ash Utilization (Lakh Ton)	% Age Utilization	In making of Fly Ash based/ Bricks/ Blocks/ Tiles etc. (Lakh Ton)	In manufacture of Portland Pozzolana Cement (Lakh Ton)	In Mine filling (Lakh Ton)	In Agriculture/ Waste land Development (Lakh Ton)	Others
(1)	(2)	(3)		(4)		(5)	(6)	(7)	(8)	(9)	(15)	(16)	(17)
1	APRIL	4.24970	0.07441	10.31	11.85	0.50342	0.61000	121.73	0.17010	0.44269	0.00000	0.00000	0.00000
2	MAY	4.81320	0.09355	10.63	12.34	0.59402	0.66000	111.46	0.19224	0.46983	0.00000	0.00000	0.00000
3	JUNE	4.71260	0.08917	10.94	12.61	0.59402	0.74000	125.15	0.21386	0.52952	0.00000	0.00000	0.00000
4	JULY	4.10610	0.08795	12.77	14.66	0.60183	0.77000	127.39	0.20917	0.55753	0.00000	0.00000	0.00000
5	AUGUST	4.64750	0.09998	16.29	18.18	0.84485	0.79000	93.03	0.21391	0.57205	0.00000	0.00000	0.00000
6	SEPTEMBER	4.98530	0.07902	17.26	18.66	0.93000	0.81000	87.40	0.20763	0.60521	0.00000	0.00000	0.00000
7	OCTOBER	5.02660	0.09676	16.54	18.23	0.91636	0.73496	80.20	0.18673	0.54820	0.00000	0.00000	0.00000
8	NOVEMBER	4.75560	0.08801	16.56	18.19	0.86503	0.78102	90.29	0.22744	0.55360	0.00000	0.00000	0.00000
9	DECEMBER	4.44800	0.08652	16.88	18.60	0.82709	0.84572	102.25	0.29291	0.55280	0.00000	0.00000	0.00000
10	JANUARY	4.46250	0.09295	16.62	18.45	0.82344	0.71882	87.29	0.26803	0.45080	0.00000	0.00000	0.00000
11	FEBRUARY	4.82830	0.12327	15.94	18.18	0.87787	0.89882	102.39	0.31114	0.58770	0.00000	0.00000	0.00000
12	MARCH	5.30930	0.18032	14.95	17.94	0.95233	0.85628	89.91	0.21593	0.64040	0.00000	0.00000	0.00000
TOTAL		56.34464	1.19190	14.70	16.56	9.33027	9.21937	98.81	2.70910	6.51027	0.00000	0.00000	0.00000

ANNEXURE-V

FORM 4

[See rule (1)]

Format for the submission of returns, regarding disposal of hazardous waste.

(To be submitted to the State Pollution Control Board)

1. Name and address of the occupier or operator of a facility: **JSW Energy (Barmer) Limited, Dist. – Barmer-344 001**

2. Details of Authorization No., Person Production for hazardous waste generation:

Sr. No.	Authorization No. and Date of issue	Name of the authorization person and full address with telephone, fax number and e-mail:	Production during the year (production wise), Wherever application
1.	**RPCB/HWM/2025-2026/Power/HSW/5.** **01/09/2025**	**Mr. Sharad Chandra Totla** **JSW ENERGY (BARMER) LIMITED,** **Village & PO. BHADRESH Dist.: BARMER,** **Rajasthan – 344001** **Telephone: 91 2982 229 100** **sharad.totla@jsw.in**	**11180 Kg** Used Lubrication Oil

2. Details filled by hazardous waste generations: **2025 - 26**

Sr. No	Total quantity of waste generated category wise	Quantity dispatched	Quantity utilised in-house, if any- site of disposal (attach a sketch showing the location(s) of disposal)			Quantity in storage at the end of the year
			To disposal facility	To recycle or co-processors or pre-processor	Other	
1	**11180 Kg** Used Spent Oil, **(Sch. (I) Code: 5.1**	**11180 Kg**	Not application	Nil (Not stored)	Nil	NA

VIJAY CHINTALA
Head of Plant
JSW Energy (Barmer) Limited
Bhadresh – Barmer 344 011

Annexure I

Material Safety Data Sheet
Coal Fly Ash

SECTION I – GENERAL INFORMATION

Subject: Coal Fly Ash

Manufacturer:

JSW Energy (Barmer) Limited

Village & Po. Bhadresh

Pin 344 011, Rajasthan

Telephone Number for Information
91-2982-229 100

SECTION II – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Mineral Analysis of Ash	**CAS number**	**Wt % Ignited Basis**
Silica Amorphous (SiO2)		40 – 70 %
Alumina (Al2O3)	1344 – 28 – 1	20 – 35 %
Ferric Oxide (Fe2O3)	1309 – 37 – 1	5 – 15 %
Calcium Oxide (CaO)	1305 – 78 – 8	1 – 5 %
Silica Crystalline Quartz	14808 – 60 – 1	2 – 8 %
Silica, Crystalline Cristobilite	14464 – 46 – 1	1 – 3 %
Potassium Oxide (K2O)		1.6 – 2 %
Titanium Oxide (TiO2)	13463 – 67 – 7	1 – 2 %

Note: Concentrations are approximate and may vary with coal source and boiler operating conditions.

SECTION III – PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance and Odor: Fine grained, gray powder. No Odor.

Boiling Point	N / A	**Evaporation rate**	N / A
Vapor Pressure	N / A	**Melting Point**	1200 deg C
Vapor Density	N / A	**Solubility in water**	Insoluble
Specific Gravity	1.2 to 2.0		

(ASTM D 854) Note: N/A means not applicable

Annexure I

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Flammability Limits: N/A

Fire and Explosion Hazard: None

Fire Fighting Procedures: Coal Fly ash is the final product of combustion: therefore, unusual hazards are not expected in a fire.

Flash point: N / A

SECTION V – REACTIVITY DATA

Stability **:** Stable, will not polymerize. Stable under normal conditions of storage and handling.

Conditions to avoid: None

Incompatibility: None

Hazardous Decomposition or by product: None reported

SECTION VI – HEALTH HAZARD INFORMATION

Exposure Route:

- Inhalation
- Skin Contact
- Eye Contact

Ingestion: No information on the short term effects from ingestion in humans available. No observed effects in mice that ingest up to 1 % Coal Fly ash in drinking water (Roy et. Al 1981).

Mutations: No information on Mutagenicity in humans was found.

Birth defects and Effects on Reproduction: No information on reproduction effects humans was found.

Other health effects: Inhaled Crystalline Silica may cause pulmonary damage, resulting in Silicosis. Silicosis is defined as degenerative fibrotic lung disease. It has been determined that the pulmonary defence system of mice was significantly affected by Coal Fly ash (Aranyl and Bradof, 1981)

Note: The International Agency for research on Cancer (IARC) has classified Crystalline silica as a probable human carcinogen.

Medical conditions: No information was reported on medical conditions that may be aggravated by exposure to Coal Fly Ash. However, emphysema and bronchitis frequently occur in cases of Silicosis (Merchant Et Al 1981).

Annexure I

SECTION VII – EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Move person to fresh air. Clear nasal passage and discourage affected individual from sniffing. If person is not breathing, contact emergency medical services and initiate basic life support.

Skin: Brush away ash particles. To avoid possible irritation, wash contaminated skin immediately with soap and water. Remove any contaminated clothing and rewash skin if necessary. If skin irritation results, obtain medical attention.

Eyes: Immediately flush the eyes for at least 15 minutes at an eyewash station or use an appropriate flush solution or water while holding the eyelids open. Do not rub. Seek medical attention as soon as possible.

SECTION VIII PRECAUTIONS FOR SAFE HANDLING AND USE

Personnel protection: Employees handling fly ash should wear gloves, goggles, NIOSH respiratory protection and disposable coverlets.

Storage and handling: When storing coal fly ash in ash ponds, treat surface to avoid wind erosion of ash particles. When storing coal fly ash in landfills, the ash should be wetted and covered to avoid wind erosion of ash particles. Open trucks utilised in ash disposal should be properly covered and should be wetted.

Special precautions and Control Measures: Employees handling fly ash should observe proper personal hygiene, wash hands, remove coverlets before eating, smoking, applying cosmetics or using toilet facilities. Local exhaust system should be used whenever possible. Other practices such as wetting should be utilized to control dust. Compressed air should not be used.

SECTION IX – SPILL OR LEAK PROCEDURES

Spill / releases: Fly ash should be placed in suitable containers and covered. Fly ash should be wetted where practical to control dust.

Fly ash is not considered a hazardous waste under EPA's Resource Conservation and Recovery Act (RCRA). Coal Fly Ash may be disposed of by adding to cement mixtures, asphalt additives and as agricultural soil modifiers (Roy Et Al 1981)