— Acik

JSW Energy Limited

Works :
P.B. No. 9, Toranagallu
Dist. Bellary - 583 123, Karnataka, India.
CIN : L74999MH1994PLC077041
Phone : 08395 - 252 124
Fax : 08395 - 250 757
Website : www.jsw.in

Ref. No.: JSWEL/ Auth./ ENV./ 7867
Date : 16.09.2023

To,

The Environmental Officer,

Regional office KSPCB,
Sy no.597P, Ward No.25,
4th Main, Near Dr. Vishnuvardhana Park,
Kuvempunagar
Ballari- 583 104.

Sub: Submission of Environmental Statement Form-V for 2 x 130 MW & 2 x 300 MW Thermal Power Plant.

Sir

Please find enclosed Environmental Statement, Form-V for the year of April 2022-March 2023 for 860 MW (2x130 MW & 2x300 MW) of JSW Energy Limited, Toranagallu.

Kindly acknowledge the same.

Thanking you.

Yours faithfully,

for JSW Energy Limited

Kartikeya Misra
Vice President & Head of Plant

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai – 400051
Phone : +91 224286 1000
Fax : +91 224286 3000

ENVIRONMENTAL STATEMENT FORM – V

(See rule 14)

Environment Audit report for the year ending the 31st March - 2023

PART – A		
(i)	Name and address of the owner / occupier of the industry, operation or process :	**Mr. Kartikeya Misra** **Vice President & Head of Plant, Toranagallu** **JSW Energy Limited, Post Box No.9** **Toranagallu, Dist:Bellary, State: Karnataka** **Pin: 583 123.**
(ii)	Industry category Primary :	**- Red - 24**
(iii)	Production category - units :	**- Electricity Generation 2 x 130 MW & 2 x 300 MW**
(iv)	Year of Establishment :	**- 2000 (2x130 MW), & 2009 (2x300 MW)**
(ii)	Date of the last Environment Audit Report submitted :	**27.06.2022**

PART - B

Water and Raw Material Consumption :

(i)	**Water consumption, Cum / day**	(Average)
	Process	**441**
	Cooling	**23,507**
	Domestic	**55**

Name of products :		Water Consumption per Unit of Products	
		During the Previous Financial Year	During the Current Financial Year
(1) Electricity Generation	Million Unit	**3,385.8**	**3,853.8**
(2) Water	(KL / KWthr)	**0.0022**	**0.0022**

(ii) Raw material consumption

Name of raw Materials :		Name of products	Consumption of raw material per unit of output	
			During the Previous Financial Year	During the Current Financial Year
a	Coal MT		**0.000398**	**0.000398**
b	Corex KNm3		**0.000147**	**0.000183**
c	Water m3		**0.0022**	**0.0022**
d	Caustic Soda (48% to 49%) Kgs		**0.000070**	**0.000056**
e	Sulfuric Acid (98% to 99%) Kgs		**0.000254**	**0.000271**

Note : Month wise Raw material, Power generation and Water consumption is given in Annexure - I.

PART – C

Pollution discharged to Environment / unit of output :

(Parameters as specified in the consent issued)

Pollutants	Quantity of Pollutants Discharged (mass/Day)	Concentration of pollutants Discharged (mass/volume)	Percentage of variation from prescribed standards with reasons
a) Total 573 cum / day of trade effluent water was generated and reutilized in JSW complex.			
1. Color&Odor	-	Un-Objectionable	
2. Suspended solids	24.1 Kg/day	42 mg/lit	
3. Particle size of suspended solids (shall pass 850 micron ISI sieve)	Passed	Passed	
4. pH	-	7.4	
5. Temp. Diff (in deg.C)	-	2.4	
6. Oil & Grease	0.6 Kg/day	<1.0 mg/lit	
7. Residual Chlorine	0.115 kg/day	<0.2	
8. Copper(Total) mg/lit	0.029 kg/day	<0.05	
9. Iron(Total) mg/lit	0.05 Kg/day	0.08 mg/lit	
10. Zinc mg/lit	0.115 Kg/day	0.2 mg/lit	
11. Phosphates (as PO4)	0.29 Kg/day	0.5 mg/lit	
12. Chromium (Total)	0.029 kg/day	0.05 mg/lit	
Note : Monthwise Trade Effluent concentrations given in Annexure - II.			
b) Stack Emissions :			
Particulate Matter -2x130 MW	Emissiong Rate (annual average)	2x130 MW -Stack Emissions	
Stack -1	0.71 MT/day	67 mg/Nm3	
Stack -2	0.43 MT/day	51 mg/Nm3	
Sulphur dioxide	Emissiong Rate	2x130 MW -Stack Emissions	
Stack -1	4.4 MT/day	413 mg/Nm3	
Stack -2	3.6 MT/day	419 mg/Nm3	
Nitrogen Oxides	Emissiong Rate	2x130 MW -Stack Emissions	
Stack -1	4.3 MT/day	401 mg/Nm3	
Stack -2	3.4 MT/day	404 mg/Nm3	
Particulate Matter -2x300 MW	Emissiong Rate	2x300 MW -Stack Emissions	
Stack -1	1.2 MT/day	76 mg/Nm3	
Stack -2	0.4 MT/day	65 mg/Nm3	
Sulphur dioxide	Emissiong Rate	2x130 MW -Stack Emissions	
Stack -1	8.7 MT/day	514 mg/Nm3	
Stack -2	2.9 MT/day	515 mg/Nm3	

Nitrogen Oxides	Emissiong Rate	2x130 MW -Stack Emissions	
Stack -1	6.6 MT/day	402 mg/Nm3	
Stack -2	2.1 MT/day	374 mg/Nm3	
Note : Monthwise Particulate matter concentrations given in Annexure - III.			

PART – D

Hazardous Wastes

[as specified under Hazardous Wastes (Management and Handling) rules, 1989]

Hazardous Wastes	Total Quantity (lts)	
	During the previous financial year	During the current financial year
(a)Used oil generated from every action relating to and every use of lubricating and system oil	**13,020**	**8,610**
Note : Hazardous Waste Management Form 4 (annual report) enclosed as Annexure - IV		

PART – E

Solid Wastes (Ash)

	Solid Wastes(Ash)	Total Quantity (kg)	
		during the previous financial year	during the current financial year
(a)	From process		
(b)	From pollution control Facility	**25,45,17,000**	**21,29,57,000**
(c)	Quantity recycled or re-utilized	**25,45,17,000**	**21,29,57,000**
(d)	RO Plant sludge generated quantity from pretreatment(utilised	**3,79,500**	**5,33,288**

PART – F

Please specify the characteristics (in items of concentration and quantum) of Hazardous as well as solids wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous Wastes — Hazardous Waste Management Form 4 (annual report) enclosed as Annexure - IV

Solid Wastes — Ash generation and utilization annual report enclosed as Annexure - V

PART – G

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

1	535963 cum water was recycled from RO plant to 2x300 MW (SBU-2) Cooling tower as a makeup.
2	RO plant pretreatment sludge 533 MT quantity has reutlized in Steel plant micro pellet plant process.
3	Utilization of ETP RO plant permeate water to DM plant as input source for reduction process water effluents and increase in DM plant efficiency.
4	Reduction of Process Controllable losses by installation of PID controller through digitization.
5	Energy savings through overhauling of 300 MW circulating water Pump.
5	Reduction of Process Controllable losses by installation of PID controller through digitization.
6	Installation of advance AI/ML based digital technology for improving plant performance.

PART – H

Additional investment proposal for environmental protection including abatement of pollution.

1	Planned for Replacement of ETP RO membranes .
2	Replacement of APH baskets in SBU-2 Unit-1 for Boiler efficiency improvement & APC reduction
3	Reduction of CEP Power consumption by Installation of VFD for CEP in SBU-1 Unit-1 & 2

PART – I

Any other particulars inrespect of environmental protection and abatement of pollution.

The following Energy and water conservation activities were carried out in the reporting period:

1	SBU1 BFP recirculation valve logic modification has given a saving of 311 kwh at 90 MW
2	SBU1 PA fan auto pressure set point based on coal flow has given a saving 15 kwh
3	SBU1 U2 BFP stopping at low load. 21.97 GJ reduction in energy consumption achived
4	SBU2 U1 To reduce slip losses in turn to reduce BFP Power Consumption. 20.05 GJ Energy savings achieved
5	ISBU2 U1 Low load operation CEP VFD locking speed reduced from 700 to 600 to avoid throttling losses. 1.67 GJ Energy savings achived
6	SBU2 U1 Two mill Operation at low <120 MWh & coal flow < 58 TPH. 6.0 GJ Energy savings achived
7	SBU2 U1 Two mil Operation at low <120 MWh & coal flow < 58 TPH & reduced header pressure Up to 5.5 Kpa & 3 mill operation reduced header pressure up to 7 .0 Kpa. 23.8 GJ Energy savings achived
8	SBU2 U1 Rectification of blade pitch mechanism malfunction, Secondary Air Flow reduced to 480 to 440 tph. 1.66 GJ Energy savings achived
9	SBU2 U1 Reducing secondary air Flow & reducing PA flow by two mill operation. 8.26 GJ Energy savings achived
10	SBU2 U1 Switching OFF 2 CT fan's Stopped for power optimization during 90 MWh Operation at < 92 Kpa vacuum. 10.02 GJ Energy savings achived
11	Cooling towers blade replacement in SBU1 (6 NOS.). 0.53 GJ Energy savings achived

FY 2022-2023 : 860 MW JSWEL POWER GENERATION & WATER CONSUMPTION DETAILS																			Annexure- 1
Month	Power			Raw materials		Water Consumption				Waste Water Generation									
	SBU1	SBU2	Total	Coal in MT	Corex in KNM3	Total	Process	Cooling	Domestic	Total	Process Blow down, recycled in RO plant	DM Waste, reused for ash conditioning	STP water, generated & Utilized for gardening	Sulfuric acid	Caustic Soda Lye (as 100%)	Pretreatment Sludge, Reused in micor pellet plant	RO Product, re used back to SBU-2 units (2x300mw	RO Reject, reused in ore benefication plant
UOM	MU	MU	MU	MT	KNM3	Cum	Cum	Cum	Cum	Cum	Cum	Cum	Cum	MT	MT	MT	Cum	Cum
Apr-22	179.7	339.6	519.3	211712	67575	1286168	22989	1261200	1979	95923	85791	8548	1583	144	14	60.7	63243	22548
May-22	169.3	226.0	395.3	154240	78762	959808	19225	938431	2152	99050	90082	7246	1722	113	12	52.7	65767	24315
Jun-22	156.5	121.1	277.5	126714	64997	649340	15464	631562	2314	78669	72338	4480	1851	82	10	56.0	52281	20057
Jul-22	136.2	109.2	245.5	104291	65003	562169	14006	546212	1951	83065	77040	4464	1561	74	9	58.0	55590	21450
Aug-22	155.7	113.1	268.9	100748	114212	576429	9419	565506	1505	58703	54111	3388	1204	56	5	35.7	39112	14999
Sep-22	157.4	131.1	288.5	108819	84102	581182	11049	568642	1490	41907	37551	3164	1192	60	5	31.7	26931	10620
Oct-22	143.0	94.4	237.4	86567	48488	514003	6774	505819	1411	41124	38100	1896	1129	52	3	35.3	27057	11043
Nov-22	136.2	108.2	244.3	93184	39379	546283	7893	536942	1448	34918	30929	2830	1158	63	4	22.6	21765	9164
Dec-22	146.5	149.4	295.9	118067	36657	626905	11094	614160	1651	47135	41693	4121	1321	69	10	33.9	29134	12559
Jan-23	156.9	151.0	307.8	122503	32718	654203	11868	640928	1407	49118	42746	5176	1196	100	8	31.0	29757	12989
Feb-23	140.6	190.6	331.1	135283	31010	712447	14704	696441	1302	74597	67378	6199	1020	96	11	45.8	46444	20934
Mar-23	157.5	284.8	442.3	171416	41884	906939	16359	889109	1471	116425	107388	7795	1242	134	13	69.8	78880	28508
TOTAL	1835	2018	3854	1533544	704786	8575875	160843	8394951	20081	820633	745147	59307	16179	1043	104	533	535963	209184
Per DAY						23496	441	23000	55.0	2248	2041	162	44				1468	573

TRADE EFFLUENT ANAYSIS REPORT FOR THE FY : 2022-23

Annexure- II

Month/Parameters	UOM	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	AVG
Color&Odor	Un Objectionable													
Particle size of suspended solids (shall pass 850 micron ISI sieve)		Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
pH		7.1	7.3	8.2	8.3	7.68	7.38	7.19	7.15	7.02	7.14	7.24	7.28	7.415
Total Suspended solids	mg/lit	17.0	19.0	86.0	35.0	30.0	35.0	42.0	38.0	45.0	49.0	52.0	50.0	41.5
Temperature Diff.	degC	2.7	2.7	2.7	2.7	2.4	2.1	2.2	2.3	2.2	2.4	2.6	2.6	2.4
Oil & Grease	mg/lit	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Residual Chlorine,	mg/lit	<0.01	<0.01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Coppper(Total)	mg/lit	<0.01	<0.01	BDL	BDL	BDL	BDL	BDL	BDL	<0.05	<0.05	<0.05	<0.05	<0.05
Iron(Total)	mg/lit	0.05	0.07	0.10	0.09	0.06	0.05	0.05	0.05	0.13	0.16	<0.1	<0.1	0.08
Zinc	mg/lit	0.16	0.21	0.2	0.16	0.25	0.29	0.2	0.1	0.16	0.18	0.20	0.3	0.20
Dissolved phosphates(as PO4)	mg/lit	0.29	0.37	0.80	0.60	0.40	0.30	0.40	0.60	0.80	0.60	0.50	0.30	0.50
Chromimum (Total)	mg/lit	0.04	0.08	BDL	BDL	BDL	BDL	BDL	BDL	<0.05	<0.05	<0.05	<0.05	0.06

ANNEXURE - III

FY 2022-23 : 2*130MW : STACK EMMISSIONS REPORT

Month	STACK - 1			STACK - 2			Flue Gas Flow in Nm3/hr	
	Running Hrs	PM (mg/Nm3)	MT	Running Hrs	PM (mg/Nm3)	MT	Unit-1	Unit-2
Apr-22	720	66.0	22.3	719	60.0	19.9	469943	460498
May-22	739	76.0	25.0	743	31.0	9.2	445660	400751
Jun-22	720	68.0	21.9	720	56.8	15.1	446731	369601
Jul-22	638	56.0	16.2	528	62.0	12.9	454168	393744
Aug-22	695	53.1	17.0	744	55.9	15.7	461705	377350
Sep-22	720	66.3	21.9	716	29.8	8.0	458541	376020
Oct-22	744	69.0	22.7	744	46.0	9.5	442609	276940
Nov-22	716	69.0	22.0	720	50.0	10.4	445043	288893
Dec-22	744	69.0	22.7	744	50.0	12.1	442558	326209
Jan-23	744	69.0	22.8	744	50.0	13.4	443908	358949
Feb-23	672	69.0	21.0	672	53.0	12.5	452231	349780
Mar-23	744	69.0	22.6	744	67.2	18.0	439338	360936
TOTAL	8596		258.1	8538		156.7		
PER DAY			0.71			0.43		

FY 2022-23 : 2*130MW : STACK EMMISSIONS REPORT

Month	STACK - 1			STACK - 2			Flue Gas Flow in Nm3/hr	
	Running Hrs	SO2 (mg/Nm3)	MT	Running Hrs	SO2 (mg/Nm3)	MT	Unit-1	Unit-2
Apr-22	720	530	179.3	719	490	162.3	469943	460498
May-22	739	418	137.8	743	514	153.1	445660	400751
Jun-22	720	428	137.7	720	405	107.8	446731	369601
Jul-22	638	401	116.2	528	408	84.8	454168	393744
Aug-22	695	384	123.2	744	407	114.3	461705	377350
Sep-22	720	398	131.5	716	387	104.2	458541	376020
Oct-22	744	387	127.4	744	376	77.5	442609	276940
Nov-22	716	386	123.0	720	376	78.2	445043	288893
Dec-22	744	386	127.1	744	388	94.2	442558	326209
Jan-23	744	386	127.3	744	381	101.7	443908	358949
Feb-23	672	398	121.0	672	397	93.3	452231	349780
Mar-23	744	459	149.9	744	497	133.5	439338	360936
Total	8596		1601			1305		
PER DAY			4.4			3.6		

FY 2022-23 : 2*130MW : STACK EMMISSIONS REPORT

Month	STACK - 1			STACK - 2			Flue Gas Flow in Nm3/hr	
	Running Hrs	NOx (mg/Nm3)	MT	Running Hrs	NOx (mg/Nm3)	MT	Unit-1	Unit-2
Apr-22	720	440	149	719	400	132.5	469943	460498
May-22	739	524	173	743	343	102.2	445660	400751
Jun-22	720	495	159	720	460	122.4	446731	369601
Jul-22	638	405	117	528	321	66.7	454168	393744
Aug-22	695	416	133	744	297	83.2	461705	377350
Sep-22	720	469	155	716	361	97.3	458541	376020
Oct-22	744	425	140	744	449	92.5	442609	276940
Nov-22	716	322	103	720	475	98.8	445043	288893
Dec-22	744	327	108	744	388	94.2	442558	326209
Jan-23	744	343	113	744	439	117.1	443908	358949
Feb-23	672	342	104	672	469	110.2	452231	349780
Mar-23	744	305	100	744	452	121.4	439338	360936
TOTAL	8596		1553	8538		1239		
PER DAY			4.3			3.4		

FY 2022-23 : 2*300MW : STACK EMMISSIONS REPORT

Month	STACK - 1			STACK - 2			Flue Gas Flow in Nm3/hr	
	Running Hrs	PM (mg/Nm3)	MT	Running Hrs	PM (mg/Nm3)	MT	Unit-1	Unit-2
Apr-22	717	69.0	47.6	547	64.0	34.2	963118	977151
May-22	683	77.0	39.3	362	73.0	24.6	747888	932182
Jun-22	600	77.0	31.6	127	60.0	4.7	684583	619625
Jul-22	701	77.0	32.0	49	63.0	1.6	592238	521357
Aug-22	744	76.5	34.8	s/d	s/d	s/d	612063	s/d
Sep-22	720	76.6	34.1	130	43.5	3.7	617777	652331
Oct-22	744	77.0	28.9	s/d	s/d	s/d	504312	s/d
Nov-22	720	77.6	33.7	s/d	s/d	s/d	602329	s/d
Dec-22	744	77.0	44.3	s/d	s/d	s/d	772678	s/d
Jan-23	744	77.0	44.2	s/d	s/d	s/d	772020	s/d
Feb-23	672	78.0	39.3	299	70.0	16.3	750684	777481
Mar-23	737	68.8	38.7	744	83.9	44.5	761853	712241
TOTAL	8526		449			130		
PER DAY			1.2			0.4		

FY 2022-23 : 2*300MW : STACK EMMISSIONS REPORT

Month	STACK - 1			STACK - 2			Flue Gas Flow in Nm3/hr	
	Running Hrs	SO2 (mg/Nm3)	MT	Running Hrs	SO2 (mg/Nm3)	MT	Unit-1	Unit-2
Apr-22	717	860	594	547	752	401.6	963118	977151
May-22	683	734	375	362	713	240.7	747888	932182
Jun-22	600	390	160	127	442	34.6	684583	619625
Jul-22	701	387	161	49	305	7.7	592238	521357
Aug-22	744	364	166	s/d	s/d	s/d	612063	s/d
Sep-22	720	404	180	130	450	38.2	617777	652331
Oct-22	744	477	179	s/d	s/d	s/d	504312	s/d
Nov-22	720	531	230	s/d	s/d	s/d	602329	s/d
Dec-22	744	525	302	s/d	s/d	s/d	772678	s/d
Jan-23	744	525	302	s/d	s/d	s/d	772020	s/d
Feb-23	672	510	257	299	513	119.1	750684	777481
Mar-23	737	456	256	744	431	228.3	761853	712241
TOTAL	**8526**		**3161**			**1070**		
PER DAY			**8.7**			**2.9**		

FY 2022-23 : 2*300MW : STACK EMMISSIONS REPORT

Month	STACK - 1			STACK - 2			Flue Gas Flow in Nm3/hr	
	Running Hrs	NOx (mg/Nm3)	MT	Running Hrs	NOx (mg/Nm3)	MT	Unit-1	Unit-2
Apr-22	717	500	345	547	435	232.3	963118	977151
May-22	683	454	232	362	446	150.6	747888	932182
Jun-22	600	376	154	127	452	35.4	684583	619625
Jul-22	701	438	182	49	414	10.5	592238	521357
Aug-22	744	330	150	s/d	s/d	s/d	612063	s/d
Sep-22	720	326	145	130	477	40.4	617777	652331
Oct-22	744	344	129	s/d	0	s/d	504312	s/d
Nov-22	720	411	178	s/d	s/d	s/d	602329	s/d
Dec-22	744	445	256	s/d	s/d	s/d	772678	s/d
Jan-23	744	445	256	s/d	s/d	s/d	772020	s/d
Feb-23	672	447	225	299	421	97.8	750684	777481
Mar-23	737	308	173	744	343	181.9	761853	712241
TOTAL	**8526**		**2426**			**749**		
PER DAY			**6.6**			**2.1**		
TOTAL-600 MW	**MT**		**3175**					

JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Bellari - 583 123, Karnataka, India
CIN. : L74999MH1994PLC077041
Phone : 08395 - 282 200
Website : www.jsw.in

Ref. No. JSWEL / BMW / 7749
Date : 02.02.2023

To

The Environmental Officer,
Regional office KSPCB,
Sy no.597P, Ward No.25,
4th Main, Near Dr. Vishnuvardhana Park,
Kuvempunagar
Bellary- 583 104.

Sub: Bio-medical waste Management Annual Returns, Jan'2022- Dec'2022 reg.

Dear Sir,

Please find enclosed herewith Bio-medical waste annual returns in prescribed format for the period of January 2022 to December 2022 for your information.

Yours faithfully,

for JSW Energy Limited

Kartikeya Misra
Vice President & Head of Plant

Form – IV
(See rule 13)
ANNUAL REPORT

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

Sl. No.	Particulars		
1	Particulars of the Occupier	:	
	(i) Name of the authorized person (occupier or : operator of facility)	:	Dr. B Preethi Latha (operator)
	(ii) Name of HCF or CBMWTF	:	JSW Energy Ltd
	(iii) Address for Correspondence	:	Post box No.9 Toranagallu
	(iv) Address of Facility	:	Ballari (Dist)
	(v)Tel. No, Fax. No	:	08395 - 282111
	(vi) E-mail ID	:	preethi.latha@jsw.in
	(vii) URL of Website	:	
	(viii) GPS coordinates of HCF or CBMWTF	:	✓
	(ix) Ownership of HCF or CBMWTF	:	(State Government or Private or Semi Govt or any other)
	(x). Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules	:	Authorisation No.: 88/KSPCB/KOCALY/Env/2018-19/1304 ..... Valid upto: One year [illegible]
	(xi). Status of Consents under Water Act and Air Act	:	Valid upto:
2	Type of Health Care Facility	:	
	(i) Bedded Hospital	:	No. of Beds: –
	(ii) Non-bedded hospital Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	:	Occupational Health Centre
	(iii) License number and its date of expiry	:	
3	Details of CBMWTF	:	
	(i) Number of health care facilities covered by CBMWTF	:	
	(ii) No. of Beds covered by CBMWTF	:	
	(iii) Installed treatment and disposal capacity of CBMWTF;	:	– Kg / day
	(iv) Quantity of bio medical waste treated or disposed by CBMWTF	:	– Kg / day
4	Quantity of waste generated or disposed in Kg per Annum (on monthly average basis)	:	*Yellow Category:* 2.047 Kgs *Red Category:* 1.569 kgs *White:* – *Blue Category:* 1.222 kgs *General Solid Waste:*
5	Details of the Storage, Treatment, Transportation, Processing and Disposal Facility		
	(i) Details of the on-site storage	:	Size:

		facility		Capacity:			
				Provision of on-site storage : (Cold storage or any other provision)			
	(ii)	Disposal facilities		**Type of treatment equipment**	**No of Units**	**Capacity Kg/day**	**Quantity Treatedor disposed in kg per annum**
				Incinerators			
				Plasma Pyrolysis			
				Autoclaves			
				Microwave			
				Hydroclave			
				Shredder			
				Needle tip cutter or destroyer			
				Sharps			
				Encapsulation or concrete pit			
				Deep burial pits			
				Chemical disinfection:			
				Any other treatment equipment:			
	(iii)	Quantity of recyclable wastes sold to authorized recyclers after treatment in Kg per annum	:	Red Category (like plastic, glass, etc.)			
	(iv)	No. of Vehicles used for collection and transportation of biomedical waste	:				
	(v)	Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum			Quantity Generated	Where disposed	
				Incineration			
				Ash			
				ETP Sludge			
	(vi)	Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of		Suryakanth Environment Technologies			
	(vii)	List of member HCF not handed over bio-medical waste.					
6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period						

7	Details trainings conducted on BMW		
	(i) Number of trainings conducted on BMW Management		
	(ii) Number of personnel trained		
	(iii) Number of personnel trained at the time of induction		
	(iv) Number of personnel not undergone any training so far		
	(v) Whether standard manual for training is available?		
8	Details of the accident occurred during the year		
	(i) Number of Accidents occurred		
	(ii) Number of persons affected		
	(iii) Remedial Action taken (Please attach details if any)		
	(iv) Any Fatality occurred, details		
9	Are you meeting the standards of air Pollution from the Incinerator? How many times in last year could not met the standards?		
	Details of Continuous online emission monitoring systems installed		
10	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?		
11	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?		
12	Any other relevant information		(Air Pollution Control Devices attached with the Incinerator)

Certified that the above report is for the period from

.....

.....

.....

.....

Name and Signature of the Head of the Institution

Mr. Kartikeya Misra
VP & HOP

Date: 12.1.2022

Place: Toranagallu

Dr. P

Signature of Medical Officer.

M/s SURYAKANTH ENVIRONMENTAL TECHNOLOGIES®

(Common Bio-Medical Waste Treatment Facility)

Factory : Sy. No. 158, Ballari City Corporation Land, Opp. Agrawal Iron Steel Factory, Hariginadoni Village, Ballari Dist. - mail id : suryaenvitech@gmail.com / surya@suryaenvitech.org / www.suryaenvitech.org

Office : Shop No. C-6, 1st Floor, BUDA Complex, Near Mothi Circle, Ballari. Cell : 98860-49556

To,

Date: 14/02/2023.

The Medical Officer,
OHC-JSWEL, Toranagallu.
Ballari.

Sub: Renewal of MOU for disposal of Bio medical waste generated in OHC of JSWEL. Toranagallu.

Respected Sir,

This is for you kind information that your Bio medical waste MOU expires on 31.12.2022. Hence the agreement for subject matter shall be renewed for the period of the 1 year that is from 01.01.2023 to 31.12.2023. M/s Suryakanth Environmental Technologies is the only authorized by KSPCB to carryout common biomedical waste treatment facility in the entire Ballari District.

And we are charging Rs.1000/- per month previously, but now from this year we are charging Rs. 1250/- per month. Because It is difficult to collecting, transporting and Disposing of Bio-medical waste. Due to causes of lot of price hike have been accrued namely Diesel, Petrol, gas and all inflammable substance. I would like to bring to your notice that in the present scenario and after effects of inflation it is currently in creative to carry out the present contract (Bio-Medical Waste disposal expenses for incinerable waste).

Our sincere requests to all kind hearted in that viewing the current situation and analyze the economy. We may please be given a better opportunity to serve by the enhancing by the collection, Transporting and Disposal of Bio-Medical Waste.

Sl. No	Particulars	Units	Qty	Unit rate per month	Amount in INR
1	Carrying out works such as : Collection, Transporting & Scientifically Disposing of Bio medical waste which generated in OHC-JSWEL.	**Months**	**12**	**1250/-**	**15000/-**
				GST 12%	**1800/-**
				Grand Total	**15000/-**

Terms & Conductions will be as same as in agreement of previous year.

Thanking You

Yours faithfully
For M/s Suryakanth Environmental Technologies.

JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Ballari-583 123. Karnataka, India.
CIN. : L74999MH1994PLC077041
Phone : 08395 - 282 200
Website : www.jsw.in

Ref. No. JSWEL / EWM / 1805
Date: May 25, 2023

To

The Member Secretary,

Central Pollution Control Board,

``Parivesh Bhawan``

CBD-Cum Office Complex,

East Arjunagar, Shahadra,

New Delhi-110032.

Sub: Filling of Annual returns for e-waste disposal for the FY 2022-23.

Dear Sir,

This is in compliance with MoEF & CC Notification for e-waste management rules, we here by submit the Annual returns in Form -3 of e-Waste for the period April 2022 to March 2023.

Yours faithfully,

for JSW Energy Limited

Kartikeya Misra
Vice President & Head of Plant

Copy to : Environmental Officer, KSPCB, Ballari.

FORM-3

(See rules4(5),5(5),8(6),9(4),10(8),11(9),13(1)(XI),13(2)(V),13(3)(VII) and13(4)(V))

FORM FOR FILLING ANNUAL RETURNS

(To be submitted by producer or Refurbisher or Dismantler by 30th day of Jun Following the financial year to which that return relates)

Period: 01.04.2022 to 31.03.2023 Quantity in Metric tons(MT) and numbers

1	Name and address of the producer or Manufacturer or Refurbisher or Dismantler or recycler	JSW Energy Limited, 860 MW TPP, P.O Box No.9, Toranagallu, Sandur taluka, Bellary District,Karnataka, PIN: 583123.		
2	Name of authorized person and complete address with telephone and fax numbers and E-mail address	Kartikeya Misra, Vice President & Head of Plant, JSW Energy Limited, 860 MW TPP, P.O Box No.9, Toranagallu, Sandur taluka, Bellary District, Karnataka, PIN 583123 Ph.no. 08395 252124 E-Mail id: kartikeya.misra@jsw.in		
3	Total Quantity of E-Waste collected or channelized to recyclers or dismantlers category of electrical and electronic equipment listed in the schedule I (attach list) by Produceres	0.4 MT		
	Details of the above	TYPE	QUANTITY	NO
3(A)*	BULK CONSUMERS: Quantity of e-waste	-	-	-
3(B)*	REFURBISHER: Quantity of e-waste	-	-	-
3(c)*	DISMANTLERS: I. Quantity of e-waste Processed (code wise) II. Details fo materials or components recovered and sold, III. Quantity of e-waste sent to recycler, IV. Residual Quantity of e-waste sent to Treatment , storage and disposal facility.	-	-	-

3(D)*	RECYCLERS : I. Quantity of e-waste Processed (code wise) II. Details fo materials or components recovered and sold in the market, III. Residual Quantity of e-waste sent to Treatment, storage and disposal facility.	Electronic cards,tv`s, Indicators, sensors, PC Monior etc.	0.4 MT	-
4	Name and full address of the destination with respect to 3(A)-3(D) above	M/S Escrappy Recyclers, Peenya 2 nd stage, 106, Andhrahalli Main, Bengaluru -560091.		
5	Type and quantity of materials segregated or recovered from e-waste of different as applicable to 3(A)-3(D)	TYPE Electronic cards,tv`s, Indicators, sensors, PC Monior etc.	Quantity 0.4 MT	

Enclose the list of recyclers to whom e-waste has been sent for recycling.

Place: Torangallu

Date: 24.05.2023.

Signature of authorized person

Note:

(1) * strike off whichever is not applicable

(2) Provide any other information as stipulated in the condition to the authorizer

(3) In case filling on behalf of multiple regional offices, bulk consumers and producers need to add extra rows to 1&3(A) with respect to each office.

JSW

TAX INVOICE

(Duplicate)

JSW ENERGY LIMITED

Post Box No. 9, Sandur- Taluk, Village & Post, Toranagallu,
Dist . Bellary - 583123 Karnataka

GST No. : 29AAACJ8109N1Z4
State Code. : 29
CIN No. : L74999MH1994PLC077041
PAN No. : AAACJ8109N

Customer Name and Address :	InvoiceNumber:22KA2994005501	Dated : 30.03.2023
E SCRAPPY RECYCLERS	Order No. : 4600000653	Dated : 29.03.2023
Peenya 2dn Stage,,106 Andharahalli Main	Delivery Note : 5310016804	Dated : 30.03.2023
BENGALURU 560091	Weightment Slip No: 8420015827	
GST No. : 29AADFE4518Q1ZX	Transporter Name.: M/S E SCRAPPY	Destination
	Date & Time of issue of Invoice : 30.03.2023 and 15:32:24	Motor Vehicle No : KA34C5249
Consignee Name And Address	Date & Time of Removal of goods :	Internal No : 7105448608
	Mode/Terms of Payments : Last Day of Month	

IRN: d226e63ea8248f03a30f15b7a801377b2b8493c24e967ec58[illegible]6074c74a29771

SL No.	Description of Goods E-WASTE	Tariff/ HSN Classification	Quantity	UOM	RATE	Amount
1	MISCELANIOUS SCRAP	85489000	0.400	MT	25,000.00	10,000.00
	IN O/P Central GST %				9.000	900.00
	IN O/P State GST %				9.000	900.00
	Total		0.400			11,800.00

Amount Chargeable in Words : ELEVEN THOUSAND EIGHT HUNDRED Rupees

Certified that the particulars given above are true & correct & the amount indicated representes the price actually charged and that there is no flow of any additional consideration directly or indirectly from from the buyer.

For JSW Energy Ltd

Authorised Signatory

We here by confirm that we have received above referred material in goodconditions along with duplicate copy of GST invoice through transportation

Signature & Name of the person/party who is receiving the material
Date

Payment against this invoice should be made by A/C. payee cheque/DD onlyin the name of JSW Energy Ltd

TERMS AND CONDITIONS

1. The Payment of the invoice should be made in advance or within Due from the date of issue of this invoice, otherwise interest @ 18% P.A shall be charged on the outstanding amount from the due date.
2. Goods once delivered will not be taken back

JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Ballari-583 123. Karnataka, India.
CIN. : L74999MH1994PLC077041
Phone : 08395 - 282 200
Website : www.jsw.in

Ref. No.: JSWEL / HWM / 7804
Date : May 24 2023.

To

The Environmental Officer,

Regional office KSPCB,
Sy no.597P, Ward No.25,
4th Main, Near Dr. Vishnuvardhana Park,
Kuvempunagar
Ballari- 583 104.

Sub: Hazardous waste Management Annual Returns for FY 2022-23.

Dear Sir,

Please find enclosed herewith annual returns of Hazardous Waste in prescribed format (Form-4) for the period of April 2022 to March 2023, along with copy of Hazardous waste disposal Manifest (Form10).

Yours faithfully,

for **JSW Energy Limited**

Kartikeya Misra
Vice President & Head of Plant

FORM 4

[see rules 6(5),13(8),16(6) and 20(2)]

FORM FOR FILLING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility : JSW Energy Limited (860 MW TPP), P.O.Box.No.9, Toranagallu, Sandur Taluk, Bellary Dist., Karnataka-583123.

2. Authorization No. and Date of issue : Authorization no. 330836 dated 11.04.2022, valid up to 30.06.2026.

3. Name of the authorized person and full address with telephone, fax number and e-mail : Mr. Kartikeya Misra
Vice President & Head of Plant,
JSW Energy Limited-860 MW
P.O. Box NO.9, Toranagallu,
Bellary Dist, Karnataka-583123
Phone no: 08395-250767,
Fax no : 08395-250757.
E-Mail : kartikeya.misra@jsw.in

4. Production during the year (product wise), wherever applicable : **April 2022 to March 2023.**

Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise:

Cat. No.	Type of hazardous as per Authorization	Quantity (in KL or MT)	
		Authorized	Generated
5.1	Used Spent Oil	102 KL / A	8.61 KL / A
5.2	Wastes Residues Containing Oil	3.50 MT/ A	0.13 MT/A
5.3	Empty Barrels contaminated with hazardous chemicals/wastes	6.5 MT/ A	0

2. Quantity dispatched

(i) to disposal facility : Nil

(ii) to recycler or co-processors or pre-processor : Used Oil: 8.610 KL(8.266 MT) and Empty oil Barrels : 0 MT

(iii) others / Incinerator facility : Oil soaked waste & filters:0.04 MT

Name & address of consignee	Mode of packing		
		Date	Quantity
		5.1: Used Spent oil	
1. M/s Haryana Petro Oil, Plot no131, Phase-III, Industrial Area, Sirsa.	Leak proof closed containers	30.08.2022	2.310 KL
		06.09.2022	1.470 KL
		26.12.2022	1.360 KL
		30.01.2023	3.470 KL
2. M/s Gomti Incinco, No. 3-B-2, 1st Phase, KIADB, Industrial Area, Kumbalgodu, Mysore Road, Bangalore 560 074. PCB ID:12382.	Leak proof closed containers	5.2 : Oil Soaked Cotton Waste & Filters	
		15.09.2022	0.040 MT

3. Quantity utilised in-house, if any - : Nil

4. Quantity in storage at the end of the year - : Nil

Part B. To be filled by Treatment, storage and disposal facility operators

1. Total quantity received - Not Applicable

2. Quantity in stock at the beginning of the year -

3. Quantity treated -

4. Quantity disposed in landfills as such and after treatment -

5. Quantity incinerated (if applicable) -

6. Quantity processed other than specified above -

7. Quantity in storage at the end of the year –

Part C. To be filled by recyclers or co-processors or other users

1. Quantity of waste received during the year - **Not Applicable**
   (i) domestic sources
   (ii) imported (if applicable)
2. Quantity in stock at the beginning of the year -
3. Quantity recycled or co-processed or used –
4. Quantity of products dispatched (wherever applicable) –
5. Quantity of waste generated –
6. Quantity of waste disposed –
7. Quantity re-exported (wherever applicable)-
8. Quantity in storage at the end of the year –

Date : 24.05.2023

Place: Toranagallu.

Signature of the Occupier

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's Name & Mailing Address (including Phone No. & E-mail)	M/s. JSW Energy Ltd., Post Box No. 09, Toranagallu Ballari - 583123 Ph No. 08395 282708 E-mail : pradeep.manoor@jsw.in
2.	Sender's Authorisation No.	330826
3.	Manifest Document No.	10365 - 010
4.	Transporter's Name & Address (including Phase-II Industrial Area Sirsi - 9818112388	Hanuman Petro Oils Plot No-31
5.	Type of Vehicle	(Truck / Tanker / Special Vehicle)
6.	Transporter's Registration No.	—
7.	Vehicle Registration No.	KA 17 B 5159
8.	Receiver's Name & Mailing Address (including Phone No. & E-mail)	Hanuman Petro Oils Plot No-31 Phase-II Industrial Area Sirsi - 9818112388
9.	Receiver's Authorisation No.	HWR/SIR/2014/[illegible]
10.	Waste Description	Waste Oil 2310 Ltr
11.	Total Quantity No. of Containers	.....m² or MT ..... Nos
12.	Physical form	(Solid / Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special Handling Instruction & Additional Information	use Safety Shoes and hand gloves
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.

JSW Energy Store Toranagallu

		MONTH	DAY	YEAR
Name & Stamp	Signature :	08	30	2022
15. Transporter Acknowledgement of Receipt of Wastes				
Name & Stamp Authorised Sign	Signature :	08	30	2022
16. Receiver's Certification of Receipt of Hazardous and other Waste				
Name & Stamp Authorised Sign	Signature :	08	31	2022

1. White	To be Forwarded by the sender to the State Pollution Control Board after signing all the seven copies.
2. Light Yellow	To be retained by the sender after taking signature on it from the transporter and the rest of the five signed copies to be carried by the transporter.
3. Pink	To be retained by the receiver (Actual user or treatment storage & disposal facility operator) after receiving the waste & the remaining four copies are to be duly signed by the receiver.
4. Orange	To be handed over to the transporter by the receiver after accepting waste.
5. Green	To be sent by the receiver to the State Pollution Control Board
6. Blue	To be sent by the receiver the sender.
7. Gray	To be sent by the receiver to the State Pollution Control Board of the sender in case the sender is in another State.

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's Name & Mailing Address (including Phone No. & E-mail)	M/s. JSW Energy Ltd., Post Box No. 09, Toranagallu Ballari - 583123 Ph No. 08395 282708 E-mail : pradeep.manapor@jsw.in
2.	Sender's Authorisation No.	33.0836
3.	Manifest Document No.	10365 - 011
4.	Transporter's Name & Address (including Phone No. & E-mail)	M/s Haryana Petro Oils Plot No-31 Phase-III Industrial Area Sonipat - 9818112388
5.	Type of Vehicle	(Truck / Tanker / Special Vehicle)
6.	Transporter's Registration No.	-
7.	Vehicle Registration No.	KA 17 B 5154
8.	Receiver's Name & Mailing Address (including Phone No. & E-mail)	M/s Haryana Petro Oils, Plot No-31 Phase-III Industrial Area Sonipat 9818112388
9.	Receiver's Authorisation No.	HSPCB/Hw/2020/8457119 dt- 11/2/20
10.	Waste Description	Waste oil
11.	Total Quantity No. of Containers	1470 Ltr m² or MT 07 Drums Nos
12.	Physical form	(Solid / Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special Handling Instruction & Additional Information	use safety shoes and hand gloves
14.	Sender's Certificate Name & Stamp Signature :	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations. MONTH 09 DAY 06 YEAR 2022
15.	Transporter Acknowledgement of Receipt of Wastes Name & Stamp Signature :	MONTH 09 DAY 06 YEAR 2022
16.	Receiver's Certification of Receipt of Hazardous and other Waste Name & Stamp Signature :	MONTH 09 DAY 07 YEAR 2022

1. White — To be Forwarded by the sender to the State Pollution Control Board after signing all the seven copies.
2. Light Yellow — To be retained by the sender after taking signature on it from the transporter and the rest of the five signed copies to be carried by the transporter.
3. Pink — To be retained by the receiver (Actual user or treatment storage & disposal facility operator) after receiving the waste & the remaining four copies are to be duly signed by the receiver.
4. Orange — To be handed over to the transporter by the receiver after accepting waste.
5. Green — To be sent by the receiver to the State Pollution Control Board
6. Blue — To be sent by the receiver the sender.
7. Gray — To be sent by the receiver to the State Pollution Control Board of the sender in case the sender is in another State.

1. The Payment of the invoice should be made in advance or within Due from the date of issue of this invoice, otherwise interest @ 18% P.A shall be charged on the outstanding amount from the due date.
2. Goods once delivered will not be taken back

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's Name & Mailing Address (including Phone No. & E-mail)	**M/s. JSW Energy Ltd., Post Box No. 09, Toranagallu Ballari - 583123 Ph No. 08395 282708 E-mail : pradeep.manoor@jsw.in**
2.	Sender's Authorisation No.	330836 330836
3.	**Manifest Document No.**	**10365 -** 013
4.	Transporter's Name & Address (including Phone No. & E-mail)	MK Haryana Petro Oils, Plot No-31 phase-III, Industrial Area. Sirsa-125055, 9818112388
5.	Type of Vehicle	(Truck / Tanker / Special Vehicle)
6.	Transporter's Registration No.	—
7.	Vehicle Registration No.	KA 17 A 5154
8.	Receiver's Name & Mailing Address (including Phone No. & E-mail)	M/s Haryana Petro oils, Plot No-31 Phase-III, Industrial Area. Sirsa-125055, 9818112388
9.	Receiver's Authorisation No.	HWR/SIR/2019/645719 dt. 14/5/19
10.	Waste Description	Waste oil
11.	Total Quantity No. of Containers	1360 Liters ..... m^3 or MT 7 barrels ..... Nos
12.	Physical form	(Solid / Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special Handling Instruction & Additional Information	Use safety Hand Gloves & Goggles
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.

JSW Energy Store Toranagallu

Name & Stamp	Signature :	MONTH	DAY	YEAR
		12	26	2022

15.	Transporter Acknowledgement of Receipt of Wastes	

Name & Stamp	Signature :	MONTH	DAY	YEAR
Authorised Sign		12	26	2022

16.	Receiver's Certification of Receipt of Hazardous and other Waste	

Name & Stamp	Signature :	MONTH	DAY	YEAR
		12	28	2022

1. White	To be Forwarded by the sender to the State Pollution Control Board after signing all the seven copies.
2. Light Yellow	To be retained by the sender after taking signature on it from the transporter and the rest of the five signed copies to be carried by the transporter.
3. Pink	To be retained by the receiver (Actual user or treatment storage & disposal facility operator) after receiving the waste & the remaining four copies are to be duly signed by the receiver.
4. Orrange	To be handed over to the transporter by the receiver after accepting waste.
5. Green	To be sent by the receiver to the State Pollution Control Board
6. Blue	To be sent by the receiver the sender.
7. Gray	To be sent by the receiver to the State Pollution Control Board of the sender in case the sender is in another State.

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's Name & Mailing Address (including Phone No. & E-mail)	**M/s. JSW Energy Ltd., Post Box No. 09, Toranagallu Ballari - 583123 Ph No. 08395 282708 E-mail : pradeep.manoor@jsw.in**
2.	Sender's Authorisation No.	33086
3.	Manifest Document No.	**10365 -** 012
4.	Transporter's Name & Address (including Phone No. & E-mail)	M/s Haryana Petro oils, Plot No-31 Phase-III, Industrial Area, Sirsa, 9818112388
5.	Type of Vehicle	(Truck / Tanker / Special Vehicle)
6.	Transporter's Registration No.	—
7.	Vehicle Registration No.	KA 17 B 5154
8.	Receiver's Name & Mailing Address (including Phone No. & E-mail)	M/s Haryana Petro oils, Plot No-31 Phase-III, Industrial Area Sirsa, 9818112388
9.	Receiver's Authorisation No.	HWR/CIR/2019/6457119 dt 14/5/19
10.	Waste Description	Waste oil
11.	Total Quantity	3470 Ltrs .....m² or MT
	No. of Containers	17 Barrels ..... Nos
12.	Physical form	(Solid / Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special Handling Instruction & Additional Information	Use safety Gloves & goggles
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.
	Name & Stamp JSW Energy Store Toranagallu HARYANA PETRO OIL Signature :	MONTH 0 1 DAY 3 0 YEAR 2 0 2 3
15.	Transporter Acknowledgement of Receipt of Wastes	
	Name & Authorised Sign HARYANA PETRO OIL Signature :	MONTH 0 1 DAY 3 0 YEAR 2 0 2 3
16.	Receiver's Certificate of Receipt of Hazardous and other Waste	
	Name & Stamp Authorised Sign Signature :	MONTH 0 2 DAY 0 4 YEAR 2 0 2 3

1. White — To be Forwarded by the sender to the State Pollution Control Board after signing all the seven copies.
2. Light Yellow — To be retained by the sender after taking signature on it from the transporter and the rest of the five signed copies to be carried by the transporter.
3. Pink — To be retained by the receiver (Actual user or treatment storage & disposal facility operator) after receiving the waste & the remaining four copies are to be duly signed by the receiver
4. Orrange — To be handed over to the transporter by the receiver after accepting waste.
5. Green — To be sent by the receiver to the State Pollution Control Board
6. Blue — To be sent by the receiver the sender.
7. Gray — To be sent by the receiver to the State Pollution Control Board of the sender in case the sender is in another State.

GOMTI INCINCO

FACTORY : # 3-B-2, 1st Phase, KIADB Industrial area,
Kumbalgodu, Mysore Road, Bangalore - 560074. Ph.No.080-28437590 . Moblie.No.9591370592

GOMTI

GSTIN: 29AAVFG0865E1Z0

PAN No : AAVFG0865E

TAX INVOICE

Invoice No.	1281/2022-2023	Order No	Telephonic	Gate Pass No.	9631001893
				Vehicle Number	KA 05 AF 0637
Invoice Date	30.09.2022	Payment Terms	07 days	Date Of Supply	15.09.2022
State	KARNATAKA — State Code 29	Transporter Name		Place Of Supply	Bangalore

Details of Receiver / Billed To:		Details of Consignee / Shipped To:	
Name	M/s. JSW Energy Ltd.,	Name	M/s. JSW Energy Ltd.,
Address	Post Box No.09, Toranagallu, Bellary – 583 275.	Address	Post Box No.09, Toranagallu, Bellary – 583 275. 0
GSTIN	29AAACJ8109N1Z4	GSTIN	29AAACJ8109N1Z4
State	Karnataka — State Code 29	State	Karnataka — State Code 29

Sl No	Name of Product	SAC CODE	UOM	QTY	RATE	TAXABLE VALUE	CGST RATE	CGST AMOUNT	SGST RATE	SGST AMOUNT	IGST RATE	IGST AMOUNT
1	Disposal of Oil Soaked Cotton Waste And Oil Filter	999432	Kgs	40	16.00	640.00	9%	57.60	9%	57.60		-
	TOTAL					640.00		57.60		57.60	-	-

Total Invoice Amount In Words:

Rupees Seven Hundred Fifty Five and Twenty paise Only

BANK DETAILS:

Bank	KARNATAKA BANK LTD
A/c No	7822000100012701
IFS Code	KARB0000782
Branch	K.Gollahalli, Kumbalgodu, Bangalore.560074

Total Amount Before Tax	640.00
Add : CGST	57.60
Add : SGST	57.60
Add : IGST	-
Tax Amount GST	115.20
Total Amount After Tax	**755.20**

Terms and Conditions: LUT ARN Number - AD290422001176G Dt.01.04.2022

1 Interest at 24% p.a. will be charged extra on this invoice after due date.

Certified that the particulars given above are true and correct.

Working for Clean and Green Environment

For GOMTI INCINCO.,

Authorised Signatory

ERRORS & OMMISSIONS ERRECTABLE (E & O E)

OPERATOR SIGNATURE

SPEED LIMIT INSIDE THE PLANT 16 KM/HR

9631002817

JSW ENERGY LTD. TORANAGALLU, KARNATAKA
WEIGH BRIDGE SLIP

RST No	: 29088	INWARD NO	:
Vehicle No.	: NA	VENDOR NAME	: GOMTI INC
COMMODITY	: SCRAP	TRANSP NAME	: ARC/VRL
SLIP/DC/INV	:	LOCATION FROM	: SBU2 UD
LOCATION TO	: Scrap yard		
Description	: OIL SOKED COTTON		

Gross	: 960	Kg	Date	: 15/09/2022	Time	: 10:52 AM
Tare Weight	: 920	Kg	Date	: 15/09/2022	Time	: 10:42 AM
Net Weight	: 40 Kg					

Client Mail :

JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Ballari - 583 123, Karnataka, India
CIN. : L74999MH1994PLC077041
Phone : 08395 - 282 200
Website : www.jsw.in

Ref. No. JSWEL/ ENV/ Auth/ 7712
Date: November 29, 2022

To

The Member Secretary,
Central Pollution Control Board,
"Parivesh Bhawan",
CBD-Cum Office Complex,
East Arjunnagar, Shahadra,
New Delhi – 110 032

Dear Sir,

Sub: Filing of returns for used batteries under Battery (M&H) Rules, 2001 as amended in 2010 for the period April 2022 to September 2022.

You are kindly aware that JSW Energy Limited is operating 860 MW TPP in compliance with conditions stipulated in the consent.

We hereby inform you that the generation of used batteries for the reporting period April 2022 to September 2022 for FY 2022-23 is nil.

This is for your kind information and records pl.

Thanking You.

Yours faithfully,

for **JSW Energy Limited,**

Kartikeya Misra
Vice President & Head of Plant

Copy to : Environmental Officer, KSPCB, , Ballari.

JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Ballari-583 123. Karnataka, India.
CIN. : L74999MH1994PLC077041
Phone : 08395 282 200
Website : www.jsw.in

Ref. No. JSWEL/ ENV/ Auth/7806
Date: May 25, 2023

To

The Member Secretary,
Central Pollution Control Board,
"Parivesh Bhawan",
CBD-Cum Office Complex,
East Arjunnagar, Shahadra,
New Delhi – 110 032

Dear Sir,

Sub: Filing of returns for used batteries under Battery (M&H) Rules, 2001 as amended in 2010 for the period October 2022 to March 2023.

You are kindly aware that JSW Energy Limited is operating 860 MW TPP in compliance with conditions stipulated in the consent.

We hereby submit the details of used batteries and its disposal in prescribed format for kind information and records.

This is for your kind information and records pl.

Thanking You.

Yours faithfully,

for JSW Energy Limited,

Kartikeya Misra
Vice President & Head of Plant

Copy to : Environmental Officer, KSPCB, , Ballari.

FORM VIII

[See rule 10(2) (ii)]

FORM FOR FILING RETURNS FOR BULK CONSUMER OF BATTERIES

[To be submitted by manufacturer/ importer /bulk consumer by 30th June (for the period October-March) and 31st December (for the period April-September) every year]

1.	Name and address of the bulk consumer	JSW Energy Limited (2x130 MW & 2x300 MW) P.O.Box No: 9. Toranagallu, Dt. Bellary Karnataka - 583 275.
2.	Name of the authorized person and full address with telephone and fax number	Mr. Kartikeya Misra Vice President & Head of Plant, JSW Energy Limited, P.O.Box: 9, Toranagallu, Dt. Bellary, Karnataka - 583 275 Ph no: (08395) 252124 Fax no: (08395) 250757. Email : kartikeya.misra@jsw.in
3.	Number of new batteries of different categories purchased **/sold** from the **manufacturer** / importer / dealer or any other agency during October-March/ **April-September** Category (i)Automotive (a)Four Wheeler (b)Two Wheeler (ii)Industrial (a)UPS (b) Motive power	

1 & 2.

	(c) Stand-by (iii) Others (inverters, etc.) Number of batteries sold to **i. dealers** ii. bulk consumers **iii. OEM** iv. Any other party for replacement Should be indicated separately	(i) No. of Used Batteries – Total 230 Nos (120 Nos sent to OEM and 110 nos sent to authorized recycler). (ii) Approximate weight in Metric Tons: Total 8.0 MT (3.6 MT sent to OEM and 4.4 MT sent to authorized recycler)
4.	Number of used batteries of categories mentioned Sl. No. 3 and Tonnage of scrap sent to **manufacturer/dealer/**importer/ **registered recycler/** or any other agency to whom the used batteries scrap was sent*	M/s Exide Industries Limited, (on buy back against supply of new batteries OEM), Garvhebhavi Palya, Bangaluru-560068. Karnataka. **And,** M/s Industrial Enterprises, (authorized recycler) Opp. KSRTC Bus stand station, D.no.7, Hosapete-583201.

- Enclose the list of manufacturer/**dealer/**importer/ registered recycler/ or any other agency to whom the used batteries scrap was sent.

Place: Toranagallu, Bellari district.

Date : 24.05.2023

Signature of the authorized Person

TAX INVOICE (Duplicate)

JSW

JSW ENERGY LIMITED

Post Box No. 9, Sandur- Taluk, Village & Post, Toranagallu,
Dist . Bellary - 583123 Karnataka

GST No. : 29AAACJ8109N1Z4
State Code. : 29
CIN No. : L74999MH1994PLC077041
PAN No. : AAACJ8109N

Customer Name and Address :	InvoiceNumber:22KA2994004038	Dated : 27.12.2022
EXIDE INDUSTRIES LIMITED No 8,8A 1st Floor Venkatadri Building,(Opp to RNS PALYA 560068	Order No. : 4600000612	Dated : 04.11.2022
	Delivery Note : 5310015332	Dated : 27.12.2022
	Weightment Slip No: 8420014377	
GST No. : 29AAACE6641E1ZR	Transporter Name.: EXID INDUSTRIES LTD	Destination
	Date & Time of issue of Invoice : 27.12.2022 and 17:21:22	Motor Vehicle No : KA16D3832
Consignee Name And Address	Date & Time of Removal of goods :	Internal No : 7105132625
	Mode/Terms of Payments : Pay immediately w/o deduction	

IRN: 1b2cbe01f9e09ad403d7225224842179d45a3dde9dd514b7a31da2abef1b26da

SL No.	Description of Goods	Tariff/ HSN Classification	Quantity	UOM	RATE	Amount
1	OLD & USED LEAD BATTERY SCRAP	85481010	120.000	EA	2,600.00	312,000.00
	IN O/P Central GST %				9.000	28,080.00
	IN O/P State GST %				9.000	28,080.00
	Total		120.000			368,160.00

Amount Chargeable in Words : THREE LAKH SIXTY EIGHT THOUSAND ONE HUNDRED SIXTY Rupees

Certified that the particulars given above are true & correct & the amount indicated representes the price actually charged and that there is no flow of any additional consideration directly or indirectly from from the buyer.

For JSW Energy Ltd

Authorised Signatory

We here by confirm that we have received above referred material in goodconditions along with duplicate copy of GST invoice through transportation

Signature & Name of the person/party who is receiving the material

Date

Payment against this invoice should be made by A/C. payee cheque/DD onlyin the name of JSW Energy Ltd

TERMS AND CONDITIONS

1. The Payment of the invoice should be made in advance or within Due from the date of issue of this invoice, otherwise interest @ 18% P.A shall be charged on the outstanding amount from the due date.
2. Goods once delivered will not be taken back

JSW

TAX INVOICE

(Duplicate)

JSW ENERGY LIMITED

Post Box No. 9, Sandur- Taluk, Village & Post, Toranagallu,
Dist . Bellary - 583123 Karnataka

GST No. : 29AAACJ8109N1Z4
State Code. : 29
CIN No. : L74999MH1994PLC077041
PAN No. : AAACJ8109N

Customer Name and Address :	InvoiceNumber:22KA2994004204	Dated : 11.01.2023
INDUSTRIAL ENTERPRISES DOOR NO 97,OPP KSRTC BUSSTAND STATION HOSAPETE 583201	Order No. : 4600000592	Dated : 25.08.2022
	Delivery Note : 5310015500	Dated : 11.01.2023
	Weightment Slip No:	
GST No. : 29ALAPK7338J1ZS	Transporter Name.:	Destination
	Date & Time of issue of Invoice : 11.01.2023 and 16:40:54	Motor Vehicle No :
Consignee Name And Address	Date & Time of Removal of goods :	Internal No : 7105181288
	Mode/Terms of Payments : Adv., Payment immdtly Due net	

IRN: d0077f7c84aa408fe5dee583e86118ef1d28b3069878c5f25e34e28fd007de0b

SL No.	Description of Goods	Tariff/ HSN Classification	Quantity	UOM	RATE	Amount
1	OLD & USED LEAD BATTERY SCRAP	85481010	110.000	EA	3,800.00	418,000.00
	IN O/P Central GST %				9.000	37,620.00
	IN O/P State GST %				9.000	37,620.00
	Total		110.000			493,240.00

Amount Chargeable in Words : FOUR LAKH NINETY THREE THOUSAND TWO HUNDRED FORTY Rupees

Certified that the particulars given above are true & correct & the amount indicated representes the price actually charged and that there is no flow of any additional consideration directly or indirectly from from the buyer.

For JSW Energy Ltd

Authorised Signatory

We here by confirm that we have received above referred material in goodconditions along with duplicate copy of GST Invoice through transportation

Signature & Name of the person/party who is receiving the material
Date

Payment against this invoice should be made by A/C. payee cheque/DD onlyin the name of JSW Energy Ltd

TERMS AND CONDITIONS

1. The Payment of the Invoice should be made in advance or within Due from the date of issue of this invoice, otherwise interest @ 18% P.A shall be charged on the outstanding amount from the due date.
2. Goods once delivered will not be taken back

JSW Energy Limited

Works :
P.B. No.9, Toranagallu
Dist. Ballari-583 123. Karnataka, India.
CIN. : L74999MH1994PLC077041
Phone : 08395 - 282 200
Website : www.jsw.in

Ref. No. JSWEL/ Ash/ Auth/ 7785
Date.: April 28, 2023

To

The Addl. Principal Chief Conservator of Forests (C),
Ministry of Environment, Forests and Climate Change,
Regional Office (South Zone),
Bangaluru.

Sub: Fly Ash Notification S.O. 5481(E), 31st December 2021 Statutory Compliance Report of **2 x 130MW & 2 x 300 MW JSW Energy limited** for the period 01.04.2022 to 31.03.2023.

Dear Sir,

This has reference to the subject cited under reference above, we hereby submit the compliance reports of fly ash generation and utilization for the period April 2022 to March 2023 in the prescribed format.

Kindly acknowledge the receipt of the same.

Thanking you.

Yours faithfully,
for **JSW Energy Limited**

Kartikeya Misra
Vice President & Head of Plant

Copy to:

KSPCB, Divisional office, Ballari
CPCB, Bangaluru
CPCB, New Delhi.
Director, MoE&FCC, New Delhi.

Ash Compliance report for the period 01.04.2022 to 31.03.2023

FY : 2022-23

Sl. No.	Details	
1.	Name of Power Plant	**JSW Energy Ltd, Toranagallu**
2.	Name of the company	**JSW Energy Ltd**
3.	District	Bellary
4.	State	Karnataka
5.	Postal address for communication:	Post Box No. 9, JSW Energy Ltd.
6.	E-mail:	kartikeya.misra@jsw.in
7.	Power Plant installed capacity (MW):	**860**
8.	Plant Load Factor (PLF): %	51%
9.	No. of units generated (MWthr.):	3853873.616 MWthr
10	Total area under power plant (ha): (including area under ash ponds)	95.78 Ha
11.	Quantity of coal consumption during reporting period (Metric Tons in reporting period)	1533544 MT
12	Average ash content in percentage (per cent):	13.9%
13.	Quantity of current ash generation during reporting period (Metric Tons in reporting period): Fly ash (Metric Tons in reporting period): Bottom ash (Metric Tons in reporting period):	198954 MT (fly ash) 14003 MT (bottom ash)
14.	Capacity of dry fly ash storage silo(s) (Metric Tons) :	1710 MT
15	Details of utilisation of current ash generated during reporting period (a) Total quantity of current ash utilised (MT) during reporting period: (b) Quatity of fly ash utilised (MT): (i) Fly ash based products (bricks or tiles or (MT) fibre cement sheets or pipes or boards or panels) (ii) Cement manufacturing: (MT) (iii) Ready mix concrete: (iv) Ash and Geo-polymer based construction material: (iii) Ready mix concrete! (iv) Ash and Geo-polymer based construction material: (v) Manufacturing of sintered or cold bonded ash aggregate: (vi) Construction of roads, road and fly over embankment: (vii) Construction of dams: (viii) Filling up Of low lying area: (ix) Filling of mine voids: (x) Use in overburden dumps: (xi) Agriculture: (xii) Construction of shoreline protection structures in coastal districts; (xii i) Export of ash to other countries: (xiv) Others (please specify): Construction. (c) **Quantity of bottom ash utllised (MT):** (i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): (ii) Cement manufacturing: (iii) Ready mix concrete: (iv) Ash and Geo-polyrner based consti uction material: (v) Manufacturing of sintered cold bonded ash aggregate: (vi) Construction of roads, road and flyover enbankment:	(a) 212957 (ash) (b) 198954 (fly ash) (b)(i) 31422 (bricks) (b)(ii) 118092 (cement) (b)(xiv) 49440 MT (others: slime pond bund embankment) c)14003 c)(i) 1778

	(vii) Construction of dams: (vi i i) Filling up of low lying area: (ix) Filling of mine voids: (x) Use in overburden dumps: (xi) A griculture: (xii) Construction of shoreline protection structures in coastal districts: (xiii) Export of ash to other countries: (xiv) Othes (please specify): Construction (MTP) (xv) Total quantity of current ash unutilised (MTP) during reporting period:	c) (xiv) 4887 MT (Reused in coal yard for process purpose) c)(xiv) 7338 MT (others: slime pond bund embankment) c)(xv) 0 MT
16	Percentage utilisation of current ash generated during reporting period (Percent)	100%
17	Details of disposal of ash in ash ponds (a) Total quantity of ash disposed in ash pond(s) (Metric Tons) (excluding reporting period): MT (b) Quantity of ash disposed in ash pond(s) during reporting period (Metric Tons): (c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m3): (d) Total number of ash ponds: (i) Active: (ii) Exhausted (yet to be reclaimed) : (iii) Reclaimed: MT (e) total area under ash ponds (ha):	(a) 35160 MT (b) 0 c)Not applicable (d) 1 (total ash pond) (d)(i) 1 (active ash pond) (d)(ii) 0 (exhausted) 35160 MT (reclaimed) e) 3.495 Ha (Ash pond Area)
18	Individual ash pond details Ash ponds-1,0, etc (please provide below mentioned details Separately, if number of ash ponds is more than one) (a) Status : Under construction or Active or Exhausted or Reclaimed (b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY): (c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY): (Not applicable for active ash ponds) (d) area (hectares): (e) dyke height (m): (f) volume (m3): (g) quantity of ash disposed as on 31st March (Metric Tons): (h) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons): (i) expected life of ash pond (number of years and months): (j) co-ordinates (Lat and Long): (please specify minimum 4 co-ordinates) (k) type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining l) mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD) (m) Ratio of ash: water in slurry mix (1:___): (n) Ash water recycleing system (AWRS) installed and	a) Active b) 2011 c) Not applicable d) 3.495 Ha e) Not applicable f) 2.75 lac cum g) 0 h) 100% & 3.3 lac MT (ash density considered as 1.2 g/cc) (i) 25 years (j) coordinates: Latitude / Longitude 15° 11′ 24″ N, 76° 40′ 23″ E 15° 11′ 26″ N 76° 40′ 25″ E 15° 11′ 23″ N 76° 40′ 30″ E 15° 11′ 22″ N 76° 40′ 28″ E (k)HDPE lining

	functioning: Yes or No (o) Quantity of wastewater from ash pond discharged into land or water body (m3): (p) Last date when the dyke stability study was conducted and name of the organisation who conducted the study: (q) Last date when the audit was conducted and name of the organisation who conducted the audit:	(l)Dry disposal (m) Not applicable (n) Not Applicable (o) Not applicable (p)This point is not applicable since ash pond is lying below ground and 100% empty. (q) Not applicable
19	Quantity of legacy ash utilised (MT in reporting period): i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): ii. Cement manufacturing: iii. Ready mix concrete: iv. Ash and Geo-polymer based construction material: v. Manufacturing of sintered or cold bonded ash aggregate: vi. Construction of roads, road and flyover embankment: MT vii. Construction of dams: viii. Filling up of low lying area: ix. Filling of mine voids: x. Use in overburden dumps: xi. Agriculture: xii. Construction of shoreline protection structures in coastal districts; xiii. Export of ash to other countries: xiv. Others (please specify):	(19) 35160 MT (19) (vi) 35160 MT

20	Summary:			
	Details	Quantity generated (MT)	Quantity utilised (MT) and (%)	Balance quantity (MT)
	Current ash during reporting period	212957	212957 (100%)	0
	Legacy ash	35160	35160 (100%)	0
	Total	248117	248117	0
21	Any other information: Soft copy of the annual compliance report, and shape files of power plant and ash ponds may be e-mailed to:- moefcc-coalash@gov.in			
22	Signature of Authorised Signatory			