



JSWHEL/KW/HPSPCB/BLG/2024- 13781

24<sup>th</sup> September 2024

To,  
The Environmental Engineer  
H.P State Pollution Control Board  
Opposite Indira Market  
Rampur, District Shimla (H.P)- 172001

**JSW Hydro Energy Limited**

(formerly Himachal Baspa Power Company Limited)

**Karcham - Wangtoo H. E. Project**

Sholtu Colony, P.O. Tapri - 172104

District Kinnaur (Himachal Pradesh)

CIN. : U40101HP2014PLC000681

Phone : +91 9816507000, 9805002039

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**Sub: Karcham Wangtoo H.E.P (1045 MW)- Environment Statement for the year ending  
31<sup>st</sup> March 2024.**

Dear Sir,

Enclosed herewith please find **Environment Statement (Form-V)** in accordance with the provisions of Rule-14 of the Environment (Protection) amendment Rules, 1993 of the Environment (Protection) Act, 1986 for the financial year ending 31<sup>st</sup> March 2024 pertaining to Karcham Wangtoo Hydroelectric Plant (1045MW).

Thanking You

Yours Faithfully,

For **JSW Hydro Energy Limited**

Authorized Signatory

**Encl:** As above



Part of O. P. Jindal Group

**Corporate Office :** JSW Centre,  
Bandra Kurla Complex,  
Bandra (East), Mumbai - 400 051

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## Himachal Pradesh State Pollution Control Board

'Him Parivesh', Phase -III, New Shimla-171009, HP.

### Form-V

(See Rule 14)

(To be enclosed along with Consent Renewal Application Form for the subsequent year)

Submission of Environmental Statement is in accordance with the provisions of Rule-14 of the Environment (Protection). Amendment Rules, 1993 of the Environment (Protection) Act, 1986 (29 of 1986) published vide Notification dated 22-04-1993- G.S.R. 386 (E) in the Gazette of India – Extraordinary- Part-II Section-3 Subsection (i). No. 155 dated 28-04-1993 by the Ministry of Environment and Forests, Government of India: read with the Notification dated 13-02-1993 G.S.R. 329 (E) of the Gazette of India-Extraordinary Part-II Section-3 Subsection (i) No. 120 dated 13-03-1993.

"Every Person carrying on an industry, operation, operation or process requiring Consent under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 (6 of 1974) or under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 (14 of 1981) or both or authorization under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 published under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an Environmental Statement for the financial for the financial year ending the 31<sup>st</sup> March in Form V to the concerned State Pollution Control Board on or before the Thirtieth day of September every year, beginning 1993."

From:

M/s JSW HYDRO ENERGY LIMITED

KARCHAM WANGTOO HYDROELECTRIC PLANT (1045 MW)

SHOLTU COLONY, PO: TAPRI, DISTT: KINNAUR (H.P.) PIN: 172104

To

Member Secretary,

Himachal Pradesh State Pollution Control Board

Him Parivesh, Phase-III, New Shimla,

Shimla-171009, HP.

ENVIRONMENT STATEMENT for the financial year ending the 31<sup>st</sup> March 2024

### PART-A

(i)	Name and address of the owner/occupier of the industry operation or process.	M/s JSW HYDRO ENERGY LIMITED KARCHAM WANGTOO HYDROELECTRIC PLANT (1045 MW) SHOLTU COLONY, PO: TAPRI, DISTT: KINNAUR (H.P.) PIN: 172104
(ii)	Industry category- Primary- (STC Code) Secondary-(SIC Code)	
(iii)	Production capacity—Units per annum	4130.98 MU
(iv)	Year of establishment	2011
(v)	Date of the last Environmental Statement submitted	Submitted vide letter no. JSWHEL/KW/HPSPCB/BLG/2023-13338 dated 19.09.2023.

## PART-B

### Water and Raw Material Consumption

#### (i). Water Consumption m<sup>3</sup> per day

Process: NIL  
Cooling: 860 m<sup>3</sup> per day  
Domestic: 184.0 m<sup>3</sup> per day

Name of Products	Process water consumption per unit of product output	
	During the previous Financial year	During the current Financial year
	(1)	(2)
1. Electricity (Hydel)	Not applicable as use of water for hydropower generation is non-consumptive	
2.	--	--
3.	--	--

#### (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
WATER	ELECTRICITY	Not applicable, as use of water for hydropower generation is non-consumptive. Being a run of the river project there is no consumption of water for electricity generation.	

\*Industry may use codes if disclosing detail of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

*Amesha*



**PART-C**  
**Pollution discharged to environment /unit of output**  
(PParameter as specified in the Consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standard with reasons
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**Stack Emission Report- June 2023**

S.N	Location	Stack No.	SPM (mg/Nm3)	CO (mg/Nm3)	NOx (mg/Nm3)	SO2 (mg/Nm3)	Remarks
1	Wangtoo PH	25399588	67.9	75.0	62.0	ND	Within Limit as per CPCB
2	Wangtoo PH	25399589	62.2	55.0	68.0	ND	Within Limit as per CPCB

**Standard Limit as per CPCB:** PM-75mg/Nm3, NOx-710 mg/Nm3, CO-150 mg/Nm3, SO2- less than 2%

S.N	Location	Stack No.	SPM (g/Kw-hr)	CO (g/Kw-hr)	NOx (g/Kw-hr)	SO2 (g/Kw-hr)	Remarks
3	Karcham Dam	25261689	0.085	0.114	0.232	0.107	Within Limit as per CPCB
4	Karcham Dam	25247284	0.076	0.103	0.198	0.115	Within Limit as per CPCB
5	Sholtu	25263433	0.134	0.132	0.211	0.114	Within Limit as per CPCB
6	Sholtu	25268809	0.141	0.130	0.214	0.111	Within Limit as per CPCB
7	Kilba Colony	25270979	0.079	0.112	0.197	0.105	Within Limit as per CPCB

**Standard Limit as per CPCB:** PM  $\leq 0.2$ g/Kw-hr, NOx  $\leq 4.0$ g/Kw-hr, CO  $\leq 3.5$ g/Kw-hr, SO2- N/A

**Stack Emission Report-Sept'2023**

S.N	Location	Location	SPM (mg/Nm3)	CO (mg/Nm3)	NOx (mg/Nm3)	SO2 (mg/Nm3)	Remarks
1	Wangtoo PH	25399588	68.7	70.0	55.0	ND	Within Limit as per CPCB
2	Wangtoo PH	25399589	70.6	60.0	51.0	ND	Within Limit as per CPCB
3	Karcham Dam	25261689	64.1	40.0	42.0	ND	Within Limit as per CPCB
4	Karcham Dam	25247284	61.7	52.0	42.0	ND	Within Limit as per CPCB
5	Sholtu	25263433	67.7	58.0	51.0	ND	Within Limit as per CPCB
6	Sholtu	25268809	68.4	58.0	45.0	ND	Within Limit as per CPCB
7	Kilba Colony	25270979	60.3	50.0	42.0	ND	Within Limit as per CPCB

**Standard Limit as per CPCB:** PM-75mg/Nm3, NOx-710 mg/Nm3, CO-150 mg/Nm3, SO2- less than 2%

### Stack Emission Report-Dec'2023

S.N	Location	Stack No.	SPM (mg/Nm3)	CO (mg/Nm3)	NOx (mg/Nm3)	SO2 (mg/Nm3)	Remarks
1	Wangtoo PH	25399588	70.3	76.0	60.0	5.0	Within Limit as per CPCB
2	Wangtoo PH	25399589	65.2	57.0	45.0	2.0	Within Limit as per CPCB
3	Karcham Dam	25261689	65.5	35.0	40.0	5.0	Within Limit as per CPCB
4	Karcham Dam	25247284	62.1	48.0	35.0	2.0	Within Limit as per CPCB
5	Sholtu	25263433	64.4	52.0	45.0	1.0	Within Limit as per CPCB
6	Sholtu	25268809	68.0	52.0	41.0	2.0	Within Limit as per CPCB
7	Kilba Colony	25270979	63.1	45.0	34.0	2.0	Within Limit as per CPCB

Standard Limit as per CPCB: PM-75mg/Nm3, NOx-710 mg/Nm3, CO-150 mg/Nm3, SO2- less than 2%

### Stack Emission Report-March 2024

S.N	Location	Stack No.	SPM (mg/Nm3)	CO (mg/Nm3)	NOx (mg/Nm3)	SO2 (mg/Nm3)	Remarks
1	Wangtoo PH	25399588	56.7	68.0	163.0	33.0	Within Limit as per CPCB
2	Wangtoo PH	25399589	56.8	54.0	154.7	42.00	Within Limit as per CPCB

Standard Limit as per CPCB: PM-75mg/Nm3, NOx-710 mg/Nm3, CO-150 mg/Nm3, SO2- less than 2%

S.N	Location	Stack No.	SPM (g/Kw-hr)	CO (g/Kw-hr)	NOx (g/Kw-hr)	SO2 (g/Kw-hr)	Remarks
3	Karcham Dam	25261689	0.015	0.183	0.206	0.097	Within Limit as per CPCB
4	Karcham Dam	25247284	0.016	0.193	0.215	0.105	Within Limit as per CPCB
5	Sholtu	25263433	0.021	1.60	0.365	0.129	Within Limit as per CPCB
6	Sholtu	25268809	0.022	1.40	0.372	0.133	Within Limit as per CPCB
7	Kilba Colony	25270979	0.015	0.164	0.201	0.100	Within Limit as per CPCB

Standard Limit as per CPCB: PM  $\leq 0.2$ g/Kw-hr, NOx  $\leq 4.0$ g/Kw-hr, CO  $\leq 3.5$ g/Kw-hr, SO2- N/A



**Incinerator Stack Report- March 2024**

S.N	Location	Parameter	Unit (mg/Nm3)	Limit as per CPCB
1	Sholtu Hospital	SPM (11% of O2 Correction)	40.0	50
2		CO (11 % of O2 Correction)	434	Not Specified
3		NOx (11% of O2 Correction)	52.6	400
4		SO2 (11% of O2 Correction)	7.4	Not specified
5		Hydrocarbon (HC)	ND %	Not Specified
6		Carbon dioxide as CO2	1.6%	Not Specified
7		Oxygen as O2	18.4%	Not Specified

**STP Report-June 2023**

S.N	Location	pH	TSS (mg/l)	TDS (mg/l)	BOD (mg/l)	COD (mg/l)	Oil & grease (mg/l)	Remarks
1	Wangtoo PH	7.24	35.0	536	24.0	80.0	3.0	Within Limit as per CPCB
2	Sholtu	7.35	32.0	485	20.0	115.0	5.0	Within Limit as per CPCB

*Limit as per CPCB: pH-5.5-9.0-, TSS-100mg/l, TDS-2100mg/l, BOD-30mg/l, COD-250mg/l, Oil & grease- 10 mg/l*

**STP Report-Sept'2023**

S.N	Location	pH	TSS (mg/l)	TDS (mg/l)	BOD (mg/l)	COD (mg/l)	Oil & grease (mg/l)	Remarks
1	Wangtoo PH	7.23	32.0	586	24.0	145.0	2.8	Within Limit as per CPCB
2	Sholtu	7.36	35.0	526	27.0	165.0	2.4	Within Limit as per CPCB

*Limit as per CPCB: pH-5.5-9.0-, TSS-100mg/l, TDS-2100mg/l, BOD-30mg/l, COD-250mg/l, Oil & grease- 10 mg/l*

**STP Report-Dec'2023**

S.N	Location	pH	TSS (mg/l)	TDS (mg/l)	BOD (mg/l)	COD (mg/l)	Oil & grease (mg/l)	Remarks
1	Wangtoo PH	7.48	36.0	328	26.0	164.0	2.4	Within Limit as per CPCB
2	Sholtu	7.44	32.0	472	26.0	148.0	2.2	Within Limit as per CPCB

*Limit as per CPCB: pH-5.5-9.0-, TSS-100mg/l, TDS-2100mg/l, BOD-30mg/l, COD-250mg/l, Oil & grease- 10 mg/l*



# STP Report-March 2024

S.N	Location	pH	TSS (mg/l)	TDS (mg/l)	BOD (mg/l)	COD (mg/l)	Oil & grease (mg/l)	Remarks
1	Wangtoo PH	7.46	33.0	388	25.0	136.0	2.8	Within Limit as per CPCB
2	Sholtu	7.62	34.0	620	25.0	140.0	3.2	Within Limit as per CPCB

**Limit as per CPCB:** pH-5.5-9.0-, TSS-100mg/l, TDS-2100mg/l, BOD-30mg/l, COD-250mg/l, Oil & grease- 10 mg/l

## PART-D

### Hazardous Wastes

[As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008]

Hazardous Wastes	Total Quantity (Kg.)	
	During the previous Financial year	During the current Financial year
Used oil & lubricants drained From DG Sets, Vehicles and Machines	<p>Quantity of used oil stored at the end of FY 2022-23: 4367 Litres</p> <p>Quantity of Used oil generated in FY 2023-24: 3365 Litres</p> <p>Total quantity of used oil generated and stored in the FY 2023-24: 7732 Litres</p> <p>Used oil sent to authorized recycler for disposal: 7350 Litres</p> <p>Quantity of used oil stored at the end of FY 2023-24: 382 Litres</p>	<p>Quantity of used oil generated in the FY 2024-25 from April to August: 819 Litres</p> <p>Quantity of used oil sent to authorized recycler for disposal: - NIL</p> <p>Total stock till 31<sup>st</sup> August 2024: 819 Litres</p>
<b>Note:</b> Used oil / lubricants have been sent to registered recycler for disposal.		

*[Signature]*

### PART-E Solid Wastes

	Total Quantity (Kg.)	
	During the previous Financial year	During the current Financial year
(a) From process	NIL	NIL
(b) From pollution control facilities	NIL	NIL
(c) 1 Quantity recycled or re-utilized within the unit	NIL	NIL
2 Sold	NIL	NIL
3 Disposed	NIL	NIL

### PART-F

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

**7350 Litres of used oil as hazardous waste was sent to Authorized recycler for disposal in FY 2023-24 to Aggarwal Manufacturing CO. Plot No. 10, Friend Industrial Estate, Oppo. Aarti Steel, Focal Point, Ludhiana.**

**16 Nos. (Approx. 1.495 MT) of old used batteries were sold to M/s Rolex Enterprises, Survey No.218, Hissa No. 4/2, Village Dhansar, Taluka Panvel, District Raigarh-421312, Maharashtra on 18.03.2024.**

**Solid waste generation-NIL**

### PART-G

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

**Since Plant is in operation therefore, it does not cause adverse effect on the environment including natural resources.**

### PART-H

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

**Plantation program is undertaken on regular basis. About 2700 plantation done in 2023-2024 with the survival rate of more than 80%**





## PART-I

Any other particulars for improving the quality of the environment.

(Signature of a person carrying out an industry – operation or process)

Date: 23.09.2024

Name: Kaushik Maulik

Designation: VP & Head of Plant

Address: M/s JSW HYDRO ENERGY LIMITED  
Karcham Wangtoo Hydroelectric Plant (1045 MW)  
Sholtu Colony, PO: Tapri, Distt: Kinnaur (H.P.) PIN: 17104

Seal/ Stamp:

