JAYPEE NIGRIE SUPER THERMAL POWER PLANT

A DIVISION OF JAIPRAKASH POWER VENTURES LIMITED

ISO CERTIFIED: 9001:2015, 14001:2015 & 45001:2018







QUALITY

ENVIRONMENT

HEALTH & SAFETY

JNSTPP/ENV/2023-24/03

Date - 15.01.2024

To
The Member Secretary,
M.P. Pollution Control Board,
Parayavaran Parisar, E-5 Arera Colony
Bhopal (M.P.) - 462016

Subject:-Quarterly Air & Water Quality Monitoring Report under Air & Water (Prevention & Control of Pollution) Act 1981 & 1974 respectively.

Dear Sir,

Please find enclosed herewith Ambient Air Quality, Stack Emission Monitoring, ETP Treated Water (RO Permeate) & STP Treated Water Analysis Reports for the Quarter (Oct, 2023 -Dec, 2023) for Jaypee Nigrie Super Thermal Power Plant (A Division of Jaiprakash Power Ventures Ltd.)

Thanking You,

Yours Sincerely,

For Jaypee Nigrie Super Thermal Power Plant (A Division of Jaiprakash Power Ventures Ltd.)

Vinod Sharma (Unit Head)

Encl: - As Above

CC. Regional Officer

M.P. Pollution Control Board,

Bhakuar, Naugadh,

District: Singrauli (MP) - 486669

- For kind information please.



Site : Jaypee Nigrie Super Thermal Power Plant, Village & P.O.-Nigrie, Tehsil-Sarai, Distt.-Singrauli (M.P.)
Ph: +91 (7801) 286021 - 36, Fax: +91 (7801) 286020, Email: jpthermal.sidhi@jalindia.co.in

Corp. Office: 'JA House', 63 Basant Lok, Vasant Vihar, New Delhi - 110 057 (India)

Ph: +91 (11) 49828679, 49828642, Fax: +91 (11) 26145389 Regd. Office: Complex of Jaypee Nigrie Super Thermal Power Plant, Nigrie

Tehsil - Sarai, Distt. - Singrauli - 486669 (Madhya Pradesh) Ph: +91 (7801) 286021 - 39, Fax: +91 (7801) 286020

Website: www.jppowerventures.com CIN: L40101MP1994PLC042920

AMBIENT AIR QUALITY MONITORING REPORT

MONTH: October 2023

		TION : Near		-		
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (μg/m³)	NO ₂ (μg/m³)	CO (mg/m³
1st	Weekly Average	24.7	48.7	6.7	12.6	0.45
2 nd	Weekly Average	25.9	51.0	7.1	12.7	0.48
3rd	Weekly Average	24.8	48.3	6.7	12.7	0.46
4 th	Weekly Average	28.4	57.1	7.9	13.8	0.52
	LOCATI	ION : Near H	12 Gas Cyling	der Shed		
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (µg/m³)	NO ₂ (μg/m³)	CO (mg/m³)
1 st	Weekly Average	26.3	52.2	7.0	13.9	0.56
2 nd	Weekly Average	28.0	55.4	7.6	13.8	0.58
3rd	Weekly Average	26.5	52.2	7.1	13.8	0.56
4 th	Weekly Average	30.6	61.4	8.3	15.2	0.63
	LOCATION : Nea	r Watch Tow		nt Grinding	Unit)	
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (μg/m³)	NO ₂ (μg/m³)	CO (mg/m³)
1 st	Weekly Average	25.7	50.5	6.7	13.2	0.54
2 nd	Weekly Average	27.5	54.6	7.3	13.8	0.57
	Weekly Average	27.6	55.2	7.3	13.9	0.57
3rd	Weekly Average	27.6	33.2	, .0	10.,	0.57
3rd 4th	Weekly Average	29.8	60.3	8.3	15.3	0.62
	Weekly Average	29.8	60.3	8.3		
	Weekly Average	29.8 ΓΙΟΝ : Near	60.3 Fuel Storage	8.3 Tank		
	Weekly Average	29.8	60.3	8.3		
4 th	Weekly Average LOCA	29.8 ΓΙΟΝ : Near PM _{2.5}	60.3 Fuel Storage	8.3 Tank SO ₂	15.3 NO ₂	0.62 CO
4 th	Weekly Average LOCA Particulars	29.8 ΓΙΟΝ : Near ΡΜ _{2.5} (μg/m³)	Fuel Storage PM ₁₀ (µg/m³)	8.3 Tank SO ₂ (µg/m³)	NO ₂ (μg/m³)	0.62 CO (mg/m³)
4 th Name of Week 1 st	Weekly Average LOCA Particulars Weekly Average	29.8 ΓΙΟΝ : Near PM _{2.5} (μg/m³) 26.6	60.3 Fuel Storage PM ₁₀ (μg/m³) 52.9	8.3 Tank SO ₂ (µg/m³) 7.3	NO ₂ (μg/m³) 14.3	CO (mg/m³) 0.56

For Jaypee Nigrie Super Thermal Power Plant

AMBIENT AIR QUALITY MONITORING REPORT

MONTH: November 2023

	LOCA	TION: Near	STP - (Color	ny Area)		
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (μg/m³)	NO ₂ (μg/m³)	CO (mg/m³)
1 st	Weekly Average	26.1	51.6	7.3	13.0	0.49
2 nd	Weekly Average	26.4	53.4	7.4	13.7	0.48
3rd	Weekly Average	24.3	48.7	6.7	12.7	0.47
4 th	Weekly Average	27.9	55.3	7.7	13.8	0.51
And Add to						
	LOCAT	ION : Near l	H2 Gas Cylin	der Shed		
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (μg/m³)	NO ₂ (μg/m³)	CO (mg/m³)
1 st	Weekly Average	27.7	53.8	7.5	14.2	0.58
2 nd	Weekly Average	26.3	52.5	7.2	13.8	0.56
3rd	Weekly Average	31.3	62.8	8.6	15.2	0.65
4 th	Weekly Average	26.4	52.5	7.0	13.4	0.57
	LOCATION : Ne		wer 22 (Ceme	ent Grinding	Unit)	
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (μg/m³)	NO ₂ (μg/m³)	CO (mg/m³)
1st	Weekly Average	27.3	55.1	7.6	14.3	0.56
2 nd	Weekly Average	31.3	62.7	8.6	15.5	0.66
3rd	Weekly Average	25.8	51.0	6.9	13.4	0.59
4 th	Weekly Average	28.0	56.0	7.7	14.3	0.60
					والفائمة	
		TION: Near	Fuel Storage			
	LOCA			CO	NO ₂	CO
Name of Week	Particulars	PM _{2.5} (μg/m³)	PM ₁₀ (μg/m³)	SO ₂ (μg/m³)	(μg/m³)	CO (mg/m³)
Name of Week		PM _{2.5}				
S ENGINEER PETER SIGN SHERRING	Particulars	PM _{2.5} (μg/m³)	(μg/m³)	(μg/m³)	(μg/m³)	(mg/m ³)
1 st	Particulars Weekly Average	PM _{2.5} (μg/m³) 26.8	(μg/m³) 54.7	(μg/m³) 7.6	(μg/m³) 14.6	(mg/m³) 0.58

For Jaypee Nigrie Super Thermal Power Plant

AMBIENT AIR QUALITY MONITORING REPORT

MONTH: December 2023

		PM _{2.5}	PM ₁₀	y Area)	NO ₂	СО
Name of Week	Particulars	PM _{2.5} (μg/m ³)	(μg/m³)	(μg/m³)	(μg/m³)	(mg/m³)
1 st	Weekly Average	25.2	48.9	6.7	12.7	0.48
2nd	Weekly Average	28.5	57.7	8.1	14.0	0.56
3rd	Weekly Average	27.2	54.5	7.5	13.6	0.54
4 th	Weekly Average	29.0	57.5	8.1	14.2	0.56
	LOCAT	ION · Noar I	H2 Gas Cylin	der Shed		_
		PM _{2.5}	PM ₁₀	SO ₂	NO ₂	СО
Name of Week	Particulars	(μg/m³)	(μg/m³)	(μg/m³)	(μg/m³)	(mg/m³)
1 st	Weekly Average	25.4	50.7	6.9	13.2	0.54
2 nd	Weekly Average	27.0	54.1	7.5	13.9	0.59
3rd	Weekly Average	30.0	60.1	8.2	14.7	0.64
4 th	Weekly Average	31.0	61.1	8.4	15.1	0.65
			***	. 6 . 1	TT	
	LOCATION : Ne					
Name of Week	Particulars	$PM_{2.5}$	PM ₁₀	SO ₂	NO ₂	
	Tarrearas	$(\mu g/m^3)$	(μg/m³)	(μg/m³)	(μg/m³)	
1 st	Weekly Average	(μg/m³) 28.1	(μg/m³) 55.9			(mg/m³) 0.57
1st 2nd				(μg/m³)	(μg/m³)	(mg/m³) 0.57 0.63
	Weekly Average	28.1	55.9	(μg/m³) 6.9	(μg/m³) 13.3	(mg/m³) 0.57
2 nd	Weekly Average Weekly Average	28.1 29.5	55.9 59.1	(μg/m³) 6.9 8.3	(μg/m³) 13.3 14.9	(mg/m³) 0.57 0.63
2nd 3rd	Weekly Average Weekly Average Weekly Average Weekly Average	28.1 29.5 28.9 31.1	55.9 59.1 58.7 60.9	(μg/m³) 6.9 8.3 7.8 8.5	(μg/m³) 13.3 14.9 14.4	(mg/m³) 0.57 0.63 0.61
2nd 3rd	Weekly Average Weekly Average Weekly Average Weekly Average	28.1 29.5 28.9 31.1 ATION : Nea	55.9 59.1 58.7 60.9 r Fuel Storage	(μg/m³) 6.9 8.3 7.8 8.5	(μg/m³) 13.3 14.9 14.4 15.2	(mg/m³) 0.57 0.63 0.61 0.66
2nd 3rd	Weekly Average Weekly Average Weekly Average Weekly Average	28.1 29.5 28.9 31.1	55.9 59.1 58.7 60.9	(μg/m³) 6.9 8.3 7.8 8.5	(μg/m³) 13.3 14.9 14.4	(mg/m³) 0.57 0.63 0.61
2nd 3rd 4th	Weekly Average Weekly Average Weekly Average Weekly Average LOCA	28.1 29.5 28.9 31.1 ATION: Nea PM _{2.5}	55.9 59.1 58.7 60.9 r Fuel Storage	(μg/m³) 6.9 8.3 7.8 8.5 e Tank SO ₂	(μg/m³) 13.3 14.9 14.4 15.2	(mg/m³ 0.57 0.63 0.61 0.66
2nd 3rd 4th	Weekly Average Weekly Average Weekly Average Weekly Average LOCA Particulars	28.1 29.5 28.9 31.1 ATION: Nea PM _{2.5} (µg/m³)	55.9 59.1 58.7 60.9 r Fuel Storag PM ₁₀ (µg/m³)	(μg/m³) 6.9 8.3 7.8 8.5 e Tank SO ₂ (μg/m³)	(μg/m³) 13.3 14.9 14.4 15.2 NO ₂ (μg/m³)	(mg/m³ 0.57 0.63 0.61 0.66
2nd 3rd 4th Name of Week	Weekly Average Weekly Average Weekly Average Weekly Average LOCA Particulars Weekly Average	28.1 29.5 28.9 31.1 ATION: Nea PM _{2.5} (µg/m³) 29.9	55.9 59.1 58.7 60.9 r Fuel Storag PM ₁₀ (µg/m³) 60.3	(μg/m³) 6.9 8.3 7.8 8.5 e Tank SO ₂ (μg/m³) 7.7	(μg/m³) 13.3 14.9 14.4 15.2 NO ₂ (μg/m³) 14.1	(mg/m³ 0.57 0.63 0.61 0.66 CO (mg/m³ 0.58

For Jaypee Nigrie Super Thermal Power Plant

JAYPEE NIGRIE SUPER THERMAL POWER PLANT

(A Division of Jaiprakash Power Ventures Limited)

QUARTERLY REPORT OF PARTICULATE MATTER EMISSION FROM POINT SOURCE (STACK)

Period - October 2023 to December 2023

S.NO.	UNIT STACK ATTACHED WITH PCE	AVG. DUST CONC. (mg/Nm³)				
	(POLLUTION CONTROLING EQUIPMENT)	Oct-23	Nov-23	Dec-23		
1	Unit - I (1X660 MW) - ESP	40.47	42.61	40.09		
2	Unit - II (1X660 MW) - ESP	39.35	40.62	40.65		

For Jaypee Nigrie Super Thermal Power Plant

ETP TREATED WATER ANALYSIS REPORT

Period: October - 2023 to December - 2023

Sr. No.	Testing Parameters	Norms as per	Observed value					
	resting I atameters	МРРСВ	Oct-23	Nov-23	Dec-23			
1	pH (at 25°C Temperature)	5.5 - 9.0	7.04	7.01	6.98			
2	TSS (mg/l)	100	*BLQ(**LOQ-1.0)	*BLQ(**LOQ-1.0)	*BLQ(**LOQ-1.0)			
3	BOD (mg/l) 3rd days at 27°C	30	*BLQ(**LOQ-2.0)	*BLQ(**LOQ-2.0)	*BLQ(**LOQ-2.0)			
4	COD (mg/l)	250	10.26	13.44	11.52			
5	O & G (mg/l)	10	*BLQ(**LOQ-0.4)	*BLQ(**LOQ-0.4)	*BLQ(**LOQ-0.4)			
6	TDS (mg/l)	2100	13.6	12.9	13.8			
7	Chlorides (mg/l)	1000	2.18	2.40	2.78			

^{*}BLQ - Below Limit of Quantification

For Jaypee Nigrie Super Thermal Power Plant

^{**}LOQ - Limit of Quantification

STP TREATED WATER ANALYSIS REPORT

Period: October - 2023 to December - 2023

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value (STP - 100 KLD)			Observed value (STP - 1000 KLD)		
			Oct-23	Nov-23	Dec-23	Oct-23	Nov-23	Dec-23
1	pH (at 25°C Temperature)	6.5 - 9.0	7.21	7.11	7.15	7.42	7.23	7.28
2	T.S.S (mg/l)	100	16.0	17.0	19.0	23.0	21.0	24.0
3	BOD (mg/l) 3 rd days at 27°C	30	12.0	15.0	14.0	15.0	18.0	16.0
4	COD (mg/l)	250	69.1	79.5	75.6	92.2	97.2	94.4
5	O & G (mg/l)	10	1.50	1.20	1.28	2.35	2.10	2.16
6	Fecal Coliform (MPN/100ml)	1000.0	30.0	21.0	23,0	50.0	40.0	35.0

For Jaypee Nigrie Super Thermal Power Plant