

# JAYPEE NIGRIE SUPER THERMAL POWER PLANT

**JAYPRAKASH**  
POWER VENTURES LIMITED

A DIVISION OF JAYPRAKASH POWER VENTURES LIMITED

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



QUALITY



ENVIRONMENT



HEALTH & SAFETY

JNSTPP/ENV/2021/01

Date-05.04.2021

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 Monitoring, ETP Treated Water (RO Permeate) & STP Treated Water Analysis Reports for the **Quarter (January 2021- March 2021)** for JaypeeNigrie Super Thermal Power Plant of M/s. Jaiprakash Power Ventures Ltd.

Thanking You,

Yours Sincerely,

**For JaypeeNigrie Super Thermal Power Plant**  
(A Division of Jaiprakash Power Ventures Ltd.)

**Vinod Sharma**  
Sr. President

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


**JAYPEE NIGRIE SUPER THERMAL POWER PLANT**  
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**AMBIENT AIR QUALITY MONITORING REPORT**

**MONTH: January 2021**

LOCATION : Near STP -(Colony Area)						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	15.6	47.6	5.0	10.1	0.404
2 <sup>nd</sup>	Weekly Average	16.8	37.1	4.1	11.3	0.338
3 <sup>rd</sup>	Weekly Average	17.8	41.0	4.8	9.9	0.447
4 <sup>th</sup>	Weekly Average	12.9	34.5	3.7	10.4	0.322
LOCATION : Near H2 Gas Cylinder Shed						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	28.7	55.6	8.4	12.9	0.565
2 <sup>nd</sup>	Weekly Average	29.9	63.4	8.0	14.6	0.523
3 <sup>rd</sup>	Weekly Average	19.6	50.6	5.8	11.9	0.444
4 <sup>th</sup>	Weekly Average	24.1	49.7	6.2	11.5	0.542
LOCATION : Near Watch Tower 22 (Cement Grinding Unit)						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	31.7	69.7	7.0	13.6	0.610
2 <sup>nd</sup>	Weekly Average	29.2	60.4	7.9	16.1	0.554
3 <sup>rd</sup>	Weekly Average	27.0	54.4	5.7	12.6	0.501
4 <sup>th</sup>	Weekly Average	31.1	62.7	6.2	14.4	0.436
LOCATION : Near Fuel Storage Tank						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	35.2	72.7	8.9	16.0	0.698
2 <sup>nd</sup>	Weekly Average	27.8	57.9	7.8	14.4	0.614
3 <sup>rd</sup>	Weekly Average	26.8	58.7	6.0	13.8	0.517
4 <sup>th</sup>	Weekly Average	29.7	56.8	7.4	11.8	0.524

For Jaypee Nigrie Super Thermal Power Plant

  
 57/4/21  
 Authorized Signatory




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**AMBIENT AIR QUALITY MONITORING REPORT**

**MONTH: February 2021**

LOCATION : Near STP - (Colony Area)						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	19.6	46.6	7.1	12.0	0.367
2 <sup>nd</sup>	Weekly Average	20.9	43.0	6.3	11.2	0.449
3 <sup>rd</sup>	Weekly Average	17.6	44.3	6.0	9.2	0.307
4 <sup>th</sup>	Weekly Average	17.2	36.7	3.3	10.9	0.350
LOCATION : Near H2 Gas Cylinder Shed						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	26.0	55.8	7.7	11.3	0.469
2 <sup>nd</sup>	Weekly Average	31.9	58.6	9.5	16.2	0.489
3 <sup>rd</sup>	Weekly Average	19.6	50.6	5.8	11.9	0.444
4 <sup>th</sup>	Weekly Average	18.0	47.6	6.8	12.8	0.488
LOCATION : Near Watch Tower 22 (Cement Grinding Unit)						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	28.1	63.0	6.2	13.6	0.520
2 <sup>nd</sup>	Weekly Average	27.9	57.4	8.3	14.5	0.668
3 <sup>rd</sup>	Weekly Average	21.8	49.3	4.8	9.3	0.434
4 <sup>th</sup>	Weekly Average	26.3	56.2	6.9	11.4	0.460
LOCATION : Near Fuel Storage Tank						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	37.5	73.4	7.9	18.2	0.577
2 <sup>nd</sup>	Weekly Average	33.8	63.5	8.5	15.2	0.583
3 <sup>rd</sup>	Weekly Average	29.8	62.2	8.8	13.6	0.558
4 <sup>th</sup>	Weekly Average	23.9	53.0	7.2	10.0	0.609

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**AMBIENT AIR QUALITY MONITORING REPORT**

**MONTH: March 2021**

LOCATION : Near STP -(Colony Area)						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	20.7	46.8	7.0	11.7	0.429
2 <sup>nd</sup>	Weekly Average	22.5	44.5	6.2	10.7	0.471
3 <sup>rd</sup>	Weekly Average	17.7	39.9	4.3	9.0	0.384
4 <sup>th</sup>	Weekly Average	27.3	61.8	8.6	12.2	0.500
LOCATION : Near H2 Gas Cylinder Shed						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	27.8	59.3	5.7	10.7	0.368
2 <sup>nd</sup>	Weekly Average	34.5	61.1	11.2	15.2	0.494
3 <sup>rd</sup>	Weekly Average	21.4	52.3	8.9	11.4	0.641
4 <sup>th</sup>	Weekly Average	36.2	69.5	10.0	16.4	0.632
LOCATION : Near Watch Tower 22 (Cement Grinding Unit)						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	30.0	65.4	5.9	13.2	0.473
2 <sup>nd</sup>	Weekly Average	28.8	58.8	8.0	15.1	0.588
3 <sup>rd</sup>	Weekly Average	31.3	57.1	6.8	11.2	0.500
4 <sup>th</sup>	Weekly Average	34.0	72.5	9.4	15.4	0.555
LOCATION : Near Fuel Storage Tank						
Name of Week	Particulars	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NO2 ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	40.6	77.9	8.9	17.9	0.528
2 <sup>nd</sup>	Weekly Average	37.7	70.9	8.2	16.1	0.559
3 <sup>rd</sup>	Weekly Average	30.6	57.6	6.0	13.4	0.595
4 <sup>th</sup>	Weekly Average	43.6	75.2	9.3	13.9	0.553

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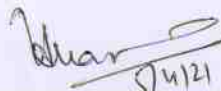
QUARTERLY REPORT OF PARTICULATE MATTER EMISSION FROM POINT SOURCE (STACK)

Annexure - II

Month - January 2021 to March 2021

S.NO.	UNIT STACK ATTACHED WITH PCE (POLLUTION CONTROLLING EQUIPMENT)	DUST CONC. (mg/Nm <sup>3</sup> )		
		Jan-21	Feb-21	Mar-21
1	Unit - I (1X660 MW) - ESP	42.65	34.46	39.91
2	Unit - II (1X660 MW) - ESP	43.80	37.72	42.73

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Annexure - III

QUATERLY ETP TREATED WATER ANALYSIS REPORT

Period : January - 2021 to March - 2021

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value		
			Jan-21	Feb-21	Mar-21
1	pH	5.5 - 9.0	7.22	7.55	7.60
2	SS (mg/l)	100	NIL	NIL	NIL
3	BOD (mg/l) 3rd days at 27°C	30	NIL	NIL	NIL
4	COD (mg/l)	250	3.70	3.40	3.92
5	O & G (mg/l)	10	NIL	NIL	NIL
6	TDS (mg/l)	2100	12.9	13.6	18.0
7	Chlorides (mg/l)	1000	2.66	3.12	4.40

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Annexure - IIIA

QUATERLY STP TREATED WATER ANALYSIS REPORT

Period : January - 2021 to March - 2021

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value (STP - 100 KLD)			Observed value (STP - 1000 KLD)		
			Jan-21	Feb-21	Mar-21	Jan-21	Feb-21	Mar-21
1	pH	6.5 - 9.0	7.48	7.66	7.53	7.39	7.32	7.28
2	S.S (mg/l)	100	7.5	8.7	9.5	14.4	16.2	13.9
3	BOD (mg/l) 3rd days at 27°C	30	7.2	7.9	8.7	10.2	9.4	9.9
4	COD (mg/l)	250	63.8	58.5	60.3	93.3	96.8	99.4
5	O & G (mg/l)	10	1.42	1.24	1.30	1.85	1.52	1.65

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