

## 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/2021/04

Date: 08.01.2022

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 here with Ambient Air Quality, Stack Emission Monitoring, ETP Treated Water (RO Permeate) & STP Treated Water Analysis Reports for the **Quarter (October, 2021- December, 2021)** for Jaypee Nigrie Super Thermal Power Plant (A Division of M/s Jaiprakash Power Ventures Ltd.)

Thanking You,

Yours Sincerely,

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

**Nadim Ahmad Khan**  
Vice - President (Chemistry & Environment)

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**  
(A Division of Jaiprakash Power Ventures Limited)

AMBIENT AIR QUALITY MONITORING REPORT

MONTH: October 2021

LOCATION : Near STP (Colony Area)						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	18.2	38.5	5.4	11.3	0.311
2 <sup>nd</sup>	Weekly Average	19.0	41.9	6.6	10.8	0.347
3 <sup>rd</sup>	Weekly Average	15.4	36.8	5.6	11.0	0.275
4 <sup>th</sup>	Weekly Average	24.7	48.4	6.3	11.9	0.432
LOCATION : Near H <sub>2</sub> Gas Cylinder Shed						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	21.8	55.1	7.1	13.6	0.486
2 <sup>nd</sup>	Weekly Average	23.8	57.9	6.9	12.2	0.465
3 <sup>rd</sup>	Weekly Average	22.7	58.5	7.3	13.3	0.441
4 <sup>th</sup>	Weekly Average	25.4	60.5	7.5	14.1	0.594
LOCATION : Near Watch Tower 22 (Cement Grinding Unit)						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	22.6	53.7	6.2	11.5	0.420
2 <sup>nd</sup>	Weekly Average	24.8	62.5	6.7	13.0	0.451
3 <sup>rd</sup>	Weekly Average	16.8	45.7	5.6	11.7	0.389
4 <sup>th</sup>	Weekly Average	31.1	63.6	7.5	12.3	0.748
LOCATION : Near Fuel Storage Tank						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	31.4	68.6	8.0	15.2	0.636
2 <sup>nd</sup>	Weekly Average	25.4	58.7	6.1	12.4	0.567
3 <sup>rd</sup>	Weekly Average	24.2	49.5	5.7	11.4	0.495
4 <sup>th</sup>	Weekly Average	32.1	64.1	7.7	15.5	0.582

For Jaypee Nigrie Super Thermal Power Plant

  
 Authorized Signatory  



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

**MONTH: November 2021**

LOCATION : Near STP (Colony Area)						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	24.7	55.0	6.5	11.4	0.426
2 <sup>nd</sup>	Weekly Average	19.4	49.9	6.1	10.1	0.374
3 <sup>rd</sup>	Weekly Average	25.0	53.5	6.8	13.0	0.386
4 <sup>th</sup>	Weekly Average	27.0	52.2	5.9	12.0	0.402
LOCATION : Near H <sub>2</sub> Gas Cylinder Shed						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	29.6	71.8	8.5	14.6	0.579
2 <sup>nd</sup>	Weekly Average	22.6	53.7	7.0	11.7	0.526
3 <sup>rd</sup>	Weekly Average	30.0	63.3	7.8	13.7	0.534
4 <sup>th</sup>	Weekly Average	28.6	61.4	6.0	11.9	0.487
LOCATION : Near Watch Tower 22 (Cement Grinding Unit)						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	28.1	65.3	7.9	14.0	0.633
2 <sup>nd</sup>	Weekly Average	26.0	60.5	6.3	13.6	0.592
3 <sup>rd</sup>	Weekly Average	33.9	69.8	7.4	11.7	0.460
4 <sup>th</sup>	Weekly Average	32.2	64.3	8.2	12.5	0.631
LOCATION : Near Fuel Storage Tank						
Name of Week	Particulars	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )
1 <sup>st</sup>	Weekly Average	34.3	80.2	9.0	14.5	0.755
2 <sup>nd</sup>	Weekly Average	30.2	63.2	6.9	11.3	0.610
3 <sup>rd</sup>	Weekly Average	37.8	74.9	8.2	15.7	0.607
4 <sup>th</sup>	Weekly Average	36.2	67.9	7.2	14.6	0.637

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**AMBIENT AIR QUALITY MONITORING REPORT      MONTH: December 2021**

LOCATION : Near STP (Colony Area)						
Name of Week	Particulars	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
1 <sup>st</sup>	Weekly Average	18.7	47.1	5.8	10.9	0.403
2 <sup>nd</sup>	Weekly Average	24.0	46.7	6.4	12.9	0.439
3 <sup>rd</sup>	Weekly Average	29.6	56.3	7.0	11.7	0.353
4 <sup>th</sup>	Weekly Average	20.7	44.5	5.5	10.3	0.392
LOCATION : Near H <sub>2</sub> Gas Cylinder Shed						
Name of Week	Particulars	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
1 <sup>st</sup>	Weekly Average	27.5	59.0	6.7	11.3	0.479
2 <sup>nd</sup>	Weekly Average	28.7	55.8	7.9	12.6	0.515
3 <sup>rd</sup>	Weekly Average	34.5	67.3	8.3	15.9	0.541
4 <sup>th</sup>	Weekly Average	28.2	60.6	7.0	11.7	0.547
LOCATION : Near Watch Tower 22 (Cement Grinding Unit)						
Name of Week	Particulars	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
1 <sup>st</sup>	Weekly Average	31.5	66.2	6.9	11.9	0.459
2 <sup>nd</sup>	Weekly Average	25.4	51.3	5.8	13.2	0.535
3 <sup>rd</sup>	Weekly Average	31.1	62.1	6.0	14.0	0.489
4 <sup>th</sup>	Weekly Average	24.2	51.9	5.3	11.3	0.401
LOCATION : Near Fuel Storage Tank						
Name of Week	Particulars	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
1 <sup>st</sup>	Weekly Average	30.4	69.0	7.8	12.3	0.610
2 <sup>nd</sup>	Weekly Average	32.4	68.3	7.6	13.0	0.531
3 <sup>rd</sup>	Weekly Average	27.1	63.1	6.7	12.9	0.599
4 <sup>th</sup>	Weekly Average	24.8	52.3	5.3	11.9	0.457

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

Annexure - II

Month - October 2021 to December 2021

S.NO.	UNIT STACK ATTACHED WITH PCE (POLLUTION CONTROLLING EQUIPMENT)	PM CONC. (mg/Nm <sup>3</sup> )		
		Oct-21	Nov-21	Dec-21
1	Unit - I (1X660 MW) - ESP	42.87	43.83	46.16
2	Unit - II (1X660 MW) - ESP	42.26	43.05	44.90

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Annexure - III

QUARTERLY ETP TREATED WATER (RO PERMEATE) ANALYSIS REPORT

Period : October - 2021 to December - 2021

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value		
			Oct-21	Nov-21	Dec-21
1	pH (at 25°C Temp.)	5.5 - 9.0	7.62	7.83	7.69
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	4.04	4.10	3.80
5	O & G (mg/l)	10	Nil	Nil	Nil
6	TDS (mg/l)	2100	11.0	12.9	13.6
7	Chlorides (mg/l)	1000	2.81	2.45	3.57

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Annexure - IIIA

QUARTERLY STP TREATED WATER ANALYSIS REPORT

Period : October - 2021 to December - 2021

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value (STP - 100 KLD)			Observed value (STP - 1000 KLD)		
			Oct-21	Nov-21	Dec-21	Oct-21	Nov-21	Dec-21
1	pH (at 25°C Temp.)	6.5 - 9.0	7.19	7.16	7.25	7.42	7.37	7.48
2	S.S (mg/l)	100	8.2	7.0	12.0	11.3	14.0	16.0
3	BOD (mg/l) 3rd days at 27°C	30	5.2	6.0	6.8	12.8	17.0	14.0
4	COD (mg/l)	250	32.4	40.9	58.6	105.1	92.1	80.0
5	O & G (mg/l)	10	1.42	1.30	1.47	1.70	2.30	2.10

For Jaypee Nigrie Super Thermal Power Plant

  
Authorized Signatory  
