

## 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/2022/02

Date-06.10.2022

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 herewith Ambient Air Quality, Stack Emission Monitoring, ETP Treated Water (RO Permeate) & STP Treated Water Analysis Reports for the Quarter (July, 2022-September, 2022) 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.)

**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: July - 2022

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	24.0	51.6	5.9	10.4	0.391
2 <sup>nd</sup>	Weekly Average	27.9	54.0	7.0	13.0	0.477
3 <sup>rd</sup>	Weekly Average	24.5	46.1	6.1	10.3	0.373
4 <sup>th</sup>	Weekly Average	19.0	41.2	5.5	9.2	0.305
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	29.8	55.4	8.2	13.8	0.539
2 <sup>nd</sup>	Weekly Average	37.8	58.9	7.6	14.4	0.559
3 <sup>rd</sup>	Weekly Average	26.5	53.2	7.1	11.2	0.475
4 <sup>th</sup>	Weekly Average	27.2	52.5	8.1	12.4	0.441
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	26.9	56.4	7.3	12.8	0.569
2 <sup>nd</sup>	Weekly Average	31.0	67.5	8.7	15.4	0.604
3 <sup>rd</sup>	Weekly Average	29.8	59.2	7.0	12.0	0.444
4 <sup>th</sup>	Weekly Average	26.1	52.0	6.0	11.2	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	32.8	63.6	7.7	12.2	0.620
2 <sup>nd</sup>	Weekly Average	40.5	62.0	9.9	16.0	0.682
3 <sup>rd</sup>	Weekly Average	28.2	57.3	6.5	11.8	0.469
4 <sup>th</sup>	Weekly Average	26.5	51.8	7.6	10.7	0.510

For Jaypee Nigrie Super Thermal Power Plant

*Wajid*  
Authorized Signatory

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

MONTH: August - 2022

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	20.5	43.7	5.5	11.1	BLQ (LOQ-0.50)
2 <sup>nd</sup>	Weekly Average	16.0	41.9	5.9	10.0	0.58
3 <sup>rd</sup>	Weekly Average	15.2	39.5	5.7	10.5	0.55
4 <sup>th</sup>	Weekly Average	16.4	38.2	5.2	11.3	BLQ (LOQ-0.50)
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	23.4	50.2	6.8	11.4	0.53
2 <sup>nd</sup>	Weekly Average	24.0	51.1	6.1	10.4	0.54
3 <sup>rd</sup>	Weekly Average	19.5	43.5	5.7	12.2	BLQ (LOQ-0.50)
4 <sup>th</sup>	Weekly Average	18.4	48.0	6.5	11.6	0.55
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	22.4	50.8	5.5	10.6	0.53
2 <sup>nd</sup>	Weekly Average	20.2	53.0	7.0	13.3	0.61
3 <sup>rd</sup>	Weekly Average	18.0	45.5	6.0	11.5	0.57
4 <sup>th</sup>	Weekly Average	21.5	46.4	6.5	13.1	BLQ (LOQ-0.50)
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	25.9	55.5	7.0	13.6	0.56
2 <sup>nd</sup>	Weekly Average	22.7	51.7	7.5	11.7	0.57
3 <sup>rd</sup>	Weekly Average	20.8	48.4	5.9	10.8	0.60
4 <sup>th</sup>	Weekly Average	19.5	47.5	7.2	12.3	BLQ (LOQ-0.50)

\*BLQ - Below Limit of Quantification, LOQ - Limit of Quantification

For Jaypee Nigrie Super Thermal Power Plant

  
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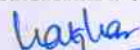
AMBIENT AIR QUALITY MONITORING REPORT

MONTH: September - 2022

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	17.3	43.3	5.4	9.9	BLQ (LOQ-0.50)
2 <sup>nd</sup>	Weekly Average	17.1	41.5	5.7	11.0	0.52
3 <sup>rd</sup>	Weekly Average	17.8	42.6	6.2	11.9	BLQ (LOQ-0.50)
4 <sup>th</sup>	Weekly Average	20.3	48.2	7.0	12.7	0.53
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	20.7	45.8	6.7	11.9	0.55
2 <sup>nd</sup>	Weekly Average	26.3	55.3	8.1	13.9	BLQ (LOQ-0.50)
3 <sup>rd</sup>	Weekly Average	23.0	48.5	6.8	11.1	BLQ (LOQ-0.50)
4 <sup>th</sup>	Weekly Average	26.8	55.7	8.0	15.0	0.51
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	19.1	49.9	5.9	11.7	BLQ (LOQ-0.50)
2 <sup>nd</sup>	Weekly Average	18.4	45.0	5.5	11.3	0.51
3 <sup>rd</sup>	Weekly Average	21.6	48.8	6.4	13.6	0.55
4 <sup>th</sup>	Weekly Average	25.1	55.1	7.3	12.3	BLQ (LOQ-0.50)
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	21.6	48.8	7.7	13.7	0.60
2 <sup>nd</sup>	Weekly Average	20.8	47.7	6.3	12.9	0.50
3 <sup>rd</sup>	Weekly Average	25.3	56.5	6.6	14.2	0.53
4 <sup>th</sup>	Weekly Average	27.6	57.1	8.4	16.1	0.54

\*BLQ - Below Limit of Quantification, LOQ - Limit of Quantification

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

Annexure - II

Month - July 2022 to September 2022

S.NO.	UNIT STACK ATTACHED WITH PCE (POLLUTION CONTROLLING EQUIPMENT)	AVG. DUST CONC. (mg/Nm <sup>3</sup> )		
		Jul-22	Aug-22	Sep-22
1	Unit - I (1X660 MW) - ESP	38.76	41.03	37.50
2	Unit - II (1X660 MW) - ESP	35.95	41.55	35.43

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Annexure - III


QUATERLY ETP TREATED (RO - Permeate) WATER ANALYSIS REPORT

Period : July - 2022 to September - 2022

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value		
			Jul-22	Aug-22	Sep-22
1	pH (at 25°C Temp.)	5.5 - 9.0	7.04	7.59	7.46
2	SS (mg/l)	100.0	NIL	*BLQ(LOQ-1.0)	*BLQ(LOQ-1.0)
3	BOD (mg/l) 3rd days at 27°C	30.0	NIL	*BLQ(LOQ-2.0)	*BLQ(LOQ-2.0)
4	COD (mg/l)	250.0	6.40	7.36	8.00
5	Oil & Grease (mg/l)	10.0	NIL	*BLQ(LOQ-0.40)	*BLQ(LOQ-0.40)
6	TDS (mg/l)	2100.0	13.6	12.0	14.0
7	Chlorides (mg/l)	1000.0	3.37	3.18	2.98

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Annexure - IIIA

QUARTERLY STP TREATED WATER ANALYSIS REPORT

Period : July - 2022 to September - 2022

Sr. No.	Testing Parameters	Norms as per MPPCB	Observed value (STP - 100 KLD)			Observed value (STP - 1000 KLD)		
			Jul-22	Aug-22	Sep-22	Jul-22	Aug-22	Sep-22
1	pH (at 25°C Temp.)	6.5 - 9.0	7.16	7.31	7.73	7.48	7.56	7.28
2	S.S (mg/l)	100.0	16.0	18.0	19.0	19.0	24.0	31.0
3	BOD (mg/l) 3rd days at 27°C	30.0	8.0	7.0	8.0	12.0	14.0	17.0
4	COD (mg/l)	250.0	48.0	44.8	57.6	73.6	80.0	86.5
5	Oil & Grease (mg/l)	10.0	1.72	2.00	1.20	2.40	2.20	2.10

For Jaypee Nigrie Super Thermal Power Plant

  
Authorized Signatory