JAYPEE NIGRIE SUPER THERMAL POWER PLANT

POWER VENTURES LIMITE

A DIVISION OF JAIPRAKASH POWER VENTURES LIMITED

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







QUALITY

ENVIRONMENT

HEALTH & SAFETY

JNSTPP/ EC/ MoEF/ 2020-21/22

18th May 2021

To

Additional Principal Chief Conservator of Forests (C),

Ministry of Env., Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal - 462016

Sub: Submission of Half Yearly Environmental Clearance Compliance Report of Jaypee Nigrie Super Thermal Power Project (A Division of Jaiprakash Power Ventures Limited) of 2x660 MW Coal Based Super Critical Thermal Power Plant and 4.0 MTPA Cement Grinding Unit at Village Nigrie, Tehsil Sarai, Singrauli Dist. in Madhya Pradesh.

Sir,

With reference to the above mentioned subject we are submitting the compliance report to stipulated conditions of E.C. in hard and soft copy for the period (Oct. 2020 - March 2021) of Jaypee Nigrie Super Thermal Power Project, EC reference nos.: J-13012/223/2007-IA-II (T) dated 25.02.2010 and its amendment dated 13.07.2012 for the JNSTPP (2x660 MW) & JNCGU (4.0 MTPA) for your kind records please.

Thanking You Yours Faithfully For Jaypee Nigrie Super Thermal Power Project (A Division of Jaiprakash Power Ventures Ltd.)

Vinod Sharma

Sr. President (O & M)

Encl. - As above

CC to:

- The Regional Directorate (Central), Central Pollution Control Board, 3rd Floor, Sahkar Bhawan, 1. North T.T Nagar, Bhopal- 462003
- The Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5 Area 2. Colony, Bhopal - 462016, Madhya Pradesh
- Regional office MP Pollution control board, Bhakuar, Naugarh, Singrauli 486 887 (M.P.) 3.

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



Half - Yearly Compliance Report Of

Environmental Clearance Period: October 2020 - March 2021

Of

M/s Jaiprakash Power Ventures Ltd.

2 x 660 MW Jaypee Nigrie Super Thermal Power Plant &

2.0 MTPA (Installed) Jaypee Nigrie Cement Grinding Unit At

(V) Nigrie, (T) Sarai, (D) Singrauli, Madhya Pradesh

Submitted To:

Regional Office, Western Zone
Ministry Of Environment, Forest & Climate Change

Zonal Office, Central Pollution Control Board, Bhopal & Madhya Pradesh Pollution Control Board, Bhopal

JAIPRAKASH POWER VENTURES LIMITED 1320 MW Coal based Thermal Power Project

21st Half Yearly Environmental Compliances statement of the stipulation of MoEF

EC Letter No.:- **J-13012/223/2007-IA.II** dated 25.02.2010 and Subsequent amendment in Environmental Clearance vide Letter No.**J-13012/223/2007-IA.II** (**T**) Dated 13.07.2012

	Terms and	
Clause	Conditions	
No.	Description as per EC	Compliance Status report
1101	letter	
i.		Our R&R plan has been submitted to the Regional Office of the Ministry
	Clearance is subject to	vide our letter No. JPVL/JNSTPP/MOEF/2010 dated 20th January 2011.
	submission of	viae our letter 110. jr 12/jr 1011 1/11021/2010 dated 2011 juridary 2011.
	complete details of R	It was subsequently modified incorporating suggestions of MoEF and was
	& R action plan (as	resubmitted vide letter no JPVL/JNSTPP/MOEF/2011 dated 29.06.2011.
	applicable) with time	resubilitied vide letter no. 31 v E/3/(0111/MOEI/2011 dated 22.00.2011.
	schedule for	
	implementation to the	
	Regional Office of the	
	Ministry and the	
	Competent Authority	
	in the state govt. The	
	details shall include	
	name of head of	
	family wise details,	
	the area of homestead	
	land and other land to	
	be acquired and the	
	compensation	
	paid/proposed to be	
	paid etc. The time	
	schedule of	
	implementation shall	
	be given.	
ii.		Hydrogeological study of the Jaypee Nigrie Super Thermal Power Plant,
	study of the area shall	Nigrie is being carried out every year by an independent agency M/s
	be reviewed annually	Hydro-geosurvey Consultants Pvt. Ltd, Jodhpur, Rajasthan a National
	and results submitted	Accreditation Board for Education and Training (NABET) Accredited &
	to the Ministry and	Quality Council of India (QCI) Accredited agency and reports are being
	concerned agency in	submitted to concerned departments timely.
	the State Govt. In case	
	adverse impact on	The last study report was submitted in August 2020.
	ground water quantity	
	& quality is observed,	Water level check from existing peizometer wells being carried out
	immediate mitigating	monthly.
	steps to contain any	
	adverse impact on	Periodic review is being done. Quality of ground water is being
	ground water shall be	monitored in and around the plant premises. Ground water level in
	undertaken.	nearby villages is also being monitored to know the seasonal fluctuations.

		There is no adverse impact found in the quality & quantity of Ground Water.
iii.	Minimum required environmental flow suggested by the competent authority of the State Govt. shall be maintained in the Channel/Rivers even in lean season. It shall be ensured that natural drainage in the region is not disturbed due to activities associated with operation of the plant.	Being Complied, The Water Resource Department, Government of Madhya Pradesh has permitted JPVL to draw 42 MCM of water from Gopad River for Thermal Power Project. The Minimum recommended discharge is being released in the River during lean period (Summer Season from March to June). On the basis of Hydro geological studies, it shows that the River flow in the month of June, in last 8 years ranges from 1.798 cumecs (m3/sec) minimum to 2.97 cumecs (m3/sec) maximum, which is substantially more than minimum recommended flow of 0.50 cumecs (m3/sec). The lean flow of Gopad river and its tributaries could not be measured in the last week of May, 2020, as the team which used to measure the lean flow could not visit the area due to lock down effective from 24th March, 2020. Natural Drainage in the region is not being disturbed due to the activities associated with the operation of the plant. The Project is not obstructing the flow of River Gopad; The natural drainage of the region is not being affected.
iv.	A stack of 275 m height (Bi-flue) shall be provided with continuous online monitoring equipments for SOx, NOx and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.	Bi-flue Stack of 275 m height is installed with Online monitoring equipments for PM, SO ₂ , NOx & Hg. The exit velocity of flue gases is more than 25.0 m/sec as stipulated. Mercury measurement is also being done through online analyzers.
v.	F	Two stacks of 55m each with exit velocity not less than 10 m/s have been installed with Online monitoring equipments for PM in Cement Grinding Unit. 2 nos. of Bag Houses attached to Cement Mills (Roll Press & Ball Mill) with guaranteed emission level of <30 mg/Nm3 at full load. Each Bag House has 1188 & 780 bags respectively.
vi.	Fugitive emission in the Grinding Unit shall be controlled and	To control fugitive emissions all raw material conveying belts are covered. Cyclones followed by bag filters are provided at all transfer points. Additionally, mobile water sprinklers are deployed in Grinding Unit area

	data on fugitive emission shall be maintained in a log book and duly signed by the Head, Environment on a daily basis.	to suppress fugitive dust while movement of vehicles on haulage roads.
vii.	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to	Highly efficient BHEL make Electro Static Precipitators (ESPs) with efficiency of 99.95%, have been installed for each boiler to meet particulate emission less than 50 mg/Nm3.
	ensure that particulate emission does not exceed 50 mg/Nm3.	Online Continuous Emission Monitoring System is installed to Monitor Emissions for both boiler stacks and data is being transmitted to MPPCB & CPCB servers on real time basis and the results are within the Norms.
		For stack (Unit-I) average concentration of PM is 43.09 mg/Nm3, maximum concentration is 49.66 mg/Nm3 & the minimum concentration is 34.46 mg/Nm3 during Oct 2020 – March 2021.
		For stack (Unit-II) average concentration of PM is 44.03 mg/Nm3, maximum concentration is 48.82 mg/Nm3 & the minimum concentration is 37.72 mg/Nm3 during Oct 2020 – March 2021.
viii.	Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as in coal	Adequate Air Pollution Control measures such as Dust Extraction System (Cyclone followed by Bag Filters) in coal crusher house and coal transfer points, Jet Sprinkler type Dust Suppression System in coal yard and Dry Fog type Dust Suppression System in belt conveyors have been provided. A) 2 numbers of Dust Extraction Systems in Crusher House are Bag house type with Constitute 44 (200 mg 3.1 may have at Para house for each Parallel.
	handling and ash handling points, transfer areas and other vulnerable dusty areas shall be	type with Capacity 46,000 m³, 1 number of Bag house for each Bunker (Unit #1 & 2) with Capacity 41,000 m³ B) Dust Suppression systems are installed in Track Hopper for all 4 Paddle Feeders, for rake unloading at track hopper & for Emergency
	provided.	reclaiming hopper.
		C) Jet Sprinkler type Dust Suppression System is installed in Coal Yard area for Bucket wheel stacker cum reclaimer.
		D) Dry Fog Dust Suppression system installed at all transfer points.
		Elaborate dust extraction & dust suppression system have been incorporated in the design of ash handling plant.
		One number of Dust extraction systems in Intermediate Silo is Bag Filter type in each Unit, one number of Bag Filter for each Coarse Ash Surge Hopper (Unit #1 & 2) and two bag filters at Main Fly Ash Silo have been installed.
ix.	Utilization of 100 % Fly ash generated shall be made from 4th year of operation of the plant. Status of	100.04 % of Fly Ash has been utilized during April 2020 to March 2021 as per MoEF & CC Notification No. 763 (E) dated September 14, 1999, notification No. 2804 (E) dated November 03, 2009 and S.O.254 (E) dated January 25, 2016 for fly ash utilization.
	Plant. Status Of	

	implementation shall be reported to the regional Office of the Ministry from time to time.	Status of Implementation is being reported to Authorized Regulatory Boards regularly.
x.		Compliance assured. We have established 2 Intermediate silos with capacity 450 metric tonnes each to collect dry fly ash & a fly ash bin of 400 metric tonnes capacity for utilization of ash in cement grinding unit and a storage silo of 20,000 metric tonnes capacity for utilization of dry ash. 100.04 % of Fly Ash has been utilized during April 2020 to March 2021 as per MoEF & CC Notification No. 763 (E) dated September 14, 1999, notification No. 2804 (E) dated November 03, 2009 and S.O.254 (E) dated January 25, 2016 for fly ash utilization. Bottom ash is being disposed off in the ash pond in lean Slurry Disposal mode with ash to water ratio typical 1:2.8, with 100% recirculation of ash water. Regular monitoring of heavy metals is being carried out Half Yearly.
xi.	Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media such that no	Design of Ash Pond has been done by M/s Development Consultants Pvt. Ltd. (DCPL) a renowned designing agency. M/s DCPL drawing has been submitted to MPPCB vide letter no. JPVL/COORD/POLL/2013-14 dated January 21, 2014. The drawing No. is K6A24–DWG-C-595 Rev. 4. The Ash Dyke has been constructed with upstream & downstream slopes (1V:2H). Ash Dyke has been constructed with HDPE lining on inner side and over that PCC (75mm) layer has been provided to protect it and eliminates any possibility of breach of embankment. Ash Pond is built over an area of 21.2 ha and is consisting of two ponds & equipped with 100% Ash Water Recirculation facility to prevent any ash mixed water discharge to outside. The Ash Dyke is situated within intact boundary wall of Power Plant.
xii.	For disposal of Bottom Ash (if proposed to be undertaken) in abandoned mines it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall	Not applicable, as presently bottom ash is not disposed in any abandoned mines.

xiii.	inform the state Pollution Control Board well in advance before undertaking the activity. Closed Cycle Cooling System with natural draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.	Cooling To adequately Clarifier (H and Reverse	wers I to mee RSCC e Osmo ter and n in Co	has beer of the pre osis (RO) d HVAC al Handl	provid scribed r Media Fi system system. ing Plan	ed. The norms thi lter (DM and reus The RO	blow do cough Hi (F), Ultra ed in Coo reject w	own is by gh Rate State	Natural Draft being treated Solid Contact on Unit (UF) wer Makeup, sed for Dust
		Month	рН	SS (ppm)	TDS (ppm)	COD (ppm)	BOD (ppm)	O&G (ppm)	Chlorides (ppm)
		0.120	7.00						
		Oct-20 Nov-20	7.33 7.57	NIL NIL	11.80 13.10	3.96	NIL NIL	NIL NIL	2.91
		Dec-20	7.74	NIL	10.60	4.60 3.60	NIL	NIL	1.99
		Jan-21	7.74	NIL	12.90	3.70	NIL	NIL	2.66
		Feb-21	7.55	NIL	13.60	3.40	NIL	NIL	3.12
		Mar-21	7.60	NIL	18.00	3.92	NIL	NIL	4.40
xiv.	conforming to the prescribed standards only shall be recirculated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.	being reused implemented Separate dra Upstream & monitored.	d with	in the pla	establis	concept of the concep	of "Zero I torm wat	Discharg er.	ated water is e Condition" s also being
xv.	O	0							water reused
	plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	suitably wit	D SEW	AGE AN	NALYSIS	5 (1000 K Oct 2020	LD STP	in Town	ship Area)
		Month	pН	SS		COD	ВО		O & G
			ļ <u>-</u>	(ppr		(ppm)	(pp	1	(ppm)
		Oct-20	7.15	-		98.7	14		1.93
		Nov-20	7.42	-		91.6	11	-	2.12
		Dec-20	7.33	3 19.	2	96.4	15	.0	2.32

		Jan-21	7.39	14.4	93.3	10.2	1.85
		Feb-21	7.32	16.2	96.8	9.4	1.52
		Mar-21	7.28	13.9	99.40	9.9	1.65
		TREAT			ALYSIS (100 F l of Oct 2020 –		lant Area)
		Month	рН	SS	COD	BOD	O & G
		Wionth	PII	(ppm)	(ppm)	(ppm)	(ppm)
		Oct-20	7.41	7.80	40.8	4.0	1.46
		Nov-20	7.63	6.40	52.4	5.6	1.21
		Dec-20	7.85	9.0	50.8	8.8	1.77
		Jan-21	7.48	7.5	63.8	7.2	1.42
		Feb-21	7.66	8.7	58.5	7.9	1.24
		Mar-21	7.53	9.5	60.3	8.7	1.30
	finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.		the gro	~ -	in the townsh r table and to	•	
xvii.	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially	supporting t safety measu Mock drills a Fire hydrant	the requires to take to the tree being and wa	uirements in the prevent of the prev	team are in perent of the neighborstoot control med periodically. Sprinklers established of Jaypee	oring villages easures. ablished in the	with adequ

the

of the Ministry.

Storage facilities

such as LDO

auxiliary liquid fuel

HFO/LSHS shall be

made in the plant area

in consultation with

Department

for

and

xviii.

The design of the plant meets the requirements. Storage facilities for

auxiliary liquid fuel are made in the plant area and license obtained from

Validity of license No. P/HQ/MP/15/2876(P311713) from Deputy Chief

Controller of Explosives, Bhopal for Petroleum Class C (LDO & HFO) in

Department of Explosives, Nagpur/Bhopal.

bulk installation is up to 31st December 2022.

Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan has been approved by Director, Industrial Health and Safety, M.P., vide. OSEP NC: RE01121811507294, Indore Dated: 28/01/2019. This plan covers all type of exportance of the meet any eventuality in case of an accident taking place due to storage of oil. xix. Regular monitoring of ground water level Monthly) monitoring of ground water level Monthly) monitoring of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg. Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project. xx. Green belt consisting of 3 iters of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width shall be raised. Wherever 100 m width shall be raised wherever 100 m width shall be raised wherever 100 m width shall be raised wherever 100 m width is all be raised wherever 100 m width shall be raised and adequate justification shall be raised wherever 100 m width shall be raised wherever 100 m width shall be raised and adequate justification shall be submitted to the Ministry. The data so obtained for the project. xx. Green belt consisting of 3 iters of plantations is being developed in a phased manner along the periphery of the Power Plant and Grinding Unit. xx. Green belt consisting of 3 iters of plantation is being developed in a phased manner along the periphery of the Power Plant and Grinding Unit. xx. Green belt consisting of 3 iters of plantation is being developed in a phased manner along the periphery of the Power Plant and Grinding Unit. xx. Green belt consisting of 3 iters of plantation is being develop		T	
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workers during construction phase. arrangements shall be made for the drivers and other contract workers during construction phase. xxii. Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like ear plugs/ear muffs etc shall be provided. Workers engaged in noisy area such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment of any hearing loss including shifting to non only /less noisy areas. xxiii. Regular monitoring of control near any stage these levels are found to exceed the prescribed under control near any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations			
areas. **xiii.** Regular monitoring of Ground level concentration of SO2, NOx, RSPM and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations **Assii.** Regular monitoring of Ground level (Manual/ Offline) during operational phase is being carried or regularly. **In case of any exceedance, necessary control measures are ensured. **Four Continuous Ambient Air Quality Monitoring Stations (Onlin Real Time) are provided along the boundary considering the wir rose/wind directions and the data of the CAAQMS, CEMS are CEQMS is connected with MPPCB server at Bhopal & CPCB server Delhi. **Compliance on EC conditions including results of monitoring data being uploaded in company web site along with EC Compliance Report and displayed at the main gate of the company.		sanitation arrangements shall be made for the drivers and other contract workers during construction phase. Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like ear plugs/ear muffs etc shall be provided. Workers engaged in noisy area such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment of any hearing loss including shifting to	Site sanitation and housekeeping is maintained regularly. 10 beds Hospital at site is equipped with all required facilities for First Aid. Complied, the steam turbines (ST) are enclosed in the building and acoustic enclosures are provided to minimize noise from these machines. All The equipments are provided with acoustic hoods to control noise. The ambient noise levels are well below 75 dBA (day time) and 70 dBA (night time) as prescribed under EPA rule, 1986. Ambient noise levels in and around the Plant area are monitored monthly. Noise levels are well under the limit. All safety items like Ear muffs, Ear Plugs are provided to all the workers & employees and made mandatory. Periodic audiometric check up is
monitoring shall be on the website of the company.	xxiii.	Regular monitoring of Ground level concentration of SO ₂ , NOx, RSPM and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of	 (Manual/ Offline) during operational phase is being carried out regularly. In case of any exceedance, necessary control measures are ensured. Four Continuous Ambient Air Quality Monitoring Stations (Online/ Real Time) are provided along the boundary considering the wind rose/wind directions and the data of the CAAQMS, CEMS and CEQMS is connected with MPPCB server at Bhopal & CPCB server at Delhi. Compliance on EC conditions including results of monitoring data is being uploaded in company web site along with EC Compliance Report and displayed at the main gate of the company. Quarterly Environmental Monitoring Reports are also made available

consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.

- ➤ Regular monitoring of PM10, PM2.5, SO₂ & NO₂ and CO is being carried out as per frequency & monitoring results are well within the norm.
- Offline Monitoring results are being submitted to MPPCB quarterly.
 AAQM Results

For the period of Oct 2020 – March 2021

LOCATION : Near STP - Colony area						
	SO ₂ (μg/m3)	NO ₂ (μg/m3)	PM10 (μg/m3)	PM2.5 (μg/m3)	CO (mg/m3)	
Minimum	4.2	10.5	38.5	15.8	0.368	
Maximum	6.4	12.5	48.5	22.3	0.449	
Average	5.5	11.3	43.6	19.6	0.414	
	L	OCATION : Ne	ar H2 Gas cylind	er shed		
	SO ₂ (μg/m3)	NO ₂ (μg/m3)	PM10 (μg/m3)	PM2.5 (μg/m3)	CO (mg/m3)	
Minimum	6.8	12.7	51.7	24.2	0.470	
Maximum	9.8	14.2	60.8	30.4	0.567	
Average	8.2	13.5	56.3	27.2	0.535	
	LOCA	TION : Near Wa	tch tower 22 (Gr	inding Unit)		
	SO ₂ (μg/m3)	NO ₂ (μg/m3)	PM10 (μg/m3)	PM2.5 (μg/m3)	CO (mg/m3)	
Minimum	6.6	11.9	55.2	25.6	0.508	
Maximum	7.9	14.9	68.0	33.4	0.603	
Average	7.4	14.0	61.6	29.6	0.549	
LOCATION : Near fuel storage tank						
	SO ₂ (μg/m3)	NO ₂ (μg/m3)	PM10 (μg/m3)	PM2.5 (μg/m3)	CO (mg/m3)	
Minimum	7.2	13.4	59.3	28.8	0.564	
Maximum	8.5	14.8	68.9	37.6	0.634	
Average	7.8	14.2	64.6	31.8	0.591	

R & R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R & R policy within three

xxiv.

xxv.

A good action plan for

The report has been submitted to MoEF & CC on 20^{th} Jan 2011 vide our letter No. JPVL/JNSTPP/MoEF/2010.

It was subsequently modified incorporating suggestions of MOEF and was resubmitted vide letter no. - JPVL /JNSTPP/MoEF/2011 dated 29.06.2011.

An amount of Rs. 24.0 crores shall be earmarked as one time capital cost for CSR programme.

Subsequently a recurring expenditure of Rs. 4.8 Crore per

shall

be

months from the date of issue of this letter.

- A separate budget earmarked for CSR activities. CSR study report already submitted to the ministry vide letter no. JPVL/JNSTPP/MOEF/2010 dated 20.01.2011 and 29.06.2011.
- For CSR activities capital outlay of more than Rs. 24 crores has been made.
- > The company is carrying out CSR activities in the vicinity of the Project as per the directions and guidance of the District

annum

earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be **submitted within one month** along with road map for implementation.

Administration.

- ➤ Providing drinking water facility benefitting to the nearby villages (Nigrie, Niwas, katai & Hardi & Mahua Ganv and Chamrach and Joba).
- ➤ Unit is also investing on CSR Activities on Rural Development Projects like conducting Medical camps in villages (Nigrie, Niwas, katai & Hardi & Mahua Ganv and Chamrach), Plantation programs (Nigrie, Niwas, katai & Hardi & Mahua Ganv and Joba), Road development activities (Nigrie), women empowerment & providing furniture/building material to local offices (Govt. Office, School), Promotion of Safety/Cultural/ sports in Rural Areas/villages & providing Medicine Distributed to nearby Villagers Construction of Temples in Papal Gaon, katai, Niwas & Restoration of Ponds in Katai, Niwas, Nigrie & Contribution of Diasaster Management (Groceries Distributed) and Promoting Education through Sardar Patel School under Jaiprakash Sewa Sansthan & Jay Jyoti School under Jaiprakash Sewa Sansthan & Gopad Viklang Sikasha Vikas Samiti, Village-Katai.
- ➤ Construction of Kitchen Shed in Gopad Viklang Sikasha Vikas Samiti,Village-Katai.
- ➤ Hand Pumps repaired in Nigrie, katai Villages.
- ➤ Maintenance of Borewell at Village, Nigrie.
- ➤ Total expenditure incurred up to March, 2021 is Rs 4.967 Crores.

xxvi.

CSR As part programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in up liftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate

Based on Need Base Assessment Study for development of nearby villages, an action plan was worked out for income generating projects for up-liftment of poor section of society.

The following activities were undertaken:

- ➤ Sardar Patel Uchchtar Madhyamik Vidyalaya started for up to class five w.e.f. July, 2011 and subsequently upgraded up to 10th class in July'2016 session.
- > Free Education & Free Mid Day Meals provided to the children of affected village Nigrie & Sardar patel School, Nigrie.
- Free Health Check Up & Health cards provided to the 245 students.
- ➤ Roads have been laid down in Nigrie Village & free electricity supply to the Street Lights is provided in R & R Colony.
- Undulated land in the Primary School, Nigrie has been converted into Play Ground.
- > Restoration & Refurbishment of water reservoirs & ponds taken

budget for community

development activities and income generating programmes. This will be in addition to vocational training for individuals imparted take up self employment and jobs.

place in nearby villages (Ram Sagar Talab).

- ➤ Providing Mobile Hospital & Ambulance Service to affected villages (Nigrie, Niwas, katai & Hardi & Mahua Ganv and Chamrach and Joba).
- An Average of 3453 patients are being benefited every month by the Primary Health Center.
- A Dispensary was also setup in R & R colony. An Average of 643 patients are being benefited every month.
- > "Trasform Singrauli" Project under Indian government and MP Government:-
 - 1. Expenditure incurred under "Disaster Management" during COVID -19 Pandemic Lockdown is 3.56 Lakhs.
 - 2. Groceries distributed in the vicinity of the project area Due to COVID -19 Pandemic Disease.
 - 3. 5000 Nose Masks have been distributed in the villages nearby the project area to protect villagers from COVID -19 Pandemic Disease.
 - 4. Established/Started Kuteer Udyog, Training Center for Stitching and honey bee keeping.

> Swatch Bharath Mission:-

- 1. 2500 Fruit Yielding plants have been planted through Gram Panachayath in 6 villages.
- 2. Provided Utensil (Bartan) for Gopad Viklang Samiti.
- 3. Construction of Public toilet in Nigrie Village.

xxvii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care. crèche etc. The housing may be in the form of temporary structures to be after the removed completion of the Labour hutments had been established & developed with all required amenities like toilet, drinking water & infrastructure like internal road etc.

	project.	
xxviii.	* '	As mandated, We have informed the public through the local newspaper
XXVIII.	1 / 1 1	
	shall advertise in at	announcements in vernacular language that the project has been accorded
	least two local	environmental clearance by the ministry and copies of the clearance letter
	newspapers widely	are available with state pollution control board and may also seen at
	circulated in the	website of the MoEF at http:/envfor.nic.in.
	region around the	
	project, one of which	
	shall be in the	
	vernacular language	
	of the locality	
	concerned within	
	seven days from the	
	date of this clearance	
	letter, informing that	
	the project has been	
	accorded	
	environmental	
	clearance and copies	
	of clearance letter are	
	available with the	
	State Pollution Control	
	Board/Committee and	
	may also be seen at	
	Website of the	
	Ministry of Environment and	
	Forests at http://envfor.nic.in.	
xxix.		Copy of EC accorded has been sent to local panchayat & Zila parishad.
*****	A copy of the clearance letter shall	We have uploaded our EC in our company website.
	be sent by the	we have apposited our Le in our company website.
	J	
	proponent to concerned Panchayat,	
	Zila Parishad/	
	· ·	
	Municipal	
	corporation, Urban	
	Local Body and the	
	local NGO, if any from	
	whom suggestions/	
	representations, if any,	
	received while	
	processing the	
	proposal. The	
	clearance letter shall	
	also be put on the	
	website of the	
	company by the	
	proponent.	
xxx.	1	We have formed a separate full-fledged Environment Management Cell
	Environment	headed by Vice President, & supported by Dy. General Manager &
	Management Cell with	Environment Officer and Chemists of laboratory and Technician for
		Dago 12 of 19

	qualified staff shall be	implementation and compliance.
	set up for	
	implementation of the	
	stipulated	
	environmental	
	safeguards.	
xxxi.	•	Complied, We are regularly sending six monthly compliance reports to
	upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional	MOEF & CC Regional Office, CPCB Zonal Office and SPCB every 6 monthly, The same has been sent by email also. Six monthly Compliance on EC conditions including results of monitoring data is being uploaded on company's website and we have also made available ambient air quality levels as well as stack emissions from both units in LED Display in front of the main gate.
	Office MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emission) shall be displayed as a convenient location near the main gate of the company in the public domain.	
xxxii.	The project proponent shall also submit six monthly reports on	Complied, six monthly compliance reports are regularly submitted to MoEF, CPCB & MPPCB.
	the status of	The same is also being sent by email.
	compliance of the	
	stipulated EC conditions including results of monitored data (both in hard copies as well by email) to the respective Regional Office of MoEF, the respective	Last compliance report had submitted on 26 th Oct 2020 for the period of April-2020 to September-2020 vide our letter no: JNSTPP / EC / MoEF/2020-21/21 dated 26 th Oct 2020. It is uploaded on the website of the company.
	Zonal Office of CPCB	
	and the SPCB.	
xxxiii.	The environment statement of each financial year ending 31st March in Form-V as is mandated to be	Compliance assured, Submitted Environmental Statement in Form- V to the State Pollution control Board authorities on 28 th May 2020 for the financial year 2019 -20 vide letter no. JVPL/EC/ES/2019 -20 dated May 27 th , 2020. It is uploaded on the website of the company.
	submitted by the	

	remained	
	project proponent to	
	the concerned state	
	pollution control	
	board as prescribed	
	under the	
	Environment	
	(Protection) Rules,	
	1986, as amended	
	subsequently, shall	
	also be put on the	
	website of the	
	company along with	
	status of compliance of	
	EC conditions and	
	shall also be sent to	
	the respective	
	Regional Offices of the	
	Ministry by e-mail.	
xxxiv.	The project proponent	Being complied, six monthly Environmental Clearance compliance status
	shall submit six	report is regularly submitted to MoEF, CPCB and SPCB.
	monthly reports on	
	the status of the	Compliance status updated on Company's website.
	implementation of the	compliance survive up autient on company o websites
	stipulated	
	*	
	environmental	
	safeguards to the	
	Ministry of	
	Environment and	
	Forests, its Regional	
	Office, Central	
	Pollution Control	
	Board and State	
	Pollution Control	
	Board. The project	
	1 ,	
	1 1	
	upload the status of	
	compliance of the	
	environmental	
	clearance conditions	
	on their website and	
	update the same	
	periodically and	
	simultaneously send	
	the same by email to	
	the Regional Office,	
	- C	
	· J	
	Environment and	
	Forests.	
xxxv.	U	Will be complied with, Six monthly Environmental Clearance compliance
	Ministry of	status report is regularly submitted to MoEF, CPCB and SPCB.
	Environment &	Compliance status updated on Company's website.
	Forests will monitor	
L		

the implementation of stipulated the conditions. complete of set documents including Environmental Impact Assessment Report Environment and Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. **Project** proponent will upload the compliance status in their website and up-date the same from time to time at least six monthly Criteria basis. pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.

Display board installed in front of main gate.

Results are being displayed at Main gate of the plant.

Complied, Dedicated fund has already been allocated and being utilized Separate funds shall for Environmental Protection Measures i.e., Low NOx Burners, be allocated for implementation of Constructions of 275m Stack with CEMS, protection from Noise, Effluent environmental Treatment, Sewage Treatment, Green Belt Development have been protection measures included in Project Capital Cost & Suppression of Fugitive Emission, along with item-wise Plantation in the periphery of the project Area, constant monitoring of the break-up. These cost pollution affects within the project area etc. are being undertaken on shall be included as regular basis. part of the project cost. The funds earmarked Recurring expenditures for the period Oct. 2020 to March 2021 is as for the environmental below: protection measures shall not be diverted Green Belt Development Rs 25,92,000/for other purposes and Maintenance cost in CHP Rs 62,69,320/-_ year -wise expenditure Operation cost in ESP 12,76,99,058/-Rs should be reported to Operation Cost of ETP Rs 1,11,93,812/the Ministry. Operation Cost of STP Rs 9,91,381/xxxvii. The project authorities Complied, The project has achieved Financial Closure on 07/05/2010. shall inform the Regional Office as well Unit- I was commissioned on 01/09/2014 & information was sent to the Ministry MPPCB vide letter No. JNSTPP/PCB/2014-15 Dated November 3, 2014. regarding the date of financial closure and Unit- II was commissioned on 24/03/2015 & information was sent to final approval of the MPPCB vide letter No. JNSTPP/PCB/2015-16 Dated May 26th, 2015. project by the concerned authorities Cement Grinding Unit was commissioned on 09/10/2014 & information and the dates of start was sent to MPPCB vide letter No. JNSTPP/PCB/2015-16 Dated May 28th, of land development 2015. work and commissioning of plant. xxxviii. Full cooperation shall Company has been fully cooperating and extending full support to the be extended to the concerned authorities. Scientists/Officers from the Ministry /Regional Office of the Ministry Bangalore/CPCB/SPCB who would be monitoring the

environmental status.

compliance

of

xxxix.	Bag house and dust	2 nos. of Bag Houses attached to Cement Mills (Roll Press & Ball Mill)		
	suppression shall be	with guaranteed emission level of <30 mg/Nm3 at full load. Each Bag		
	installed in packing	House has 1188 & 780 bags respectively.		
	area to control the			
	particulate and	To control fugitive emissions all raw material conveying belts are covered.		
	fugitive emissions.	Cyclones followed by Bag Filters are provided at all transfer points.		
		Additionally, mobile water sprinklers are deployed in Grinding Unit area		
		to suppress fugitive dust while movement of vehicles on haulage roads.		

Annexure - I

Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party:

VEL/JNSTPP/WW/02-9

M/s JaypeeNigrie Super Thermal

Power Plant

(A Division Of Jaiparkash Power Ventures Limited)Village & P.O.

Sample Description:

Sample Collected by:

Preservation:

Parameter Required: Analysis Protocol:

Nigrie, Tehsil-Sarai, Distt. Singrauli

(M.P.)

Heavy Metals

VardanEnviro Lab Representati

Refrigerated

As Per Client Requirement APHA 23rd Edition 2017

Report No .:

Format No .:

Party Reference No .:

Reporting Date:

Period of Analysis: Receipt Date:

Sampling Date: Sampling Quantity

Sampling Type:

Test Method

7.8 F-01

NIL

15/01/2021

11/01/2021-15/01

11/01/2021

09/01/2021

2.0Ltr.

S. No.	Locations	#Arsenic as As in mg/l	#Mercury as Hg in mg/l	Chromium as Cr in mg/l	Lead as Pb in mg/l
Instrument used for analysis		AAS Thermo Scientific Model No. AA 303	AAS Thermo Scientific Model No. AA 303	AAS Thermo Scientific Model No. AA 303	AAS Thermo Scientific Model No. AA 303
da <u>ı</u> .	Near ND-CT	BDL* (<0.01)	BDL*(<0.001)	BDL* (0.02)	BDL* (<0.01)
2.	Near Crusher	BDL* (<0.01)	BDL* (<0.001)	BDL*(0.01)	BDL* (<0.01)
3.	Near STP Plant in Colony	BDL* (<0.01)	BDL* (<0.001)	BDL* (0.01)	BDL* (<0.01)
4.	NearSardar Patel School	BDL* (<0.01)	BDL* (<0,001)	BDL* (0.01)	BDL* (<0.01)
5.	Near Reservoir II	BDL* (<0.01)	BDL* (<0.001)	BDL* (0.02)	BDL* (<0.01)
6.	Near Gate No.3	BDL* (<0.01)	BDL*(<0.001)	BDL*(0.01)	BDL* (<0.01)
7.	NearAwas Gate	BDL* (<0.01)	BDL* (0.001)	BDL* (0.02)	BDL* (<0.01)
8.	Near Wagon Tippler	BDL* (<0.01)	BDL* (0.001)	BDL* (0.03)	BDL* (<0.01)
Instrument Detection Limit		0.005 mg/l	0.005 mg/l	0.005 mg/l	0.005 mg/l
HX (19)	Limits of IS 10500:2012	Party Fold by Walt date	ho Eardest at Varden En	Trougray also Vary to Fee	viscal alla Vasculare
	Requirement (Acceptable Limits)	Wardal 0.01	and an E 0.001 Lab Va	Environal varianten	n Envir 0.01 i Va
ndon B	Permissible Limit in the Absence of Alternate Source	Envirol D.05	No Relaxation	No Relaxation	No Relaxation

West principle Aut to repared under our NABL scope

*BDL - Blow Detection Limit

(Checked By

LAB OREBATION

www.vardan.co.in

Note: Terms & conditions refer on backside of test report.