

JNSTPP/ EC/ MoEF/ 2016-17/13

November 25<sup>th</sup>, 2016

The Director  
Ministry of Environment, Forest & CC  
Govt. of India  
Regional Office, Western Region  
Bhopal – 462016 (M.P.)

**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 Thermal Power Plant and 2.0 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 (April 2016 – September 2016) 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 (2.0 MTPA) for your kind record please.

Thanking You

Yours Faithfully

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



**Vinod Sharma**  
President (O & M)

Encl. – As above

**CC to:**

1) **Zonal Office**

Central Pollution Control Board  
Bhopal – (M.P.) 462016

- For information please.

2) **Member Secretary**

Madhya Pradesh Pollution Control Board  
Bhopal (M.P.) 462016

- For information please.

3) **Regional Officer**

Madhya Pradesh Pollution Control, Singrauli

- For information please.

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Ph. : +91 (120) 4609000, 2470800 Fax : +91 (120) 4609464, 4609496  
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Ph. : +91 (1792) 257999, 245367 Fax : +91 (1792) 245362  
**Regd Office** : Complex of Jaypee Nigrie Super Thermal Power Project, Sarai, Singrauli, Madhya Pradesh  
Website : www.jaiindia.co.in CIN : L40101MP1994PTC015896  
Tehsil Sarai District Singrauli 486669 (Madhya Pradesh)

**Six Monthly Compliance Report  
Of  
Environmental Clearance  
Period: April' 2016 - September' 2016**

**Of**

**1320 (2x660) MW Jaypee Nigrie Super Thermal Power Plant  
&  
2.0 MTPA Jaypee Nigrie Cement Grinding Unit  
At  
Nigrie, District 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**  
**2 X 660 MW Coal based Thermal Power Plant**

**13<sup>th</sup> 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

Clause No.	Terms and Conditions Description as per EC letter	Compliance Status report December 2016
i	Environmental Clearance is subject submission of complete details of R & R action plan (as applicable) with time 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 and other land to be acquired and the compensation paid/proposed to be paid etc. The time schedule of implementation shall be given.	<p>Our R&amp;R plan has been submitted to the Regional Office of the Ministry vide our letter No. JPVL/JNSTPP/MOEF/2010 dated 20th January 2011.</p> <p>It was subsequently modified incorporating suggestions of MOEF and was resubmitted vide letter no. - JPVL/JNSTPP/MOEF/2011 dated 29.06.2011.</p>
ii	Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quantity & quality is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	<p>Hydro-geological study of the area is being carried out by M/s. Hydro Geo-survey Consultant Pvt. Ltd. Jodhpur, Rajasthan and reports submitted to concerned departments timely.</p> <p>The last study was done in July 2016.</p> <p>Periodic review is being done. Quality of ground water is being monitored in and around the plant premises. Ground water level in nearby villages is also being monitored to know the seasonal fluctuations.</p> <p>There is no adverse impact found in the quality of Ground Water. Presently, JPVL is drawing Industrial and Domestic water from surface water source (Gopad River) within quantity allocated (42 MCM) by DoWR, Madhya Pradesh.</p>

iii	<p>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.</p>	<p>Being Complied, We have already obtained permission from water resource department Govt. of Madhya Pradesh for withdrawal of 42 MCM water for both Units from Gopad river.</p> <p>The above quantity is adequate to meet the plant's requirement including lean season.</p> <p>All plant roads and drains are design based.</p> <p>Natural Drainage in the region shall not be disturbed due to the activities associated with the operation of the plant. Water harvesting pond shall be provided to manage runoff within colony area.</p>
iv	<p>A stack of 275 m height (Bi-flue) shall be provided with continuous online monitoring equipments for SO<sub>2</sub>, NO<sub>x</sub> and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Mercury emission from stack shall also be monitored on periodic basis.</p>	<p>Bi-flue Stack containing two flues of Unit-I &amp; Unit-II of 275 meters is installed with On-line monitoring equipment for SO<sub>2</sub>, NO<sub>x</sub> &amp; PM.</p> <p>Exit velocity of flue gas is more than 25 m/sec.</p> <p>Mercury measurement is also being done through online analyzers.</p>
v	<p>For cement Grinding Unit two stacks of 55 m each with exit velocity not less than 10 m /s shall be installed. mission from the Grinding Unit shall not exceed 50 mg/Nm<sup>3</sup>.</p>	<p>Two stacks of 55m each with exit velocity not less than 10 m /s have been installed for Cement Grinding Unit. Thermax India Ltd. has supplied and erected 2 nos. of Bag Houses attached to cement mills(Ball &amp; Roll Press Mill) with guaranteed emission level of &lt;50 mg/Nm<sup>3</sup> at full load. Each Bag House has 780 &amp; 1188 bags respectively.</p> <p><b>Note:</b> Plant Under Shut down due to non-availability of Clinker.</p>
vi	<p>Fugitive emission in the grinding Unit shall be controlled and data on fugitive emission shall be maintained in a log book and duly signed by the Head, Environment on a daily basis.</p>	<p>Noted, To control fugitive emission all raw material conveying belt conveyors are covered. 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.</p>
vii	<p>High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate</p>	<p>Highly efficient Electrostatic Precipitators with efficiency of 99.93 % have been installed for each boiler (ESPs) to meet particulate emission less than 50 mg/Nm<sup>3</sup>.</p>

	emission does not exceed 50 mg/Nm <sup>3</sup> .	For stack U-I average concentration of PM is 32.34 mg/Nm <sup>3</sup> , maximum concentration is 35.14 mg/Nm <sup>3</sup> & the minimum concentration is 30.52 mg/Nm <sup>3</sup> .  For stack U-II average concentration of PM is 38.50 mg/Nm <sup>3</sup> , maximum concentration is 40.00 mg/Nm <sup>3</sup> & the minimum concentration is 37.60 mg/Nm <sup>3</sup> .
viii	Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Adequate air pollution control measures such as dust extraction system (Cyclone followed by bag filters) in coal crusher and coal transfer points, jet sprinkler type dust suppression system in coal yard and dry fog type dust suppression system in belt conveyor have been provided.  Elaborated dust extraction & dust suppression system have been incorporated in the design of ash handling plant.
ix	Utilization of 100 % Fly ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the regional Office of the Ministry from time to time.	Fly ash silo established to collect dry ash for further utilization. Bottom ash is being disposed off in the ash pond in lean slurry mode, with recirculation of ash water.  100% Fly Ash is being Utilized as per Ash Utilization Notification.  Status of Implementation is being reported to Regional Office of MPPCB regularly.
x	Fly Ash shall be collected in dry form and storage facility (silos) shall be provided 100% fly ash utilization shall be ensured from 4TH year onwards. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry. Mercury and other heavy metals (As, Hg, Cr, and Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	Compliance assured We have established a day silo to collect dry fly ash & a fly ash bin of 400 ton capacity for utilization of ash in cement grinding unit and a storage silo of 20,000 ton capacity for utilization of dry ash.  100% fly ash is being utilized.  Bottom ash is being disposed off in the ash pond in the form of high concentration slurry.  Regular monitoring of heavy metals is being carried out periodically. (Attached).
xi	Ash pond shall be lined with HDPE/LDPE lining or any other	Well designed ash dyke with HDPE lining has been established as per the guidelines of MoEF, CEA & CPCB. Adequate safety measures were taken for any unforeseen incidents.

	suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Adequate safety measures also taken to protect the ash dyke from getting breached.																																																	
xii	For disposal of Bottom Ash (if proposed to be undertaken) in abandoned mines 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 inform the state Pollution Control Board well in advance before undertaking the activity.	Not applicable, as the disposal of bottom ash is not envisaged in any abandoned mines. Bottom ash is being carried in slurry form to the ash dyke situated inside the plant premises.																																																	
xiii	Closed cycle cooling system with natural draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.	<p>Recirculation type Closed cycle Cooling water system with Natural Draft Cooling Towers has been provided. The blow down is being treated adequately to meet the prescribed norms through High Rate Solid Contact Clarifier (HRSCC), Dual Media Filter (DMF), Ultra filtration Unit (UF) and RO system and reused in Cooling Tower makeup, service water and HVAC system. The RO reject water is used in Dust Suppression in Coal Handling Plant areas.</p> <p style="text-align: center;"><b>TREATED EFFLUENT ANALYSIS</b> <b>For the period of April- September 2016</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Month</th> <th>pH</th> <th>SS ppm</th> <th>TDS ppm</th> <th>COD ppm</th> <th>O&amp;G ppm</th> <th>BOD ppm</th> </tr> </thead> <tbody> <tr> <td>April -16</td> <td>7.2</td> <td>37.4</td> <td>268.0</td> <td>79.5</td> <td>6.2</td> <td>7.5</td> </tr> <tr> <td>May -16</td> <td>7.8</td> <td>82.0</td> <td>285.0</td> <td>121.3</td> <td>2.3</td> <td>9.0</td> </tr> <tr> <td>June -16</td> <td>6.7</td> <td>78.4</td> <td>271.0</td> <td>163.2</td> <td>4.3</td> <td>12.4</td> </tr> <tr> <td>July -16</td> <td>6.8</td> <td>58.0</td> <td>273.0</td> <td>97.7</td> <td>5.2</td> <td>9.0</td> </tr> <tr> <td>August -16</td> <td>7.2</td> <td>73.0</td> <td>277.0</td> <td>122.5</td> <td>4.7</td> <td>10.0</td> </tr> <tr> <td>September -16</td> <td>7.1</td> <td>68.0</td> <td>272.0</td> <td>132.6</td> <td>3.9</td> <td>12.0</td> </tr> </tbody> </table>	Month	pH	SS ppm	TDS ppm	COD ppm	O&G ppm	BOD ppm	April -16	7.2	37.4	268.0	79.5	6.2	7.5	May -16	7.8	82.0	285.0	121.3	2.3	9.0	June -16	6.7	78.4	271.0	163.2	4.3	12.4	July -16	6.8	58.0	273.0	97.7	5.2	9.0	August -16	7.2	73.0	277.0	122.5	4.7	10.0	September -16	7.1	68.0	272.0	132.6	3.9	12.0
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xiv	The treated effluents conforming to the prescribed standards	All the effluents treated adequately in the ETP. Treated water is being reused within the plant. The concept of "Zero Discharge Condition" implemented except during monsoon period.																																																	

	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.	Separate drainage network established for storm water.																																			
xv.	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	<p>Sewage Treatment Plant has been installed &amp; treated water reused suitably within the plant premises for green belt development.</p> <p style="text-align: center;"><b>TREATED SEWAGE ANALYSIS</b> <b>For the period of April- September 2016</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Month</th> <th>pH</th> <th>SS ppm</th> <th>COD ppm</th> <th>BOD ppm</th> </tr> </thead> <tbody> <tr> <td><b>April -16</b></td> <td>8.2</td> <td>82.0</td> <td>163.0</td> <td>19.0</td> </tr> <tr> <td><b>May -16</b></td> <td>8.7</td> <td>86.0</td> <td>165.0</td> <td>10.0</td> </tr> <tr> <td><b>June-16</b></td> <td>8.0</td> <td>92.0</td> <td>175.0</td> <td>8.0</td> </tr> <tr> <td><b>July -16</b></td> <td>8.1</td> <td>84.0</td> <td>109.0</td> <td>3.0</td> </tr> <tr> <td><b>August -16</b></td> <td>8.0</td> <td>83.0</td> <td>120.0</td> <td>6.0</td> </tr> <tr> <td><b>September -16</b></td> <td>8.0</td> <td>83.0</td> <td>113.0</td> <td>10.0</td> </tr> </tbody> </table>	Month	pH	SS ppm	COD ppm	BOD ppm	<b>April -16</b>	8.2	82.0	163.0	19.0	<b>May -16</b>	8.7	86.0	165.0	10.0	<b>June-16</b>	8.0	92.0	175.0	8.0	<b>July -16</b>	8.1	84.0	109.0	3.0	<b>August -16</b>	8.0	83.0	120.0	6.0	<b>September -16</b>	8.0	83.0	113.0	10.0
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xvi.	Rainwater harvesting should be adopted. Central Groundwater Authority/Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	<p>Rain Water Harvesting scheme has been prepared &amp; sent to Regional Director, Central Ground Water Board, Bhopal.</p> <p>Rainwater harvesting within the township area has been constructed/ implemented to store the rain water.</p> <p>The Rain Water Harvesting scheme has also been forwarded to MoEF along with the EC Compliance Report of June, 2013.</p>																																			
xvii.	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant lay	<p>Adequate safety team with adequate safety measures is available in the plant site to take preventive control measures. Fire hydrant and water jet type sprinklers established in the coal yard.</p> <p>The duly approved Off- site &amp; On- site Disaster Management Plan was already submitted vide letter No. 05 /4 0 /A-2/MHC/V1/12/6175 dated 04/10/2014.</p>																																			

	out shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	
xviii	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHSA shall be made in the plant area in consultation with the Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventually in case of an accident taking place due to storage of oil.	<p>Noted, Storage facilities for auxiliary liquid fuel are made in the plant area in consultation and consent from Department of Explosives, Nagpur. While procuring LDO/HFO, it is checked that limit of sulphur content shall not be more than 0.5%.</p> <p>Disaster Management Plan has been prepared to meet any eventuality in case of any accident taking place due to storage of oil.</p> <p>Licence No. P/HQ/MP/15/2877(P311712) dated 14th June 2013 has been obtained from Petroleum and Explosive Safety Organization (PESO), Nagpur for our Petroleum Class C in bulk installation. (Attached).</p> <p>The fuel LDO &amp; HFO properly stored in minimum risk area &amp; as per the norms fixed by the Chief Controller of Explosive. Disaster management plan and On-site emergency plan prepared &amp; Mock drills are being conducted periodically.</p>
xix	Regular monitoring of ground water level shall be carried out by establishing a network 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 projects.	Eight Piezometer locations are identified at down and upstream of Ash ponds. As this is a new project, the presence of heavy metals can be monitored after accumulation to a reasonable level, we have initiated action to assess and monitor heavy metals and results are expected to a reasonable level of accuracy in about 4 - 6 months after that the comparison will be done and the report will be submitted to RO, MoEF and RO, MPPCB.
xx	Green belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised.	<p>Complied, Noted.</p> <p>Green belt development/ plantations are being carried out on available land. Our efforts are being made to develop more greenery in and around plant premises. We have already established our nursery to develop saplings for afforestation &amp;</p>



	Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with the survival rate not less than 70%.	<p>horticultural activities. Besides this, we have also developed lawn &amp; gardens to create aesthetic view inside the plant premises. JPVL has developed green belt/plantation in 53.2 ha lands, our continued endeavor to develop more green belt /plantation. A consultant M/s Nature Forever Organization is an expert &amp; experienced agency prepared Greening Plan including Plant Greenbelt Plan.</p> <p>33,500 no of saplings have been planted in greenbelt area during the period of Monsoon Season'16. 1, 33,000 nos of saplings have been planted in greenbelt area up to September'16.</p> <p>Tree density is not less than 2500 per ha with the survival rate is 90%.</p>																												
xxi	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	<p>First Aid and sanitation facility provided for the drivers and contract workers during construction phase.</p> <p>Site sanitation and housekeeping is maintained regularly. 10 beds Hospital at site is equipped with all required facilities for First Aid.</p>																												
xxii	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dB (A). 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 noisy /less noisy areas.	<p>Complied, The steam turbine (ST) is enclosed in the building and acoustic enclosures are provided to minimize noise from these machines.</p> <p>The working personals provided with appropriate personal protective equipment and periodic audiometric check up is being carried out and records are being maintained.</p> <p>Noise level monitoring is being carried out regularly and reports submitted to the Board.</p> <p style="text-align: center;"><b>NOISE LEVELS FOR THE PERIOD OF APRIL - SEPTEMBER - 2016</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Month</th> <th>ST-1</th> <th>ST-2</th> <th>Air Compressor House</th> </tr> </thead> <tbody> <tr> <td><b>April -16</b></td> <td>70.0</td> <td>75.2</td> <td>74.2</td> </tr> <tr> <td><b>May -16</b></td> <td>79.3</td> <td>74.0</td> <td>66.5</td> </tr> <tr> <td><b>June-16</b></td> <td>70.6</td> <td>77.2</td> <td>69.8</td> </tr> <tr> <td><b>July -16</b></td> <td>70.5</td> <td>78.4</td> <td>70.4</td> </tr> <tr> <td><b>August -16</b></td> <td>76.1</td> <td>77.2</td> <td>71.5</td> </tr> <tr> <td><b>September -16</b></td> <td>73.7</td> <td>79.1</td> <td>72.1</td> </tr> </tbody> </table> <p><b>NOTE - Spot Noise Levels at 1 meter distance from turbine in db(A)</b></p>	Month	ST-1	ST-2	Air Compressor House	<b>April -16</b>	70.0	75.2	74.2	<b>May -16</b>	79.3	74.0	66.5	<b>June-16</b>	70.6	77.2	69.8	<b>July -16</b>	70.5	78.4	70.4	<b>August -16</b>	76.1	77.2	71.5	<b>September -16</b>	73.7	79.1	72.1
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xxiii	Regular monitoring of Ground level concentration of SO <sub>2</sub> , NO <sub>X</sub> . RSPM and Hg shall be carried out in	<p>i) Baseline monitoring was conducted during EIA. Weekly monitoring during operational phase is being carried out regularly.</p> <p>ii) In case of any exceedance, necessary control measures are ensured.</p>																												

	<p>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 monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of the Ministry. The data shall also be put on the website of the company.</p>	<p>iii) Four Ambient Air Quality monitoring stations established in consultation with Regional Officer, MPPCB. And the data is being put in the website of our company along with half yearly EC Compliance Report.</p> <p>iv) Regular monitoring of PM10, PM2.5, SO2 &amp; NOx are being carried out as per frequency &amp; monitoring results are well within the norm.</p> <p>v) Monitoring results are being submitted to MPPCB quarterly.</p>			
<b>LOCATION : Near STP - Colony area</b>					
	<b>PM10 (µg/m3)</b>	<b>PM2.5 (µg/m3)</b>	<b>SO2 (µg/m3)</b>	<b>NOX (µg/m3)</b>	<b>CO (µg/m3)</b>
<b>Minimum</b>	30	18	15	16	87
<b>Maximum</b>	72	40	29	42	187
<b>Average</b>	56	29	21	27	141
<b>LOCATION : Near H2 Gas cylinder shed</b>					
	<b>PM10 (µg/m3)</b>	<b>PM2.5 (µg/m3)</b>	<b>SO2 (µg/m3)</b>	<b>NOX (µg/m3)</b>	<b>CO (µg/m3)</b>
<b>Minimum</b>	30	18	15	17	82
<b>Maximum</b>	76	43	32	44	197
<b>Average</b>	57	32	22	29	134
<b>LOCATION : Near Watch tower 22 (Grinding Unit)</b>					
	<b>PM10 (µg/m3)</b>	<b>PM2.5 (µg/m3)</b>	<b>SO2 (µg/m3)</b>	<b>NOX (µg/m3)</b>	<b>CO (µg/m3)</b>
<b>Minimum</b>	32	18	15	17	87
<b>Maximum</b>	80	47	30	41	232
<b>Average</b>	61	32	21	27	159
<b>LOCATION : Near fuel storage tank</b>					
	<b>PM10 (µg/m3)</b>	<b>PM2.5 (µg/m3)</b>	<b>SO2 (µg/m3)</b>	<b>NOX (µg/m3)</b>	<b>CO (µg/m3)</b>
<b>Minimum</b>	36	15	15	18	85
<b>Maximum</b>	72	47	29	41	210
<b>Average</b>	58	31	21	28	143
xxiv	<p>A good action plan for R &amp; R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R &amp; R policy within three months from the date of issue of this letter.</p>	<p>The report has been submitted to MoEF &amp; CC on 20th Jan 2011 vide our letter No. JPVL/JNSTPP/MOEF/2010.</p> <p>It was subsequently modified incorporating suggestions of MOEF and was resubmitted vide letter no. - JPVL/JNSTPP/MOEF/2011 dated 29.06.2011.</p>			

xxv	<p>An amount of Rs. 24 crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs. 4.8 Crore per annum shall be 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.</p>	<p>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.</p> <p>The capital fund of Rs 24 Crores is earmarked for CSR activities and Rs. 4.8 Crores per annum fund kept for recurring expenditure.</p> <p>Expenses Incurred Under CSR from April 2016 to Sept.2016 RS. 50,24,255.00/-</p> <p>Total expenditure incurred up to September 2016 is RS. 1,60,64,229.00/-</p>
xxvi	<p>As part of CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment 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 budget for community development activities and income generating programmes. This will be in addition to vocational training individuals imparted to take up self employment and jobs.</p>	<p>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.</p> <p><b>The following activities were undertaken:</b></p> <p>Sardar Patel Uchhtar Madhyamik Vidyalaya was started functioning up to class five w.e.f. July, 2011 and subsequently upgraded up to 10th class in July'2016 session.</p> <p>Annapurna mess is serving the free mid day meal to students.</p> <p>An ITI institute is being constructed for development of skilled man power in nearby areas of project.</p> <p>Other CSR activities include Stipend for secondary school students, Paying tribute to Old Age Persons, Vocational Training for students, and Drinking Water facility to local habitants.</p> <p>District Administration has taken initiative to give training through skill development programme at ITI Waidhan; the company has contributed Rs.12, 00,000/- against this programme. About 100 persons of nearby villages have been identified and sent for this training.</p>

xxvii	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Labor hutments had been established & developed with all required amenities like toilet, drinking water, & infrastructure like internal road etc. for construction phase only.
xxviii	The project proponent shall advertise in at least two local newspapers widely circulated in the 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 as Website of the Ministry of Environment and Forests at <a href="http://envfornic.in">http: / /envfornic.in</a>	Complied, JPVL had advertised about the receipt of EC in two local Newspapers in vernacular language.
xxix	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal corporation, Urban Local Body and	Complied, The copy of EC was Already Sent to all the concerned departments and local panchayat and acknowledgement was taken.  The clearance letter is put on the website of the company.

	<p>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.</p>	
xxx.	<p>A separate Environment Managements Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.</p>	<p>Complied, we have already established Environment Management cell headed by DIC and supported by Env. Officer, Chemist &amp; Horticulturist for implementation and compliance.</p>
xxxi.	<p>The proponent shall 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 Office MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>X</sub> (ambient levels as well as stack) shall be displayed as a convenient location near the main gate of the company in the public domain.</p>	<p>Complied, six monthly Environmental Clearance compliance status report is regularly submitted to MoEF, CPCB and SPCB. The same has been sent by email also.</p> <p>Last report was submitted on 17<sup>th</sup> Aug 2016 and now being submitted in Dec 2016. Next report will be submitted in June 2016.</p> <p>Compliance status updated on Company's website.</p> <p>Display board already installed in main gate.</p>
xxxii.	<p>The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC</p>	<p>Complied, six monthly compliance reports is regularly submitted to MoEF, CPCB &amp; MPPCB.</p> <p>The same also being sent by email.</p>

	<p>conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office OF MoEF, the respective Zonal Office of CPCB and the SPCB.</p>	<p>Last compliance report had submitted in Aug'16 for the period of October'15 to March'16 vide our letter no: JNSTPP/EC/MOEF/2016-17/12A dated 09.08.2016</p>
xxxiii	<p>The environment statement of each financial year ending 31st March in Form-V as is mandated to be submitted by the 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.</p>	<p>Compliance assured, Environment Statement for the year 2015-16 is submitted vide letter no. JVPL/ES/2016-17 dated September 05<sup>th</sup>, 2016. It is forwarded to RO, MoEF by e-mail and put on the website of the company.</p>
xxxiv	<p>The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of</p>	<p>Being complied, six monthly Environmental Clearance compliance status report is regularly submitted to MoEF, CPCB and SPCB. The same is sent by email also.</p> <p>Compliance status updated on Company's website.</p>

	<p>compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by email to the Regional Office, Ministry of Environment and Forests.</p>	
xxxv	<p>Regional Office of the Ministry of Environment &amp; Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment 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 up-load the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels including NO<sub>x</sub> (from stack &amp; ambient air) shall be displayed at the main gate of the power plant.</p>	<p>Will be complied with.</p> <p>Six monthly Environmental Clearance compliance status report is regularly submitted to MoEF, CPCB and SPCB. The same is sent by email also.</p> <p>Compliance status updated on Company's website.</p> <p>Display board already installed in main gate.</p> <p>Results are being displayed at Main gate of the plant.</p>
xxxvi	<p>Separate funds shall be allocated for implementation of environmental protection measures</p>	<p>Complied, Environmental protection measures i.e., Dry low NO<sub>x</sub> burners, constructions of 275m stack with CMS, Noise protection, effluent treatment, green belt development have been included in project capital cost.</p>

	<p>along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.</p>	<p>Dedicated fund has already been allocated and being utilize for Environmental Protection measures.</p> <p><b>Year wise Cost breakup details as follows:</b></p> <ul style="list-style-type: none"> <li>✓ Operation cost in ESP - Rs 2,09,74,928 / -</li> <li>✓ Maintenance Cost of ETP - Rs 1,20,00,000/-</li> <li>✓ Operation Cost of STP - Rs 6,22,197 / -</li> <li>✓ Green Belt Development - Rs 2,622,000/-</li> <li>✓ Maintenance cost in CHP - Rs 23,77,949/ -</li> <li>✓ O&amp;M cost Of Bag Houses &amp; Bag Filters in CGU - Rs 73,066/-</li> </ul>
xxxvii	<p>The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.</p>	<p>Complied, The project has achieved Financial Closure on 7<sup>th</sup> May 2010.</p>
xxxviii	<p>Full cooperation shall be extended to the Scientists/Officers from the Ministry /Regional Office of the Ministry at Bangalore/CPCB/SPCB who would be monitoring the compliance of environmental status.</p>	<p>Noted &amp; Agreed.</p> <p>Full cooperation being extended.</p>
xxxix	<p>Bag house and dust suppression shall be installed in packing area to control the particulate and fugitive emissions.</p>	<p>Adequate air pollution control measures such as dust extraction system (Cyclone followed by bag filters) in CGU, coal crusher and coal transfer points, Jet Sprinkler type dust suppression system in coal yard and dry fog type dust suppression system in belt conveyor have been provided.</p>



## PETROLEUM CLASS - C LICENCE



Government of India  
Ministry of Commerce & Industry  
Petroleum & Explosives Safety Organisation (PESO)  
5th Floor, A-Block, CGO Complex, Seminary Hills,  
Nagpur - 440006



E-mail : [explosives@explosives.gov.in](mailto:explosives@explosives.gov.in)  
Phone/Fax No : 0712 -2510248, Fax-2510577

No. : PIHQ/MP/15/2877 (P311712)

Dated : 14/06/2013

To, ✓  
M/s. Jaiprakash Power Ventures Limited,  
Jaypee Nigrie Super Thermal Power Project, Village & P.O. Nigrie,  
Taluka: Deosar,  
District: SINGRAULI,  
State: Madhya Pradesh  
PIN: 999999

Sub: Petroleum Class C Installation at Khasee No, 212, 215, Jaypee Nigrie Super Thermal Power Project (2 x 600 MW), Nigrie, Taluka: Deosar, District: SINGRAULI, State: Madhya Pradesh. PIN: 999999 Grant of Licence regarding.

Sr(s) Please refer to your letter No. Nil dated 13/06/2013

Licence No. PIHQ/MP/15/2877 (P311712) dated 14/06/2013 granted in Form XV under the Petroleum Rules, 2002 and valid till 31/12/2017 for the storage of the following kinds and quantities of Petroleum at the subject installation is forwarded herewith.

Description of Petroleum	Quantity licenced in KL
Petroleum Class A in bulk	NIL
Petroleum Class A, otherwise than in bulk	NIL
Petroleum Class B in bulk	NIL
Petroleum Class B, otherwise than in bulk	NIL
Petroleum Class C in bulk	1109.00 KL
Petroleum Class C, otherwise than in bulk	NIL
<b>Total Capacity</b>	<b>1109.00 KL</b>

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence to Dy. Chief Controller of Explosives, Bhopal, so as to reach his office on or before the date on which Licence expires.

This approval/permission, however, does not absolve from obtaining necessary permission/clearance from other authorities or under other statutes as applicable.

Yours faithfully,

(T R Thomas)  
Chief Controller of Explosives  
Nagpur

Copy forwarded to :-

1. The District Magistrate, SINGRAULI (Madhya Pradesh) with reference to his NOC No 401/R.D.M./2013 Dated 07/06/2013
2. Jt. Chief Controller of Explosives, AGRA. A Copy of the licence along with approved plan is enclosed.
3. Dy. Chief Controller of Explosives, Bhopal. A Copy of the licence along with approved plan is enclosed.

Chief Controller of Explosives  
Nagpur

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)

Day Tanks

FORM XV  
(see Article 6 of the First Schedule)

LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

316)

Licence No. : P/HQ/MP/15/2877(P311712)

Fee Rs. 15000/- per year

Licence is hereby granted to M/s. Jaiprakash Power Ventures Limited, Jaypee Nigrie Super Thermal Power Project, Village & P.O. Nigrie, Taluka: Deosar, District: SINGRAULI, State: Madhya Pradesh, PIN: 999999 valid only for the importation and storage of 1109.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No P/HQ/MP/15/2877(P311712) dated 14/06/2013 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

The Licence shall remain in force till the 31st day of December 2017

Description of Petroleum	Quantity licenced in KL
Petroleum Class A in bulk	NIL
Petroleum Class A, otherwise than in bulk	NIL
Petroleum Class B in bulk	NIL
Petroleum Class B, otherwise than in bulk	NIL
Petroleum Class C in bulk	1109.00 KL
Petroleum Class C, otherwise than in bulk	NIL
Total	1109.00 KL

June 14, 2013

  
Chief Controller of Explosives

DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

The licensed premises, the layout, boundaries and other particulars of which are shown in the attached approved plan are situated at Khasra No: 212, 219, Jaypee Nigrie Super Thermal Power Project (2 x 600 MW), Nigrie, Taluka: Deosar, District: SINGRAULI, State: Madhya Pradesh, PIN: 999999 and consists of 2 Above Ground Petroleum class C storage tanks (Day oil tanks) together with connected facilities, together with connected facilities.

Co  
1.1  
2.1  
3.1

## ASH POND EFFLUENTS TEST REPORT

### Vimta Labs Limited

Registered Office  
142, IDA Phase II, Cherlapally  
Hyderabad-500 051, India  
T : +91 40 2728 4141  
F : +91 40 2728 3557



#### CLIENT:

M/s Jaypee Nigra Super Thermal Power PLANT  
VPO Nigra Niwas,  
Singrauli  
MADHYA PRADESH.

Report Number : 00689/16/VLL/006/02

Issue Date : 2016-05-11

Your Ref : TRF

Anal Date : 2016/04/09

Page 1 of 1

Sample Particulars: Ash Pond Water Recovery Sample

Sample Registration Date:	2016-04-09	Sample Received date:	2016-04-09
Analysis starting date:	2016-04-10	Analysis Completion date:	2016-04-22
Sample Details: Ash Pond Water Recovery Sample			
Tests required: Lead as Pb, Arsenic as As, Mercury as Hg and Chromium as Cr.			
SAMPLES NOT COLLECTED BY VIMTA LABS LIMITED			LAB REF: DC

#### TEST RESULTS

Sr.No	Parameters	Units	Result
I	Heavy Metals		
(i)	Lead as Pb	mg/l	<0.01
(ii)	Arsenic as As	mg/l	0.06
(iii)	Mercury as Hg	mg/l	<0.001
(iv)	Chromium as Cr	mg/l	<0.01

Method of testing: As per APHA 22<sup>nd</sup> Edition.

**Dr. Subba Reddy Mallampati**  
Sr. Scientist - Environment

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