

Recommendations of the Oversight Committee in its Fifth quarterly report for Compliance by the Jaypee Nigrie Super Thermal Power Plant

S. No.	Recommendations of the Oversight Committee	Current Status of action as on 31-10-2021
A.	The thermal power plants shall ensure that 100% fly ash utilization of the fly ash shall be ensured by them as per the Fly ash Notification.	<p>Ash Utilization in the FY 2020 - 21 was 100.04 %.</p> <p>Having long term MoU with the End User (Cement Industry).</p> <p>Efforts have been made to utilize/dispatch 100% generated fly ash.</p>
B.	For the achievement of new emission norms, equipments like FGD, SCR/ SNCR etc shall be got installed as per the time lines provided to them by the CPCB.	<p>Action has already been taken to install Wet Lime Stone based FGD on both of the Units, so as to control SO₂ Emission in order to meet New Emission Norms of MoEF&CC Notification dated 07.12.2015 (keeping in view of the timeline as defined in the MoEF & CC gazette notification dated 31-03-2021).</p> <p>FGD Status - NIT issued on dated 31.12.2019 but due to massive outbreak of second wave of pandemic Covid-19 & receipt of request from various bidders for extension of last date of bid submission, the last date of bid submission now has been extended up to 31st December, 2021.</p>
C.	Fly ash dyke shall be monitored regularly for their strength through some reputed organizations. The design should be safe and timely maintenance should be regularly ensured.	<p>Structural Stability Study has been carried out by Competent Third Party Technical Agency on 21.11.2019.</p> <p>SOPs has been prepared and regular checking is being done, recent report with SOPs is attached as Annexure - I.</p> <p>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.</p> <p>Ash pond has been constructed as per above approved drawing.</p> <p>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.</p> <p>Ash Pond is built over an area of 21.2 ha and is consisting of two ponds & equipped with 100% Ash Water Recirculation System to prevent any ash mixed water discharge to outside.</p> <p>The Ash Dyke is situated within intact boundary wall of Power Plant.</p>

D.	Air borne fly ash from the ash dykes, specifically during summers should be controlled through arrangements of water sprinkling, vegetation and other scientific measure.	The bottom ash which is in slurry form is sent through ash disposal pipes to the bottom ash slurry pond i.e. the Ash Dyke. Ash Pond Top layer is always covered with water. Also, mobile water sprinkling arrangement is in place for using as and when required for controlling air borne fly ash. Photographs of Ash Ponds dated 19 th November, 2021 are being attached as Annexure-II .
E.	NTPC- VSTPS shall ensure to start disposal of the fly ash in the abandoned Gorbi mines, and shall complete the related studies at the earliest.	Not Applicable to us.
F.	Health check up of villagers through mobile medical van be conducted regularly for the detection of the occupational diseases like silicosis, fluorosis etc. and treatment be provided under CSR activities. Record should be maintained and made available to the district health authorities.	Free Medical Check-up facility & Free Medicines are being Provided to nearby Villagers as required. Providing Mobile Hospital & Ambulance Service to the nearby affected villages (Nigrie, Niwas, katai & Hardi & Mahua Ganv and Chamrach and Joba).
G.	The thermal power plants namely, M/s Essar Power MP Ltd. and M/s Sasan Power Ltd. shall deposit with MPPCB the remaining amount of environmental compensation of Rs. 9 Cr., and Rs. 8 Cr. respectively out of the levied amount of Rs. 10 Cr. M/s NTPC- Vindhyachal, has however obtained a stay from Hon'ble Supreme Court.	Not Applicable to us.
H.	NPTC- Vindhyachal shall complete the dredging of the Rihand reservoir for the removal of the ash flown into it due to breach of its ash dyke and to complete it within 3 months time.	Not Applicable to us.
I.	NPTC- Vindhyachal should complete the studies of making RCC wall around the ash dyke through IIT Roorkee / IIT Delhi and submit the report for further consideration on its technical viability. Similarly studies / action should be initiated for the construction of Ash mounds.	Not Applicable to us.
J.	All the TPPs / industries shall calibrate all the CAAQMS and CEMS installed by them in 3 months (if not done recently) and submit the report to the committee. Such reports will be useful in checking the error percentage in the results.	CAAQMS & CEMS installed in the plant have been given on the annual maintenance contract and are being calibrated on quarterly basis by the Equipment Manufacturers itself. The last Calibration of CAAQMS was done from 28 th September, 2021 to 30 th September, 2021 & Calibration of CEMS was done on 11 th July, 2021. Copy of the calibration report is being attached as Annexure - III .


Vinod Sharma
 Sr. President
 Nigrie Super Thermal Power Plant
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JAYPEE NIGRIE SUPER THERMAL POWER PLANT

Annexure 1



ISSUE NUMBER: 1.0

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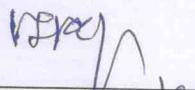
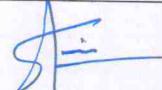
DOC: Check Sheet of Ash Pond Inspection

1. Name of the Project: Jaypee Nigrie Super Thermal Power Project (A Division of Jaiprakash Power Ventures Limited)

2. Inspection Date: 25.10.2021

3. Name of the inspection officers: S/Shri V S Pandey, J K Mishra, M K Tripathi and S P Singh.

A) ASH POND DETAILS	Ash Pond 1	Ash Pond 2	Inspection Schedule	Remarks
a) Whether any ash surface is exposed above water.	No	No	Fortnightly	
b) If ash surface is exposed above water level whether ash is flying anywhere.	No	No	Fortnightly	
c) Whether water flow is obstructed by floating plants or any other floating bodies near over flow channel.	No	No	Fortnightly	
B) Dyke				
a) Top level of dyke.				
1. Whether there are any signs of settlement on the top of dyke.	No	No	Fortnightly	
b) Whether any sign of settlement / caving -in :				
1. Upstream slope.	No	No	Fortnightly	
2. Downstream slope.	No	No	Fortnightly	
c) Whether any seepage is observed on:				
1. Downstream slope.	No	No	Fortnightly	
d) Whether any wet spots / areas are present on:				
1. Downstream slope.	No	No	Fortnightly	
e) Whether any longitudinal cracks are observed on:				
1. The top of dyke.	No	No	Fortnightly	
2. The downstream slope.	No	No	Fortnightly	
f) Whether any transverse cracks are observed on:				
1. The top of dyke.	No	No	Fortnightly	
2. The downstream slope.	No	No	Fortnightly	
g) If any cracks are observed on the top and the slopes:				
1. Whether the cracks on the top & slopes are continuous.	No	No	Fortnightly	
2. Whether the cracks are lengthening with time.	No	No	Fortnightly	
3. Whether the cracks are widening with time.	No	No	Fortnightly	
4. If seepage is observed in the slope or near the d/s toe.	No	No	Fortnightly	
h) Whether the seepage water is muddy:				
1. If the seeping water is muddy	No	No	Fortnightly	
2. If the seepage water is muddy, the seepage area has been covered with inverted filters.	No	No	Fortnightly	
3. If filters have been placed over the seepage areas. Whether the water has become clear indicating reduction in material carry over.	No	No	Fortnightly	
4. Whether the seepage rate is changing with time.	No	No	Fortnightly	
5. Whether the filter material is getting displaced due to seepage water flow.	No	No	Fortnightly	

i) Whether any damage is there in the turving protection on the downstream slope.	No	No	Fortnightly	
j) whether the stone pitching / concrete lining on the slopes are dislodged or caved in at any location on:				
1. The upstream slope (concrete lining)	No	No	Fortnightly	
2. The downstream slope (stone pitching)	No	No	Fortnightly	
k) Whether there is any growth of vegetation / bushes on the:				
1. Downstream slope.	Yes	Yes	Fortnightly	Heavy growth of vegetation / bushes.
2. Upstream slope.	Yes	Yes	Fortnightly	Heavy growth of vegetation / bushes.
3. Top of dyke.	Yes	Yes	Fortnightly	Heavy growth of vegetation / bushes.
l) Whether any rat holes are present on the dyke:				
1. On the downstream slope.	No	No	Fortnightly	
2. On the dyke top.	No	No	Fortnightly	
m) If rat holes are present, whether they are being plugged with earth.	No	No	Fortnightly	
n) If rat holes present, whether there are also signs of cracking, sinking or settlement on the top or downstream slope of the dyke near region where rat holes are found.	No	No	Fortnightly	
o) Whether there are any rain cuts on dyke:				
1. Top of dyke.	No	No	Fortnightly	
2. Downstream slope.	No	No	Fortnightly	
p) Whether the rock toe is maintaining its design shape.	Yes	Yes	Fortnightly	
q) Whether the toe drain is clean with no obstruction for flow of water:	Yes	Yes	Fortnightly	
r) Whether any growth of vegetation inside the toe drain.	Regular cleaning	Regular cleaning	Fortnightly	
s) Whether the lining in the toe drain is in good condition.	Yes	Yes	Fortnightly	
t) Whether there is any flow in the toe drain.	Yes	Yes	Fortnightly	
Discharge of Ash Slurry in:				
Pond 1:	No (Ash filledup)			
Pond 2:	Started since 10.05.2021			
SIGNATURE OF INSPECTION OFFICERS				
Ash Handling Plant	Civil		Railway Siding	
Sig: 	Sig: 		Sig: 	
Name: V. J. Rametey	Name: J. K. Srinivas	S. P. SINGH	Name:	
Date: 25/10/2021	Date: 25.10.2021	25/10/2021	Date:	

Photographs of ASH POND –I



Ash Pond Under Evacuation

Photographs of ASH POND –II



In service Ash pond

Ambient Air Quality Monitoring Station (AAQMS)**CALIBRATION REPORT**

Customer Name : J P NIGRIE
 Station Name : AAQMS #1
 Station Location : GRINDING UNIT
 Analyser Make : Thermofisher Scientific

Date: 28.09.2021

Gas Analyser	Zero Calibration				SPAN VALUE	Span Calibration				Remark
	Zero Reading		Background			Span Reading		Co-efficient		
	Old	New	Old	New		Old	New	Old	New	
SO ₂ (PPB)	1.2	0.00	25.10	26.30	200 PPB	190.20	200.00	1.067	1.122	OK
NO (PPB)	2.5	0.00	37.5	40	151 PPB	134.00	151.00	1.000	1.163	OK
NO _X (PPB)	4.1	0.00	46.1	50	200 PPB	164.00	200.00	1.000	1.197	OK
CO (PPM)	-0.28	0.00	0	-0.28	2 PPM	2.81	2.00	1.000	0.654	OK

Foil calibration -		Zero value - 0.0	Span value - 1021 ug/m ³	Remark
PM Analysers	Range	Amplification Factor		
		Old Value	New Value	
PM 10	1000	7347	7254	OK
PM 2.5	1000	7101	7034	OK

Thermo Fisher Scientific



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Customer Name : J P NIGRIE
 Station Name : AAQMS #2
 Station Location : STP
 Analyser Make : ThermoFisher Scientific

Date: 28.09.2021

Gas Analyser	Zero Calibration				SPAN VALUE	Span Calibration				Remark
	Zero Reading		Background			Span Reading		Co-efficient		
	Old	New	Old	New		Old	New	Old	New	
SO2 (PPB)	2.5	0.00	27.9	28.4	200 PPB	224.00	200.00	1.41	1.26	OK
NO (PPB)	0.1	0.00	3.4	3.6	150PPB	226.00	151.00	1.18	0.80	OK
NOX (PPB)	0.3	0.00	8.9	8.7	200 PPB	307.00	200.00	1.25	1.31	OK
CO (PPM)	0.316	0.00	-0.19	0.215	2 PPM	2.010	2.00	1.03	1.02	OK

Foil calibration -		Zero value - 0.0	Span value - 1021 ug/m3	Remark
PM Analysers	Range	Amplification Factor		
		Old Value	New Value	
PM 10	1000	7441	7363	OK
PM 2.5	1000	7386	7348	OK

Thermo Fisher Scientific



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Customer Name : J P NIGRIE
 Station Name : AAQMS #3
 Station Location : NDCT
 Analyser Make : Thermofisher Scientific

Date: 30.09.2021

Gas Analyser	Zero Calibration				SPAN VALUE	Span Calibration				Remark
	Zero Reading		Background			Span Reading		Co-efficient		
	Old	New	Old	New		Old	New	Old	New	
SO2 (PPB)	3.1	0.00	55.1	57.9	200 PPB	177.00	200.00	0.85	1.40	OK
NO (PPB)	4	0.00	29.2	36	151 PPB	135.00	151.00	1.32	1.44	OK
NOX (PPB)	8	0.00	36.4	50.9	200 PPB	175.00	200.00	1.24	1.32	OK
CO (PPM)	-0.066	0.00	0	-0.066	2 PPM	1.61	2.00	1.00	1.70	OK

Foil calibration -		Zero value - 0.0	Span value - 1021 ug/m3	Remark
PM Analysers	Range	Amplification Factor		
		Old Value	New Value	
PM 10	1000	7306	6800	OK
PM 2.5	1000	6828	7156	OK

Thermo Fisher Scientific



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Customer Name : J P NIGRIE
Station Name : AAQMS #4
Station Location : FOUPH
Analyser Make : Thermofisher Scientific

Date: 29.09.2021

Gas Analyser	Zero Calibration				SPAN VALUE	Span Calibration				Remark
	Zero Reading		Background			Span Reading		Co-efficient		
	Old	New	Old	New		Old	New	Old	New	
SO2 (PPB)	1.5	0.00	15.1	16.6	200 PPB	184.00	200.00	0.65	0.72	OK
NO (PPB)	-0.3	0.00	11.9	11.6	153 PPB	148.00	153.00	1.69	1.75	OK
NOX (PPB)	1	0.00	12.3	13.4	200 PPB	188.00	200.00	1.14	1.17	OK
CO (PPM)	0.2	0.00	0	0.2	2 PPM	1.97	2.00	1.00	1.01	OK

Foil calibration -		Zero value - 0.0	Span value - 1021 ug/m3	Remark
PM Analysers	Range	Amplification Factor		
		Old Value	New Value	
PM 10	1000	7334	7425	OK
PM 2.5	1000	7541	7559	OK

Thermo Fisher Scientific



CALIBRATION REPORT FOR GAS ANALYZERS S710

JAYPEE NIGRIE		Model: S710		SICK INDIA PVT LTD			
Calibration Date: 11.07.2021		Equipment Number : (S.N:715748)		Done by : Salim Gadkari			
<p>1. Model No: S710 Multor.</p> <p>2. Customer Name: Jaypee Nigrie Super Thermal Power Plant, Jalprakash Power Ventures Ltd, Village-Nigrie, Post-Niwas, Tehsil-Sarai, Dist-Singrauli, Madhya Pradesh-486669.</p> <p>3. Instrument Tag No: Unit#1 CEMS analyser.</p> <p>4. Calibration Due Date: 10.01.2022</p>							
S.N.	Cylinder No	Expiry date of calibration cylinder	Component	Cylinder Value	Before Calibration Value	After Calibration Value	Remarks
1	SGC-43109H	23.12.2021	SO2	788 ppm	792Nppm	790 ppm	Calibrated
2	SGC-43109H	23.12.2021	NO	800 ppm	819 ppm	796 ppm	Calibrated
3	SGC-43109H	23.12.2021	CO2	34.53 %	34.81 %	34.53 %	Calibrated

The readings are within standard range according to the used test method. Analyzer system is operating normally.

Date / Place: 11.07.21/JPVL Nigrie.



SICK representative signature

Salim Gadkari

SICK representative Name

S.K. Choudhury

Customer representative signature

Santosh Kumar Choudhury

Customer representative Name

CALIBRATION REPORT FOR GAS ANALYZERS S710

JAYPEE NIGRIE		Model: S710		SICK INDIA PVT LTD			
Calibration Date: 11.07.2021		Equipment Number : (S.N:715246)		Done by : Salim Gadkari			
<p>1. Model No: S710 Multor.</p> <p>2. Customer Name: Jaypee Nigrie Super Thermal Power Plant, Jaiprakash Power Ventures Ltd, Village-Nigrie, Post-Niwas, Tehsil-Sarai, Dist-Singrauli, Madhya Pradesh-486669.</p> <p>3. Instrument Tag No: Unit#2 CEMS analyser.</p> <p>4. Calibration Due Date: 10.01.2022</p>							
S.N.	Cylinder No	Expiry date of calibration cylinder	Component	Cylinder Value	Before Calibration Value	After Calibration Value	Remarks
1	CSL-43109H	23.12.2021	SO2	788 ppm	780 ppm	789 ppm	Calibrated
2	CSL-43109H	23.12.2021	NO	800 ppm	789 ppm	798 ppm	Calibrated
3	CSL-43109H	23.12.2021	CO2	34.53 %	34.20%	34.53 %	Calibrated

The readings are within standard range according to the used test method. Analyzer system is operating normally.

Date / Place: 11.07.21/JPVL Nigrie.



S.K. Choudhury

SICK representative signature

Salim Gadkari

SICK representative Name

Customer representative signature

Santosh Kumar Choudhury

Customer representative Name

CALIBRATION REPORT-DUST

JAYPEE NIGRIE SUPER THERMAL POWER PLANT		Model: DHT-50	SICK INDIA PVT LTD
Calibration date: 11.07.2021		Equipment Number : 14028363 Analyser Installed at : Unit #2 Stack.	Calibration done by : Salim Gadkari
Manual Sampling Done by: M/s Vardan Envirolab, Jaipur, Rajasthan.		Details of Manual sampling: DMP/ENV/090721/02 Dated: 10.07.21	
S.NO	Manual sampling Results in (mg/Nm3)	Instrument Reading in mg/Nm3	
1	41.71	33.57	

With reference to the manual sampling results instrument was calibrated.

Old Calibration factor: 165

New Calibration factor: 205



S.K. Choudhury

SICK representative signature

Salim Gadkari

SICK representative Name

Customer representative signature

Santosh Kumar Choudhury

Customer representative Name

CALIBRATION REPORT-DUST

JAYPEE NIGRIE SUPER THERMAL POWER PLANT		Model: DHT-50	SICK INDIA PVT LTD
Calibration date: 11.07.2021		Equipment Number : 14028364	Calibration done by : Salim Gadkari
		Analyser Installed at : Unit #1 Stack.	
Manual Sampling Done by: M/s Vardan Envirolab, Jaipur, Rajasthan.		Details of Manual sampling: DMP/ENV/090721/01 Dated: 10.07.21	
S.NO	Manual sampling Results in (mg/Nm3)	Instrument Reading in mg/Nm3	
1	41.71	51.45	

With reference to the manual sampling results instrument was calibrated.

Old Calibration factor: 586

New Calibration factor:475



S.K. Choudhury

SICK representative signature

Salim Gadkari

SICK representative Name

Customer representative signature

Santosh Kumar Choudhury

Customer representative Name