

**IInd QUARTERLY REPORT OF THE
OVERSIGHT COMMITTEE**

**IN COMPLIANCE WITH THE HON'BLE
NATIONAL GREEN TRIBUNAL ORDER
DATED 14-07-2020**

**IN O.A. 164 / 2018 (ASHWANI KUMAR
DUBEY VS. UNION OF INDIA & ORS.)**

**IInd QUARTERLY REPORT OF THE OVERSIGHT COMMITTEE IN COMPLIANCE WITH
THE ORDER DATED 14.07.2020 OF NGT IN OA 164/2018 (ASHWANI KUMAR
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**SECOND QUARTERLY REPORT OF THE OVERSIGHT COMMITTEE IN COMPLIANCE
WITH THE ORDER DATED 14.07.2020 OF NGT IN OA 164/2018 (ASHWANI
KUMAR DUBEY VS. UNION OF INDIA AND ORS.)**

1. Hon'ble NGT vide its order dated 14-07-2020 in OA 164 of 2018 (Ashwani Kumar Dubey vs. Union of India & ors. earlier OA 276 of 2013) was please to order that:

"11. Since the term of the Committee has expired, further oversight work may be undertaken by a joint Committee of the CPCB with respective State PCB and the District Magistrates. The State PCBs will be the nodal agency for the respective States.

12. The newly constituted OC may furnish its reports quarterly by email at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. First such report may be furnished giving status as on 31.10.2020 by 15.11.2020 with copies to concerned stake holders for their response if any by 30.11.2020."

2. In compliance to the above order of Hon'ble NGT and findings / recommendations of the various Committees, the new Oversight Committee in its first report had chalked out the various recommendations and gathered the status of compliance / ATR form the various stack holders, mainly Thermal Power Plants, Coal Mines and Railway authorities of the Singrauli region, which was placed as Annexure 1 in the first report.

3. **Based on the compliances, following recommendations were made for further compliance by the various stakeholders in the first quarterly report by the new oversight committee:-**

➤ ***Thermal Power Plants:-***

- 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.***
- 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.***
- 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.***
- D. Air borne fly ash from the ash dykes, specifically during summers shold be controlled through arrangements of water sprinkling, vegetation and other scientific measure.***

- 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.*
 - 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.*
 - 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.*
 - 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.*
 - 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.*
 - 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.*
- **Coal Mines:**
- A. Road sweeping machines in sufficient numbers shall be procured and regular sweeping of the coal transport roads shall be undertaken to keep them dust free.*
 - B. Paving of the road side shoulders along the coal transport roads shall be undertaken within 3 months under the guidance and supervision of the district administration.*
 - C. Maintenance of railway sidings operated by NCL shall be undertaken as per the guidelines published by CPCB titled "Inventorization of Railway Sidings and Guidelines for their Environment Management- March 2015".*
 - D. Utilization of fly ash in over burden (OB) of working mines and conducting pilot studies for the same as per Fly ash notification and CPCB guidelines shall be undertaken and 25% use fly ash in the OB dumps shall be done as per Fly Ash Notification, 1999.*
 - E. 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.

- F. The railway connectivity of the Block B Gorbi mine shall be completed within 3-6 months time to stop the road transportation of the coal. Consequently the operation of the coal loading railway siding of the Block B Gorbi mine shall be terminated thereafter.*
- G. The railway sidings operated by NCL should be operated in accordance with the CPCB guidelines.*
- H. All the coal mines shall calibrate all the CAAQMS 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.*

➤ **Railway sidings / Railway Administration:**

- A. The railway sidings operated by East Central Railways (ECR) and West Central Railways (WCR) are a source of dust pollution in the vicinity and have not taken proper measures for the control of coal dust as per CPCB guidelines. It is recommended that General Managers of ECR and WCR should be operated in accordance with the guidelines published by CPCB titled "Inventorization of Railway Sidings and Guidelines for their Environment Management- March 2015" and all necessary dust control devices should be installed within 3-6 months time.*
- B. Indian Railways has been taking large scale track doubling works in the Singrauli region as well as throughout the country, and use huge amount of soil for laying railway tracks, constructing embankments. Large amount of flyash can be used in these construction activities of Indian Railways, for which railways need to be instructed for taking positive steps.*

➤ **National Environmental Engineering Research Institute (NEERI):**

NEERI has been entrusted with the studies for the assessment of Environmental Damage Compensation (EDC) due to the ash dyke breach of M/s Essar Power MP Ltd., M/s Vindhyachal Super Thermal Power Station and M/s Sasan Power Ltd. Neither of the study report has been submitted even after a lapse of long time. NEERI may be instructed to submit the reports at the earliest.

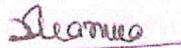
➤ **District Administration:**

- A. *The district administration / Municipal Corporation Singrauli should ensure that all the villages, where RO water supply was provided, shall be supplied with piped water supply / tankers.*
- B. *The Health department of the district shall ensure that the citizens with manifestation of occupational diseases like silicosis, fluorosis etc shall be diagnosed and treated. Facilities for the same shall be developed in the newly constructed Trauma center of the district hospital.*
- C. *The domestic use of coal in the households shall be discouraged and LPG connections under Ujjawala Scheme be provided.*
4. The above recommendations and the compliances reported by various stake holders is tabulated and enclosed as Annexure 1.
5. As far as recommendations for compliance for the next quarter are concerned, many of the recommendations of the first quarterly report are not fully complied or are under the process of being complied. No new recommendations are made since site visits could not be under taken due to the COVID 19 situation. Hence the point-wise comments of the Oversight committee listed in Column 4 of the Annexure 1 and shortcomings listed there, which the committee expects from the stakeholders to be complied by the end of 30th April, 2021 (next quarter), may be taken as new recommendations, which will be reviewed / verified in field in the next quarter.

Enclosure : As above



Sunil Kumar Meena
Scientist D,
CPCB Regional Directorate,
Bhopal



(H.K. Sharma)
Director Environment
MPPCB, Bhopal



(Rajiv Ranjan Meena)
District Magistrate
Singrauli (MP)

<u>Annexure 1</u>		
<u>Before The National Green Tribunal, Principal Bench; New Delhi in the matter of cases O.A. No. 164/2018 : 2nd Quarterly report of the Oversight Committee</u>		
Action Taken Report of the various Stakeholders before the Oversight Committee constituted by Hon'ble NGT vide its order dated 14-07-2020 on OA 164 of 2018 Ashwani Kumar Dubey vs. Union of India		
SNo.	Recommendations in the 1 st Quarterly report of the Oversight Committee constituted via Hon'ble NGT order 14.7.2020	Current Status
<u>THERMAL POWER PLANTS</u>		
1	2	3
1.	A. The thermal power plants shall ensure that 100% fly ash utilization shall be ensured by them as per the Fly ash Notification.	Presently 100 % Fly ash is not being utilized by the Thermal Power Plants situated in Singrauli Region except for the one TPP namely JP Nigrie Super Thermal Power Plant as this unit has one cement clinker grinding unit also where the fly ash is mostly utilized. However action plans have been submitted by every TPP for 100% fly ash utilization but since 25% of the fly ash is not being used in the external overburdens by the coal mines of M/s NCL, the 100% utilization of fly ash by the thermal power plants is near to impossible. Intervention of Hon'ble NGT to direct M/s NCL specifically in this matter is required. The replies filed by the various thermal power plants, namely M/s Vindhyaachal Super Thermal Power Plant (NTPC), M/s Sasan Power Ltd, M/s Essar Power MP Ltd., M/s JP Nigrie Super Thermal Power Plant and M/s Hindalco Mahan Aluminum (CPP) are attached respectively as <u>Enclosure 1</u> , <u>Enclosure 2</u> , <u>Enclosure 3</u> , <u>Enclosure 4</u> & <u>Enclosure 5</u> along with their annexure.

<p>The time for the installation of FGD for M/s namely JP Nigrie Super Thermal Power Plant has expired on 30-06-2020 and that for as well as Mahan Aluminum (Captive Power Plant) has expired on 30-06-2018. Esaar Power MP Ltd. has gone into insolvency process and till that issue is settled, the installation of FGD etc remains to be stalled, for which the given time lines have expired on 31-12-2020. Similarly for other remaining thermal power plants, for whom the time for installation is still valid, like Sasan Power Ltd and NTPC are also delayed, the process of bidding / tenders/ orders etc is still going on and may not be completed within the given time lines by CPCB. However the progress made by NTPC is somewhat ahead of other TPPs. On the other hand matter seems to be in deliberation between MoP, MoEF&CC and also seems to be ceased up with Hon. Supreme Court. Also CPCB has not initiated any coercive action against the three TPPs whose time lines have expired.</p>	<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>
<p>TPPs have got the testing of their ash dykes from institutions like IIT Roorkee, IIT BHU and private consultants. These institutes have found them to be safe. However, the departments like MoP or CEA etc shall be entrusted with the responsibility of approving the designs initially and then regularly inspecting and approving the safety and stability from time to time. Also during the height raising of the dykes, regular inspection should be carried out and SOPs for the same to be drawn and implemented in field. Presently no such checks by external expert regulatory body is being done by anybody.</p>	<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>
<p>Compliance has been reported by the TPPs, that wetting of the top ash layer is done specifically in summer season.</p>	<p>D. Air borne fly ash from the ash dykes, specifically during summers should be controlled through arrangements of water</p>

	<p>sprinkling, vegetation and other scientific measure.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>NTPC Vindhyachal has completed the studies and has submitted application before MPPCB for starting trial runs of the ash dumping in abandoned Gorbi Mines. MPPCB should take an early decision on the same.</p> <p>Except for Sasan Power Ltd. other TPPs have accepted the recommendation that they will take up health check up facilities for villagers through mobile medical van. However no such cases of silicosis, fluorosis have been reported by the State Health Department.</p> <p>Sasan Power Ltd. has refused to deposit the amount on the pretext that Hon. NGT has ordered NTPC to deposit the remaining amount and not to Sasan Power Ltd. Meanwhile NEERI has submitted its environmental damage compensation report in respect of M/s Essar Power MP Ltd. and a compensation of Rs 91.82 Cr. has been assessed. Since the TPP is now under NCLT, MPPCB has submitted its claim amounting to Rs. 90.82 (Rs 1 Cr already deposited), before the duly appointed dissolution professional. MPPCB has also filed court case under the provisions of the Water Act, 1974 and EP Act, 1986 for the non compliances committed by M/s Sasan Power Ltd. which due to its illegal ash storage had taken lives of 6 citizens and caused pollution to the environment.</p>
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	<p>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.</p>	<p>NTPC has reported that the work for removal of fly ash has been started and 55000 Tonnes of fly ash has been removed. However no time targets have been given by them.</p>
	<p>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.</p>	<p>NTPC has reported that Contract for feasibility study for construction of RCC wall awarded to IIT, Roorkee and their First visit is expected in Mar'21. They have also submitted that consultations for pilot project for construction of ash mound are progress with IIT-Delhi. IIT- Roorkee also contacted for the work but has informed that it lacks experience in the area. L&T-S&L was also approached but the agency has informed that the area of land proposed for mound is very less.</p>
	<p>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.</p>	<p>All the TPPs of the region except M/s Sasan Power Ltd, have submitted the calibration reports. Sasan Power Ltd has submitted that the calibration report will be submitted soon.</p>

<u>COAL MINES</u>	
2.	<p>M/s Northern Coalfields Ltd. is the biggest producer of coal in the region and road transportation from its various mines takes place. They have reported that 10 nos. of road sweeping machines have been deployed and 4 more are being procured shortly. The reply submitted by the M/s NCL along with its annexures is placed as <u>Enclosure 6</u> of this report.</p> <p>NCL has reported that paving of the shoulders all along the coal transport road from Jayant and Block B to Spur I and Spur II of railway siding has been completed. However this is only a small portion, where the coal is taken to railway siding from the two mines. While there are other routes also where road transportation of the coal take places in the Singrauli city, which is not meant to be taken to railway sidings, but to other location, outside the city. Hence all the internal roads inside the city from where the coal transportation takes place, shoulders need to be paved and a time bound programme need to be prepared and implemented by M/s NCL</p> <p>M/s NCL is operating two railway sidings and have reported compliance as per CPCB guidelines on the railway sidings. Including water sprinklers, wind breaking walls, concrete roads etc. However these systems need to be maintained and operated properly.</p>
	<p>A. Road sweeping machines in sufficient numbers shall be procured and regular sweeping of the coal transport roads shall be undertaken to keep them dust free.</p> <p>B. Paving of the road side shoulders along the coal transport roads shall be undertaken within 3 months under the guidance and supervision of the district administration.</p> <p>C. Maintenance of railway sidings operated by NCL shall be undertaken as per the guidelines published by CPCB titled "Inventorization of Railway Sidings and Guidelines for their Environment Management- March 2015".</p>

	<p>D. Utilization of fly ash in over burden (OB) of working mines and conducting pilot studies for the same as per Fly ash notification and CPCB guidelines shall be undertaken and 25% use fly ash in the OB dumps shall be done as per Fly Ash Notification, 1999.</p>	<p>As reported from time to time, M/s NCL has objected to the use of 25% fly ash in the external overburden of its coal mines claiming serious safety implications, and submitted that it cannot be done in working mines. The reply of the NCL can be seen at Enclosure 6. They have also reported that IIT- BHU has been contacted to study this aspect. This is certainly seems to be a delaying tactics, as previously at least for the last three years NCL was gaining time saying that a study by CMPDI is going on. No such report / recommendations of CMPDI has been submitted / produced till date and now this IIT-BHU study, for which also no time limit has been specified?</p>
	<p>E. 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.</p>	<p>NCL has reported that health check up for local population is being arranged and mobile ambulances are also being operated. However including routine ailments, NCL should also conduct health check up of villagers specifically for Silicosis , Fluorosis etc. as recommended by the oversight committee and record be maintained and shared with the local health department.</p>
	<p>F. The railway connectivity of the Block B Gorbi mine shall be completed within 3-6 months time to stop the road transportation of the coal. Consequently the operation of the coal loading railway siding of the Block B Gorbi mine shall be terminated thereafter.</p>	<p>NCL has reported that the construction of railway line is 75 % complete, but due to hindrance by the local villagers, work is getting delayed. In this matter the district administration needs to play its role and getting the issues resolved at the earliest.</p>
	<p>G. The railway sidings operated by NCL should be operated in accordance with the CPCB guidelines.</p>	<p>Progress as reported at point no. C.</p>

	<p>H. All the coal mines shall calibrate all the CAAQMS 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.</p>	<p>NCL has reported that they have installed 9 CAAQMS and calibration is being done regularly. However no such calibration report has been submitted.</p> <p>Amilia (North) Coal Mine, A unit of Jai Prakash Power Ventures Ltd. has reported that they have calibrated their CAAQMS on 24-1-2021, however no report has been submitted. Their reply is placed as <u>Enclosure 7</u> of this table.</p> <p>Moher & Moher, Amlohri Coal Mine owned by M/s Sasan Power Ltd. has not submitted any compliance.</p>
3.	<u>RAILWAY SIDINGS / RAILWAY ADMINISTRATION</u>	
	<p>A. The railway sidings operated by East Central Railways (ECR) and West Central Railways (WCR) are a source of dust pollution in the vicinity and have not taken proper measures for the control of coal dust as per CPCB guidelines It is recommended that General Managers of ECR and WCR should be operated in accordance with the guidelines published by CPCB titled “Inventorization of Railway Sidings and Guidelines for their Environment Management- March 2015” and all necessary dust control devices should be installed within 3-6 months time.</p>	<p>There are 05 coal loading / unloading railway sidings in the Singrauli district, out of which 02 are operated by East Central Railways, Dhanbad and 03 are operated by West Central Railways, Jabalpur. These railway sidings are a cause of dust nuisance due to storage, transportation and loading / unloading of coal and none have made adequate arrangements for dust control as per the CPCB Guidelines.</p> <p>The Dy. Commercial Manager of the East Central Railways, Dhanbad has submitted that the work order of the construction of wind breaking wall of 6’ height along with 20’ high fencing / protection screen has been awarded for Mahadeiya and Singrauli Railway sidings, which will be completed in 6 months. Fixed water sprinklers are yet to be installed. MPPCB has already launched a Court case in the court of Chief Judicial Magistrate, Waidhan district Singrauli on dt. 13/10/2017 against the DRM, East Central Railways, Dhanbad. The reply by ECR is as per <u>Enclosure 8</u>. In short, not much progress has been done by ECR and despite the legal case against them, still they</p>

		<p>are operating the two sidings causing pollution. No fixed time lines have been given for the compliance as per CPCB guidelines. On the other hand West Central Railway (WCR), Jabalpur has not submitted any compliance.</p>
	<p>B. Indian Railways has been taking large scale track doubling works in the Singrauli region as well as throughout the country, and use huge amount of soil for laying railway tracks, constructing embankments. Large amount of flyash can be used in these construction activities of Indian Railways, for which railways need to be instructed for taking positive steps.</p>	<p>No reply has been given by railways on this aspect. The matter needs to be taken up as a matter of policy and the Department of Railways should be asked to take up technical studies for the use of fly ash, specifically in track laying and railway embankments; these activities require large amount of local soil, which can be protected if railways may succeed in using fly ash in its activities, for which Hon'ble NGT may be pleased to pass a suitable order.</p>
<p>4.</p>	<p><u>NATIONAL ENVIRONMENTAL ENGINEERING INSTITUTE (NEERI)</u></p>	
	<p>A. NEERI has been entrusted with the studies for the assessment of Environmental Damage Compensation (EDC) due to the ash dyke breach of M/s Essar Power MP Ltd., M/s Vindhyachal Super Thermal Power Station and M/s Sasan Power Ltd. Neither of the study report has been submitted even after a lapse of long time. NEERI may be instructed to submit the reports at the earliest.</p>	<p>NEERI has since then submitted their EDC report in the matter of breach of ash dyke of M/s Essar Power MP Ltd. An EDC of Rs. 91.82 Cr. has been assessed and MPPCB has placed its demand before the Interim Resolution Professional. NEERI has since then revisited the sites of VSTPS and Sasan Power Ltd. and recollected the samples for testing. Reports for these two TPPs, is expected to be submitted soon.</p>

<u>DISTRICT ADMINISTRATION</u>	
5.	<p>The Municipal Corporation of Singrauli has submitted that 13 RO plants have been installed and purified water is being supplied. In the city, piped water supply is being given and at some places in some wards, laying of pipeline is being done. The information submitted by the MC is as per <u>Enclosure 9</u>.</p>
<p>A. The district administration / Municipal Corporation Singrauli should ensure that all the villages, where RO water supply was provided, shall be supplied with piped water supply / tankers.</p> <p>B. The Health department of the district shall ensure that the citizens with manifestation of occupational diseases like silicosis, fluorosis etc shall be diagnosed and treated. Facilities for the same shall be developed in the newly constructed Trauma center of the district hospital.</p>	<p>The Chief Medical and Health Officer of Singrauli has informed that in the District Hospital cum Trauma Center, the facility to test and treat Silicosis and Fluorosis is available, however there are no patients of these ailments. The information is placed as <u>Enclosure 10</u>.</p>
<p>A. The domestic use of coal in the households shall be discouraged and LPG connections under Ujjawala Scheme be provided.</p>	<p>The District Supply Officer of Singrauli has informed that 109881 households have been given gas connection under PM Ujjawala Scheme. The information is placed as <u>Enclosure 11</u>.</p>

**Recommendations of the Oversight Committee in its first quarterly report for Compliance
by the various stakeholders**

1. Thermal Power Plants:-

09.02.21

S.No.	Recommendation	Status
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.	Action plan for 100 % ash utilization is attached as Annexure 1 .
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.	<ol style="list-style-type: none"> 1. Contracts for the works have been awarded as required. 2. FGD installation work is in progress in all the Units (1-12). Issue of timeline extension due o various unforeseen circumstances taken up with CEA (Annexure 2). 3. DeNOx limit achieved in Unit 10 with combustion chamber modification. Action plan in place to achieve the limit in all other Units as per the CPCB time line of Dec'22.
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.	Monitoring done through IIT-Roorkee in Nov'19. Design and construction of ash dykes of NTPC Vindhyachal were certified as safe. Next round of third party monitoring will be done by IIT, Hyderabad for which contract has already been awarded. Visit expected in Feb'21.
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.	Noted for compliance. Thin film of water is maintained above the top surface of ash in the dykes that are in service to prevent any fugitive dust emission. Sprinkling arrangement is also in place. Fogging machine deployment will also be done with effect from Apr'21. PO for the machines has already been placed.
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.	EIA/EMP study interim report received from CMPDI on 23.01.21. MPPCB has been requested to give clearance to start ash filling based on the Radio Tracer, Flora-Fauna and EIA/EMP study reports vide letter dtd 23.01.21.



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.	Noted for compliance. No cases of silicosis or other occupational diseases detected in 2020.
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.	-
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.	Work is in progress. About 55,000 MT of sludge removal has been completed.
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.	<ul style="list-style-type: none"> • Contract for feasibility study for construction of RCC wall awarded to IIT, Roorkee. First visit is expected in Mar'21. • Consultations for pilot project for construction of ash mound are in progress with IIT-Delhi. IIT-Roorkee was also contacted for the work but has informed that it lacks experience in the area. L&T-S&L was also approached but the agency has informed that the area of land proposed for mound is very less.
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.	Complied. Calibration reports are attached as Annexure 3 .

(Munish Jain),

AGM (EMG), NTPC Vindhyachal

100% ASH UTILIZATION PLAN**UOM: LMT**

	2020-21	2021-22	2022-23	2023-24
Expected Ash Gen	80	80	80	80
Transportation cost sharing Incentive Scheme for Cement Plants	4	6	6	4
Supply to Cement Plants through rail transportation	1	3	10	13
Utilisation in OB mixing	0	4	13	32
Mines Filling	0	4	5	7
Waste land development	8.5	10	15	8
Brick Manu. & other Fly ash based industry	1	2.5	3	3
Road Construction	6.5	10	15	10
Ash Dyke Raising	11	8	2	0
Ash Park (Rewa)	0.2	0.2	0.5	1
Ash Mound		0.3	1.5	2
Total AU	32.2	48	71	80
AU%	40%	60%	90%	100%

EXTERNAL SUPPORT REQUIRED

- Implementation of Demand side provisions of MoEF notification on fly ash utilization including mandatory use of fly ash bricks and OB mixing with fly ash.
- Creation of requisite rail/road infrastructure to support ash evacuation from the region to ensure 100 % ash utilization.
- Clearance for ash filling in GORBI mines.
- Early clearance of Waste Land Development proposals.

Initiatives & Measures taken by NTPC Vindhyachal to improve ash utilization

1. Efforts are being made to start GORBI mine filling within a short period of time. Since the mine void is filled with water of very low pH, all care has to be taken to ensure that no environmental hazard is created and clearances from regulatory/statutory authorities are obtained before start of work. MPPCB has given elaborate and detailed terms and conditions for allowing permission for ash filling. Based on the interim Environment Study reports, NTPC Vindhyachal has approach MPPCB again on 23.01.21 for interim clearance. MoEF has already clarified that no separate clearance from them is required as long as the CPCB guidelines on mine filling are followed and the same will be complied with. Work is also in progress to comply with DGMS requirements.
2. Supply of fly ash to Cement Manufacturers started in July'20 under Incentive scheme for making it financially viable for them to lift ash from VSTPS.
3. VSTPS is regularly taking up the work of Waste Land Development of Govt/Public/Private land using fly ash at various locations within 100 kms of Plant radius. Total ash utilisation in these contracts is expected to be around 8.5 LMT in the financial year 2020-21. Contract for the works have already been awarded.
4. VSTPS has been continuously following up with NHAI for getting requirement for ash in road construction. A requirement of about 10 lac MT has now been received from NHAI, Varanasi and supply of ash has been started in Aug'20. VSTPS is committed to provide ash to all projects under Pradhan Mantri Gramin Sadak Yojna and asset creation programmes of the Government involving construction of buildings, road, dams and embankments within 300 kms of the Plant as and when the requirement is received.
5. Fly ash transportation by rail to Satna/Rewa region and other places for reducing transportation cost is planned. NTPC is procuring 3 rakes of BTAP wagons for the purpose at a cost of ~ 60 crores. Rail loading facility is expected to become functional by Mar'21. However, in the meantime, rail transport of fly ash filled in bags is being done on trial basis.
6. Ash park has been set up at Rewa where fly ash transported in 50 kg bags from VSTPS is made available to the ash based industries in the region. Vindhyachal has been the first Plant in the region to start such an initiative. Ash bagging machines have been installed for the purpose in the SILOs at Vindhyachal. Bagging machines for Jumbo bag filling (1-1.5 T) are also planned to be installed.
7. VSTPS has started supplying fly ash to the ash based industries within 100 kms from the Plant. Free of cost Door step delivery is being made. Again, Vindhyachal is the first Plant in the region to start such an initiative
8. Contract for door step delivery of fly ash to ash based industries up to 300 kms distance from the Plant has been awarded.
9. VSTPS is actively following up with Distt Administration for awarding any abandoned quarries which can be developed using ash. One no. of stone quarry was awarded to VSTPS in Makrohar region where ash filling has been completed.
10. VSTPS has approached IIT-Roorkee, IIT-Delhi and other vendors for construction of Ash Mound as a pilot project.
11. VSTPS is making around 75,000 ash bricks/day for its own use. No red brick is used for any construction activity within Plant or township.
12. Consistent efforts are being made by VSTPS requesting NCL for mixing of fly ash with OB but so far the efforts have not yielded fruit.

No. 10/1/2020-S. Th.
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated 19.10.2020

OFFICE MEMORANDUM

Sub: Meeting chaired by Secretary (Power) on 13.10.2020 at 3:30 PM with States, Central Generating Companies and IPPs to review the status/timelines of implementation of emission control equipments in Thermal Power Plants - reg.

The undersigned is directed to inform that Secretary (Power) chaired a meeting through Video Conferencing, on 13.10.2020 at 3:30 PM with States, Central Generating Companies and IPPs to review the status of implementation of emission control equipments in Thermal Power Plants.

2. In this regard, minutes of the meeting is enclosed for information and necessary action.

Enclosed: as stated.



Nishat Kumar
Under Secretary to the Govt. of India
Tel: 23715507, Ext: 212

To,

- i. All Energy Secretaries of States having coal based Thermal Power Plants.
- ii. Chairperson, CEA
- iii. CMD, NTPC
- iv. CMD, DVC
- v. CMD, NLC
- vi. All IPPs

Minutes of the Meeting chaired by Secretary (Power) with States, Central Generating Companies and IPPs on 13.10.2020 at 3.30 PM to review the status/ timelines for installation of emission control equipment by Thermal Power Plants

List of participants is annexed.

2. At the outset, Secretary (Power) welcomed all the participants. After a brief round of introduction of participants, JS(Thermal) informed that in the meeting chaired by Secretary, Ministry of Environment Forest & Climate Change (MoEF&CC) on 15.09.2020, it was deliberated that CPCB would make a combined assessment exercise, in consultation with MoP and CEA and reconcile the progress status of each unit against the committed timelines and also estimate timelines for compliance based on progress made by individual units. Based on the above assessment, CPCB may consider a reasonable relaxation in timelines due to COVID-19 Impact on case to case basis. Further, in a meeting chaired by Hon'ble Minister (Power) on 07.10.2020 it was directed to review the sincerity of action taken by utilities so far and assess final timelines by which they would comply with Central Pollution Control Board (CPCB)'s stipulations in respect of emission norms. In case Gencos fail to explain the reasons for any delay on their part, they may have to face penalty/ Environmental Compensation (EC) by CPCB for non-bona fide delays.

3. CE (TPRM), CEA made a State-wise, sector-wise power presentation on the progress of FGD installation by individual units. The progress of each unit along with reasons for the delay so far was deliberated with the concerned developers. Gist of the various issues discussed/ raised by developers were as follows:

3.1 Stressed Thermal Power Plants: As regards 34 stressed thermal power assets/units identified by Department of Financial Services (DFS), it was informed that MoP had already proposed extension for such units on the ground that timelines need to be worked out from the date new owner/ management takes over the stressed asset either through National Company Law Tribunal (NCLT) or through One Time Settlement (OTS) mechanism. The developers who had taken over the stressed assets would submit complete details and documents to CEA for enabling the assessment which could be submitted for consideration of MoEF&CC.

3.2 Cost recovery of FGD installations for projects without PPA: It was informed that a mechanism in this regard had been proposed by Confederation of Indian Industry (CII) and Association of Power Producers (APP). The matter would be examined in consultation with CEA.

3.3 Staff paper of Central Electricity Regulatory Commission (CERC) for cost compensation: It was informed that CERC has hosted a staff paper on its website seeking comments of stakeholders on the proposed mechanism for compensation for competitively bid out Thermal Generating Stations for Change in Law on account of compliance of the revised emission standards notified by MoEF&CC. All the concerned utilities were requested to send their

comments to CERC so that the matter might be considered by CERC appropriately.

3.3.1 As regards pending cases of some IPP's with SERCs, it was observed that APTEL had already given its Order for considering MoEF&CC's New Emission Norms as 'Change in Law' event in the specific case of Punjab SERC. The same has already been informed to all Gencos by CEA and to all SERCs by Forum of Regulators (FOR)/CERC, as per MoP's directions.

3.4 **Amendment in NOx emission norms** : It was informed that based on Hon'ble Supreme Court's observation with respect to NOx emission norms for thermal plants commissioned between 01.01.2004 and 31.12.2016, the issue had been taken up with MoEF&CC for issuing necessary amendment in NOx emission norms upto 450 mg/Nm³.

3.5 **Ultra norms by RKM Powergen for expediting installation of FGD** : RKM Powergen was requested to share the technology on Ultra norms on emission being adopted by them in their Uchpinda TPP as they had claimed to reduce the implementation time for FGD installation to 15-20 months. CEA was advised to study the feasibility of the technology adopted by RKM Powergen in other similarly placed plants.

3.6 **Assessment on progress made by each thermal power units for compliance of emission norms**: Each unit and developer was asked to explain the reason for delay in completing feasibility study/ making tender specification/ issuing NIT/ non-finalisation of bids/ award of bids so far. They were also asked to submit a definitive timelines for each of the pending activity while indicating timelines for meeting each of the milestone for compliance of emission norms. It was observed that some of data provided by developers to CEA in this regard were outdated/ faulty and required suitable updation. All the Gencos were requested to submit to CEA by 21.10.2010, the reasons (with documentary proof) for delays so far in respect of failure in compliance of emission norms as per the phasing plan and also submit a definitive action plan for meeting emission norms with timelines for each of milestones separately.

4. **Draft notification on utilization of fly ash**: It was observed that some of the States had made representations to Ministry of Power (MoP) for doing away the requirement of meeting transportation cost of fly ash by Thermal power plants. It was informed that MoEF&CC had proposed a draft notification on fly ash utilization seeking comments of MoP before hosting in public domain seeking comments of various stakeholders.

4.1 It was noted that the draft notification had put stringent conditions on utilization of fly ash and provision of penalty varying from Rs.1500/ tonne to Rs.2,000/tonne for not meeting the proposed fly ash utilization norms. All the Gencos were requested to submit their comments to CEA by 21.10.2020 and CEA was advised to compile comments of Gencos and submit an analysis to Ministry of Power by 23.10.2020 for taking up the matter with MoEF&CC appropriately.

5. **Recommendations:** After detailed discussion and deliberations, the following were recommended:

5.1 **FGD Installations:** All developers/ Gencos to submit details unit wise to CEA by 21.10.2020 at cetprmcea@nic.in as follows:

1. Prescribed CPCB timelines for FGD installation.
2. Action Taken from thereon and Reasons for Delay till date for each of the milestone.
3. Date of completion of Feasibility study- if not, likely completion date.
4. Date for finalization of tender specifications- if not, likely completion date.
5. Date of issue of NIT- if not, likely completion date of issue of NIT
6. Date of bid opening- if not, likely bid opening date.
7. Date of award of bids/ placing purchase orders- if not, likely completion date.
8. Date of Final Commitment for FGD commissioning.

5.1.1 CEA will compile the details on the above commitments from all the 448 thermal power plant units and other left out under construction units having Environment Clearance (EC) prior to 07.12.2015. Based on the inputs so received, CEA will make its own assessment regarding proposed final timelines for FGD installations, based on available records and track record of the utility so far in compliance of emission norms. A detailed assessment and analysis unit wise shall be submitted by CEA to MoP by 23.10.2020

5.1.2 Timelines for the identified 34 stressed assets may be re-worked from the date of taking over by new management/company/project out of stress.

5.2 **Draft notification on fly ash utilization:** All the Gencos (Central/ State Gencos and IPPs) to send comments on the draft MoEF&CC Notification on utilization of fly ash by Thermal Power Plants by 21.10.2020 to CEA at cetprm-cea@nic.in and tcdcea@gov.in.

5.2.1 MoP will re-send the emails to those Gencos who had not received emails pertaining to the proposed draft Notification of MoEF&CC.

5.2.2 CEA to compile the comments received on draft MoEF&CC Notification on Utilization of fly ash by Thermal Power Plants and submit a detailed analysis of comments received to the MoP by 23.10.2020.

6. The meeting ended with a vote of thanks to the chair.

List of Participants

Ministry of Power

1. Shri S.N. Sahai, Secretary (Power) in chair
2. Shri S.K.G. Rahate, Additional Secretary (Power)
3. Shri V.K. Dewangan, Joint Secretary (Th.)
4. Shri Rakesh Kumar, OSD to Secretary (Power)
5. Shri Nishat Kumar Under Secretary (S.Th.)
6. Shri Bhanu Joshi, Section Officer (S.Th.)

Central Electricity Authority

7. Shri B.C. Mallick, CE
8. Sh. Rajeev Kumar, Director
9. Sh. Baleshwar Thakur, Director
10. Shri Surendra Kumar, Deputy Director (TPRM)
11. Shri Saurabh Parth Sarthi, AD (TPRM)
12. Sh. Bitan Ray, Deputy Director

NTPC

13. Sh. Gurdeep Singh, CMD
14. Shri U.K. Bhattacharya, ED
15. Shri Ramesh Babu, Director (Operations)
16. Shri SM Choudhary, ED
17. Shri B B Chugh, GM
18. Shri Udayan Kumar, GM
19. Shri Pankaj Gupta, AGM

DVC

20. Shri A.K Verma, ED (Projects)
21. Shri M C Mishra, ED (Operations)
22. Shri B Dutta, ED (Engg.)

NLC India Ltd.

23. Shri Shaji John (Dir)
24. Shri Balasubramanian (GM)

Singareni Collieries Limited (SCCL)

25. Shri S.K. Sur, CTC
26. Shri J.N. Singh, Chief OLM
27. Shri Ch. Vasudevamurthy

Andhra Pradesh

28. Shri N. Srikanta, Principal Secy. (Energy)

Assam

29. Shri Niraj Verma, Secretary, Power

30. Shri Kalyani Baruah, MD, APGCL

Bihar

31. Shri A.K. Sinha Director (Technical)

32. Shri Sakshi, OSD (Technical)

33. Shri Shweta Priya, Assistant Engineer

Chhattisgarh

34. Shri Subrat Sahoo, Additional Chief Secretary

Gujarat

35. Shri Sunaina Tomar, ACS, Energy and Petrochemicals, Gujarat

36. Shri H.N. Baxi, MD, GSECL

Haryana

37. Mohd Shayin, MD, HPGCL

Jharkhand

38. Sri Basarat Kyum, MD , Jharkhand Urja Utpadan Nigam Ltd

39. Sri Arvind Kumar Sinha, MD, TVNL

Karnataka

40. Shri Ponnuraju V., MD, KPCL

Madhya Pradesh

41. Shri Sanjay Dubey, Principal Secy. (Energy)

Maharashtra

42. Shri V. Thangapandian, Director (Projects), MAHAGENCO

Odisha

43. Shri Indranil Dutta, MD, OPGC

44. Shri Sanjeev Kishore, Regional Executive Director, NTPC

Punjab

- 45. Shri A. Venugopal, CMD, PSPCL
- 46. Shri Narender Mehta, OSD to ACS

Rajasthan

- 47. Shri A.K. Gupta, MD, JVVNL

Tamil Nadu

- 48. Shri Pankaj Kumar Bansal, CMD, TANGEDCO
- 49. Shri R. Ethiraj, Director, Generation, TANGEDCO
- 50. Shri M. Chitra, Chief Engineer, TANGEDCO

Telangana

- 51. Shri D. Prabhakar Rao, CMD TS GENCO
- 52. Shri Lakshmaiah, Director Thermal, TS GENCO
- 53. Shri Satchidanandan, Director Project, TS GENCO
- 54. Shri Ajay Kumar, Director, Civil, SCCL Ltd
- 55. Shri D. Satyanarayana Rao, Director (E&M) SCCL
- 56. Shri Muralidharan, Chief Coordinator, SCCL

Uttar Pradesh

- 57. Shri Senthil Pandian C. MD, UPRVUNL
- 58. Shri Ajit Kumar Tiwary, Director (Technical), UPRVUNL

West Bengal

- 59. Shri S. Suresh Kumar, ACS, Power

JSPL

- 60. Shri KK Agarwal, MD
- 61. Shri Siddharth Mohanty, VP
- 62. Shri Amit Kumar, TA to Chairman

Lanco Apara Power Ltd.

- 63. Shri Vamsi Krishna Bopanna, GM
- 64. Shri M Narsimha Murthy, VP

Essar Power

- 65. Shri Kush
- 66. Shri Rajamohan

Ideal Energy Projects Ltd.

- 67. Shri KK Fadnavis
- 68. Shri Vivek N. Masade

MB Power

- 69. Shri Ravi Arya
- 70. Shri Dinesh Batra
- 71. Shri Vinod Agarwal

GMR Energy

- 72. Shri Ashis Basu
- 73. Shri Balaji Sivan

Sembcorp Energy

- 74. Shri Raghav Trivedi
- 75. Shri Mahesh Virpadas

Lanco Amarkantak Power Ltd.

- 76. Shri Anil Sharma, VP
- 77. Shri Vamsi Krishna

Reliance Power Ltd.

- 78. Shri Manoj B. Pongde, VP
- 79. Shri Kiran Narasinga

HNPCL

- 80. Shri R.C. Padhy

Tata Power

- 81. Mr Vijay Namjoshi, Chief - Generation, Tata Power
- 82. Mr Ramkrishna Gadre, Chief- Engineering & Quality, Tata Power
- 83. Mr Ivaturi Rao, Head - Corporate Environment, Tata Power
- 84. Mr Rahman Sidiqur, Head Projects
- 85. Ms Paramita Sahoo, Head Advocacy
- 86. Ms Nandita Singh, Advocacy
- 87. Mr Mukul Singh, Group Head Environment.

DB Power

- 88. Sh. Suresh Nagarajan, CEO
- 89. Shri Manu Krishnan Namboothiri, Head(Strategy, Power sales & Corporate Relationships)

Torrent Power

- 90. Shri Virtal Mehta , VP (Generation)
- 91. Shri J B Patel , GM (Maintenance)
- 92. Shri Nirav Mehta, Mgr (Project)

KSK Mahanadi

- 93. Dr.M.V.R.N Acharyulu, Senior Deputy General Manager (Environment)

L&T

- 94. Shri Afroz Ali, General Manager
- 95. Shri Saurabh Patel, Manager

Bajaj/Lalitpur Power Generation

- 96. Sh. Tara Chandra Upreti
- 97. Shri Ankush J, AVP

Adani Power

- 98. Shri MR Krishna Rao,
- 99. Sh. MS KS Nagendra

RKM Powergen

- 100. Sh. T M Singaravel, Director (Operations)

CESC Limited/Haldi Energy

- 101. Sh. Sudipto Mukherjee, ED

Dhariwal Infrastructure Ltd.

- 102. Sh. Bhaskar Kr Ganguly, GM
- 103. Sh. Kush Kumar, Head – Corporate Affairs

JIPTL

- 104. Sh. Punit Gupta

SKS Binjkote

- 105. Sh. Rama Krishna

Rattan India

- 106. Sh. Gautam Wazir

Sterlite Energy

107. Sh. Aditya Pyasi

TAQA Neyveli

108. Sh. Raghunathan K.

Lanco Anpara

109. Sh. M. Narasimha Murthy

KSK Mahanadi

110. Dr.M.V.R.N Acharyulu, Senior Deputy General Manager(Environment),

Fwd: Review of FGD timeline on the basis of present status of implementation, sincere efforts of utilities & challenges in execution - reg.

From : Vijay Kumar Kejriwal <vkkejriwal@ntpc.co.in> Thu, Oct 29, 2020 11:13 AM
Subject : Fwd: Review of FGD timeline on the basis of present status of implementation, sincere efforts of utilities & challenges in execution - reg. 1 attachment
To : cetprm-cea <cetprm-cea@gov.in>
Cc : Surinder Pal Singh Virk सुरिंदर पाल सिंह विर्क <spsvirk@ntpc.co.in>, Rajendra Kumar Joshi राजेंद्र कुमार जोश <rkjoshi@ntpc.co.in>, Pankaj Kumar Gupta पंकज कुमार गुप्त <pkgupta02@ntpc.co.in>, Udayan Kumar उदयन कुमार <ukumar@ntpc.co.in>, Vinay Kumar विनय कुमार <vinaykumar03@ntpc.co.in>, Prem Parkash प्रेम प्रकाश <premprakash@ntpc.co.in>

Sir,

Please refer trailing mail requesting to submit the new FGD implementation timeline in the wake of various challenges being faced in the FGD implementation.

In this regard, desired information is attached as Annexure-I.

Regards

विजय केजरीवाल) Vijay Kejriwal
उप महाप्रबन्धक, नैगम आयोजना) DGM(CP)
एन टी पी सी लिमिटेड) NTPC Limited
कोर 6) Core-6 (सातवाँ तल) 7th Floor
स्कोप कॉम्प्लेक्स, लोधी रोड) SCOPE Complex, Lodhi Road
नयी दिल्ली) New Delhi

----- Forwarded Message -----

From: "Bikash Chandra Mallick" <cetprm-cea@gov.in>
To: "deepak pandya" <deepak.pandya@adani.com>, bharatagarwal@adhunikgroup.co.in, "north aluminium" <north.aluminium@vedanta.co.in>, "balco igcell" <balco.igcell@vedanta.co.in>, "cmd tsecl" <cmd.tsecl@rediffmail.com>, cesclimited@rp-sg.in, "nadeem ma" <nadeem.ma@coastalenergen.com>, "chairman" <chairman@dvc.gov.in>, powersec@essarpower.co.in, "Yogindu Khajuria" <Yogindu.Khajuria@gmrgroup.in>, "md gsecl" <md.gsecl@gebmail.com>, pvrsg@gvk.com, "sunil hnp" <sunil.hnp@hindujagroup.com>, brs@ibpil.com, communications@avanthapower.com, kpclcetd@gmail.com, info@ksk.co.in, md@mahagenco.in, "cmd" <cmd@ntpc.co.in>, gmhrbspqcl@gmail.com, "opgc2 leadership" <opgc2.leadership@opgc.co.in>, "cmd pspcl" <cmd.pspcl@gmail.com>, powersectt@rattanindia.com, "m malathi" <m.malathi@rkmpowergen.in>, "nikunj shah" <nikunj.shah@shirpurpower.in>, "amitabh prasad" <amitabh.prasad@sterlite.com>, "tspl commercial" <tspl.commercial@vedanta.co.in>, "raghu nathan"

<raghu.nathan@taqaglobal.com>, info@tvnl.in, "legal secretarial"
<legal.secretarial@acbindia.com>, cmd@tsgenco.co.in, "rpower mcafiling"
<rpower.mcafiling@relianceada.com>

Cc: "Bikash Chandra Mallick" <bikasmallick.cea@gov.in>, "rajeev kunwar"
<rajeev.kunwar@gmail.com>

Sent: Wednesday, October 21, 2020 4:56:04 PM

Subject: Review of FGD timeline on the basis of present status of implementation,
sincere efforts of utilities & challenges in execution - reg.

****Security Advisory: This Email has been sent by a Non-NTPC mail ID from Internet.
The Actual sender determined by Security Gateway is [prvs=5563a0218=cetprm-
cea@gov.in]. Please do not click links contained in this mail or open attachments
unless you recognise the source of this email and know the content is safe. ****

****Security Advisory: This Email has been sent by a Non-NTPC mail ID from Internet.
The Actual sender determined by Security Gateway is [prvs=5563a0218=cetprm-
cea@gov.in]. Please do not click links contained in this mail or open attachments
unless you recognise the source of this email and know the content is safe. ****

As per the discussion held in the meeting on 13.10.2020 under the chairmanship of
Secretary, Power, all the TPPs were requested to submit the new FGD implementation
timeline in the wake of various challenges being faced in the FGD implementation.

It is once again requested to all the utilities to submit the complete information
proposing new FGD phasing plan & clearly stating the likely date of FGD completion in
all the units along with the reasons and rationale for delay in FGD implementation .
The information may kindly be sent by today evening positively without any further
delay. The matter may be treated as MOST URGENT.

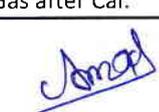
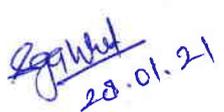
O/o
CE (TPR&M),
Central Electricity Authority
Ministry of Power,
Govt. of India



Annexure-I with reason for extension.xlsx

33 KB

VSTPS STAGE 1 CEMS PARAMETER CALIBRATION REPORT

S.N	UNIT 1				DATE: 28/01/21	
	Gas Cal.	Nox(0-1500ppm)	Sox(0-1500ppm)	CO2(0-20%)	CO(0-1000ppm)	Rmarks
A	Zero Gas Conc.	0	0	0	0	
1	Zero Gas before Cal.	2	3	1	0	
2	Zero Gas after Cal.	0	0	0	0	
B	Span Gas Conc.	1275	1275	17.20	859	
3	Span Gas before Cal.	1270	1275	17.17	856	
4	Span Gas after Cal.	1275	1275	17.20	859	
S.N	UNIT 2				DATE: 28/01/21	
	Gas Cal.	Nox(0-1500ppm)	Sox(0-1500ppm)	CO2(0-20%)	CO(0-1000ppm)	Rmarks
A	Zero Gas Conc.	0	0	0	0	
1	Zero Gas before Cal.	1	4	0	1	
2	Zero Gas after Cal.	0	0	0	0	
B	Span Gas Conc.	1275	1275	17.20	859	
3	Span Gas before Cal.	1270	1274	17.18	859	
4	Span Gas after Cal.	1275	1275	17.20	859	
S.N	UNIT 3				DATE: 28/01/21	
	Gas Cal.	Nox(0-1500ppm)	Sox(0-1500ppm)	CO2(0-20%)	CO(0-1000ppm)	Rmarks
A	Zero Gas Conc.	0	0	0	0	
1	Zero Gas before Cal.	3	1	0	2	
2	Zero Gas after Cal.	0	0	0	0	
B	Span Gas Conc.	1275	1275	17.20	859	
3	Span Gas before Cal.	1278	1269	16.9	854	
4	Span Gas after Cal.	1274	1275	16.95	859	
S.N	UNIT 4				DATE: 28/01/21	
	Gas Cal.	Nox(0-1500ppm)	Sox(0-1500ppm)	CO2(0-20%)	CO(0-1000ppm)	Rmarks
A	Zero Gas Conc.	0	0	0	0	
1	Zero Gas before Cal.	2	2	0	1	
2	Zero Gas after Cal.	0	0	0	0	
B	Span Gas Conc.	1275	1275	17.20	859	
3	Span Gas before Cal.	1271	1275	17.17	858	
4	Span Gas after Cal.	1275	1275	17.20	859	
S.N	UNIT 5				DATE: 28/01/21	
	Gas Cal.	Nox(0-1500ppm)	Sox(0-1500ppm)	CO2(0-20%)	CO(0-1000ppm)	Rmarks
A	Zero Gas Conc.	0	0	0	0	
1	Zero Gas before Cal.	0	2	0	1	
2	Zero Gas after Cal.	0	0	0	0	
B	Span Gas Conc.	1275	1275	17.20	859	
3	Span Gas before Cal.	1275	1273	17.18	852	
4	Span Gas after Cal.	1275	1275	17.20	854	
S.N	UNIT 6				DATE: 28/01/21	
	Gas Cal.	Nox(0-1500ppm)	Sox(0-1500ppm)	CO2(0-20%)	CO(0-1000ppm)	Rmarks
A	Zero Gas Conc.	0	0	0	0	
1	Zero Gas before Cal.	4	1	0	1	
2	Zero Gas after Cal.	0	0	0	0	
B	Span Gas Conc.	1275	1275	17.20	859	
3	Span Gas before Cal.	1270	1273	17.19	853	
4	Span Gas after Cal.	1275	1275	17.20	859	
						
Calibrated by: Anlyzer Instrument Ltd.				Checked by:		

RECORD FOR MONTHLY PREVENTIVE MAINTENANCE



ANALYSER INSTRUMENT CO. PVT LTD.

29.12.2020
to
28.01.2021
Period

E-29 (A), ROAD NO.2, I.P. INDUSTRIAL AREA,
KOTA-324005, RAJASTHAN
PH: 0744-2420610, 2420611, 2430611
E-MAIL: aicplindia@gmail.com Website: www.aicplindia.com

Customer Details **NTPC** *Windhyachal I*

Maintenance Visit Date: *26/01/21*

SR. NO.	REPORT DATED	SITES (UNIT)	PREVENTIVE MAINTENANCE DONE AS PER CHECK LIST ENCLOSED AND ANALYSER SYSTEM CHECKED	SYSTEM STATUS	REMARKS
01	25/01/21	Unit #1	checked	OK	
02	25/01/21	Unit #2	checked	OK	
03	26/01/21	Unit #3	checked	OK	
04	26/01/21	Unit #4	Checked	OK	
05	26/01/21	Unit #5	Checked		
06	26/01/21				

DETAILS OF ANY SPECIAL WORK DONE:

- (1) U#1 to U#6 CEMS Complete preventive maintenance done
- (2) U#1 to U#6 FT & FOT checked running OK
- (3) U#1 to U#6 Zero and span calibration done
- (4) All systems healthy and running OK

REMARKS:

- (1) New Replec in Semic filter U#1
- (2) U#1 New Replec in sunlight No.

AIC ENGINEER

[Signature]
NTPC REPRESENTATIVE

CEMS CALIBRATION REPORT

UNIT 7

DATE: 20/10/2020

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-40%	CO 0-1000 PPM	REMARKS
1	Zero Gas Before cal	2	1	0		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1266	1347	17.32%		
4	Span Gas After cal	1266	1349	17.32%		
5	Sample Reading before	224	338	11.03%		
6	Sample Reading After	226	340	11.05%		

Nox Gas Cylinder 1266 ppm

SOx Gas Cylinder 1349 ppm

CO Gas Cylinder _____

CO2 Gas Cylinder 17.32%

CEMS CALIBRATION REPORT

UNIT 8

DATE: 20/10/2020

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-40%	CO 0-1000 PPM	REMARKS
1	Zero Gas Before cal	1	1	0		
2	Zero Gas After cal	1266 0	0	0		
3	Span Gas Before cal	1266	1347	17.30%		
4	Span Gas After cal	1266	1349	17.32%		
5	Sample Reading before	233	279	11.28%		
6	Sample Reading After	235	280	11.30%		

Nox Gas Cylinder 1266 ppm

SOx Gas Cylinder 1349 ppm

CO Gas Cylinder _____

CO2 Gas Cylinder 17.32%

Sign: NTPC

Handwritten signature:
31/10/20
(Jiwesh)



CEMS CALIBRATION REPORT

UNIT 8

DATE 25/11/20

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-43%	CO 0-100 PPM	REMARKS
1	Zero Gas Before cal	1	2	0		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1275	1275	17.32%		
4	Span Gas After cal	1274	1275	17.31%		
5	Sample Reading before	261	266	10.98%		
6	Sample Reading After	262	267	10.99%		

Nox Gas Cylinder 1275 PPM

SOx Gas Cylinder 1275 PPM

CO Gas Cylinder _____

CO2 Gas Cylinder 17.32 %

CEMS CALIBRATION REPORT

UNIT 7

DATE 25/11/20

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-43%	CO 0-100 PPM	REMARKS
1	Zero Gas Before cal	1	2	0		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1275	1275	17.32%		
4	Span Gas After cal	1275	1273	17.32%		
5	Sample Reading before	336	367	12.33		
6	Sample Reading After	335	377	12.33		

Nox Gas Cylinder 1275 PPM

SOx Gas Cylinder 1275 PPM

CO Gas Cylinder _____

CO2 Gas Cylinder 17.32 %

Sign: NTPC

Thi
03/12/2020
(W. Prakash)



CEMS CALIBRATION REPORT

UNIT 7

DATE: 27/01/21

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-40%	CO 0-1000 PPM	REMARKS
1	Zero Gas Before cal	0	1	2		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1275	1285	17.54%		
4	Span Gas After cal	1276	1286	17.55%		
5	Sample Reading before	296	320	11.55%		
6	Sample Reading After	299	300	11.40%		

Nox Gas Cylinder 1275

SOx Gas Cylinder 1285

CO Gas Cylinder 17.54%

CO2 Gas Cylinder _____

CEMS CALIBRATION REPORT

UNIT 8

DATE: 27/01/21

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-40%	CO 0-1000 PPM	REMARKS
1	Zero Gas Before cal	1275 0	1	2		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1275	1285	17.54%		
4	Span Gas After cal	1274	1284	17.54%		
5	Sample Reading before	320	336	11.36%		
6	Sample Reading After	299	300	11.40%		

Nox Gas Cylinder 1275

SOx Gas Cylinder 1285

CO Gas Cylinder 17.54%

CO2 Gas Cylinder _____

Sign: NTPC

Jh
30/01/21
(Jivesh kumar)



CEMS CALIBRATION REPORT

UNIT 9

DATE: 27/01/21

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-40%	CO 0-1000 PPM	REMARKS
1	Zero Gas Before cal	0	1	2		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1275	1285	17.54%		
4	Span Gas After cal	1276	1284	17.55		
5	Sample Reading before	215	309	10.35%		
6	Sample Reading After	191	299	10.20%		

Nox Gas Cylinder 1275

SOx Gas Cylinder 1285

CO Gas Cylinder 17.54

CO2 Gas Cylinder _____

CEMS CALIBRATION REPORT

UNIT 10

DATE: 27/01/21

Sr no	Gas Cal	NOx 0-1500 PPM	SO2 0-1500 PPM	CO2 0-40%	CO 0-1000 PPM	REMARKS
1	Zero Gas Before cal	0	1	2		
2	Zero Gas After cal	0	0	0		
3	Span Gas Before cal	1275	1285	17.54%		
4	Span Gas After cal	1274	1286	17.55%		
5	Sample Reading before	100	307	11.10%		
6	Sample Reading After	06	300	11.20%		

Nox Gas Cylinder 1275

SOx Gas Cylinder 1285

CO Gas Cylinder 17.54%

CO2 Gas Cylinder _____

Sign: NTPC

(Handwritten Signature)



NTPC

Vindhyachal

Calibration Report of CEMS Analysers

1. Instrument Details:

DESCRIPTION	Unit#11 NOx/SOx ANALYSER
MAKE	Sick
RANGE	0-1000 PPM
LOCATION	SITE
PERMISSIBLE ERROR	1 %
DATE OF CALIBRATION	05/01/2021
NEXT DUE DATE	05/04/2021

2. MASTER USED

NAME OF THE MASTER	STANDARD NOx/SOx GAS CYLINDER(900 ppm)
--------------------	--

3. Observations:

Sr. No	Standard Value		Observed Value		Deviation
	Input	Desired output	Before Calibration	After Calibration	
NOx Calibration					
1.	0 ppm	0 ppm	8 ppm	0 ppm	-
2.	900 ppm	900 ppm	880 ppm	905 ppm	5 ppm
SOx Calibration					
3.	0 ppm	0 ppm	15 ppm	2 ppm	
4.	900 ppm	900 ppm	912 ppm	906 ppm	6 ppm

Maximum Observed Error: 6 ppm

Remarks: OK

Signature Of Person Performing Calibration:

Name: L R Sachan

Approved By: Praveen Panwar

 Signature: 

NTPC

Vindhyachal

Calibration Report of CEMS Analysers

1. Instrument Details:

DESCRIPTION	Unit#12 NO _x /SO _x ANALYSER
MAKE	Fuji
RANGE	0-2000 PPM
LOCATION	SITE
PERMISSIBLE ERROR	1 %
DATE OF CALIBRATION	05/01/2021
NEXT DUE DATE	05/04/2021

2. MASTER USED

NAME OF THE MASTER	STANDARD NO _x /SO _x GAS CYLINDER
--------------------	--

3. Observations:

Sr. No	Standard Value		Observed Value		Deviation
	Input	Desired output	Before Calibration	After Calibration	
NO_x Calibration					
1.	0 ppm	0 ppm	5 ppm	2 ppm	-
2.	1268 ppm	1268 ppm	1290 ppm	1275 ppm	8 ppm
SO_x Calibration					
3.	0 ppm	0 ppm	8 ppm	3 ppm	
4.	1348 ppm	1348 ppm	1360 ppm	1350 ppm	2 ppm

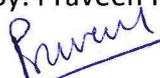
Maximum Observed Error: 8 ppm

Remarks: OK

Signature Of Person Performing Calibration:

Name: L R Sachan

Approved By: Praveen Panwar

Signature: 

ANALYSER CALIBRATION SHEET-SOX/NOX/CO2							DATE:
U# 13	BEFORE CALIBRATION VALUE	ZERO VALUE	SPAN VALUE	ADJUSTMENT	AFTER CALIBRATION VALUE		15/07/2020
SOX	29 PPM	-2 PPM	482	-	34		
NOX	115 PPM	-15	971	-	131		
CO2							
SOX SPAN GAS CONC.	496 ppm						
NOX SPAN GAS CONC.	988 ppm						
CO2 SPAN GAS CONC.	33.20%						
ZERO GAS CONC:	0.4% O2						
REMARKS IF ANY:							

SIGNATURE *[Signature]*
 NAME Shailash Verma
 DESIG. Dy. Mgr. (C&E)
 DATE 15/7/2020

ANALYSER CALIBRATION SHEET-SOX/NOX/CO2							DATE:
U# 13	BEFORE CALIBRATION VALUE	ZERO VALUE	SPAN VALUE	ADJUSTMENT	AFTER CALIBRATION VALUE		14/10/2020
SOX	45 PPM	4 PPM	490 PPM	-	55 PPM		
NOX	106 PPM	10 PPM	980 PPM	-	120 PPM		
CO2							
SOX SPAN GAS CONC.	496 PPM						
NOX SPAN GAS CONC.	988 PPM						
CO2 SPAN GAS CONC.	33.20%						
ZERO GAS CONC:	0.4% (0.20 ppm)						
REMARKS IF ANY:							

SIGNATURE *[Signature]*
 NAME Shailash Verma
 DESIG. Mgr. (C&E)
 DATE 14/10/2020

Quality Monitoring Station (AAQMS)

Calibration Report

Customer Name	NTPC VINDHYACHAL
Station Name	: AAQMS - 1
Station Location	: NH2 colony
Analyser Make	Thermo Fisher Scientific

Date: 21/12/2020

Standard (Gas/PM)	Agency	Concentration
SO2 Gas Cylinder	CHEMTRON	5 PPM
Nox Gas Cylinder	CHEMTRON	NO 5 PPM,
CO2 Gas Cylinder	CHEMTRON	993 PPM
Dynamic Multi Gas Calibrator		
Calibration Foil Kit for PM Analysers		

Gas Analyser	Zero Calibration		Span Calibration			Sample Before	Sample After	Remark
	Span Reading (ppm/ppb)							
	Old	New	Old		New			
SO2	2.8	0.20	92.60		100.00	33.30	31.10	ok
NO	2.3	0.70	30.40		33.30	4.90	3.40	ok
NO2	1.9	0.10	55.36		66.60	11.60	11.20	ok
NOX	4.2	0.80	85.76		99.90	16.90	14.60	ok
CO2	-15.1	0.01	1031.00		1034.00	475.00	470.00	ok
PM Analysers	Range	Amplification Factor			Sample Before	Sample After	Remark	
	Old Value		New Value					
	PM 10	10000	6625		7739	62		61
PM 2.5	10000	5256		6775	31	33	ok	


 एम. सी. रंजन
 S C RANJAN
 उप महाप्रबंधक (सो. पर्यावरण मो. एण्ड आई)
 DGM (C & M - C & I)
 एन.टी.पी.सी. लि० - विंध्याचल
 NTPC Ltd. - Vindhyachal



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Customer Name :	NTPC VINDHYACHAL
Station Name :	AAQMS - 2
Station Location :	MGR
Analyser Make :	Thermo Fisher Scientific

Date: 21/12/2020

Calibration Standards (Gas/PM)	Agency	Concentration
SO2 Gas Cylinder	CHEMTRON	5 PPM
Nox Gas Cylinder	CHEMTRON	NO 5 PPM,
CO2 Gas Cylinder	CHEMTRON	993 PPM
Dynamic Multi Gas Calibrator		
Calibration Foil Kit for PM Analysers		

Gas Analyser	Zero Calibration		Span Calibration		Sample Before	Sample After	Remark
	Zero Reading(ppm/ppb)		Span Reading (ppm/ppb)				
	Old	New	Old	New			
SO2	4.2	0.21	93.10	100.00	15.50	13.60	ok
NO	2.1	0.30	30.30	33.30	4.70	4.20	ok
NO2	2	0.10	54.80	66.60	11.90	11.60	ok
NOX	4.1	0.40	85.10	100.00	16.60	15.80	ok
CO2	-20.7	0.10	1010.00	1019.00	438.00	470.00	ok

PM Analysers	Range	Amplification Factor		Sample Before	Sample After	Remark
		Old Value	New Value			
PM 10	1000	7012	6833	77	73	ok
PM 2.5	1000	6110	6811	52	44	ok


एस. सी. रंजन
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(उप महाप्रबंधक (प्रकारण - सी एण्ड आई)
DGM (O & M - C & I)
एन.टी.पी.सी. लि० - विन्ध्याचल
NTPC Ltd. - Vindhyachal




Monitoring Station (AAQMS)

REPORT

Customer Name	VINDHYACHAL
Station Name	AAQMS - 3
Station Location	Pt plant
Analyser Make	Fisher Scientific

Date: 22/12/2020

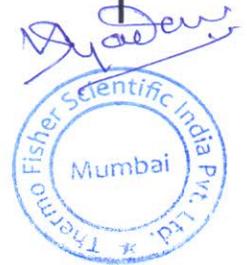
Standards (Gas/PM)	Agency	Concentration
SO2 Gas Cylinder	CHEMTRON	5 PPM
Nox Gas Cylinder	CHEMTRON	NO 5 PPM,
CO2 Gas Cylinder	CHEMTRON	993 PPM
Dynamic Multi Gas Calibrator		
Calibration Foil Kit for PM Analysers		

Gas	Zero Calibration		Span Calibration		Sample Before	Sample After	Remark
	Zero Reading		Span Reading (ppm/ppb)				
	Old	New	Old	New			
SO2	4.1	0.20	92.35	100.00	32.70	30.20	ok
NO	3.2	0.50	29.30	33.40	3.90	2.40	ok
NO2	2.1	0.15	56.36	66.60	12.60	11.20	ok
NOX	5.3	0.65	85.66	100.00	15.50	13.60	ok
CO2	-21	0.04	1011.00	1054.00	477.00	481.00	ok

Analysers	Range	Amplification Factor		Sample Before	Sample After	Remark
		Old Value	New Value			
PM 10	10000	7033	7765	67	62	ok
PM 2.5	10000	6643	6735	37	36	ok

Monitoring Station (AAQMS)


 एस. सी. रंजन
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 उप महाप्रबंधक (पर्यावरण मो एण्ड आई)
 DGM (U & M-C&I)
 एन.टी.पी.सी. लि० - विंध्याचल
 NTPC Ltd. - Vindhyachal



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Customer Name :	NTPC VINDHYACHAL
Station Name :	AAQMS - 4
Station Location :	Hindi school
Analyser Make :	Thermo Fisher Scientific

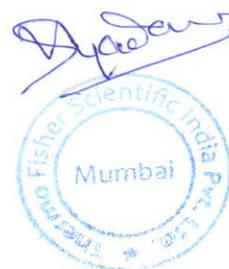
Date: 24/12/2020

Calibration Standards (Gas/PM)	Agency	Concentration
SO2 Gas Cylinder	CHEMTRON	5 PPM
Nox Gas Cylinder	CHEMTRON	NO 5 PPM,
CO2 Gas Cylinder	CHEMTRON	993 PPM
Dynamic Multi Gas Calibrator		
Calibration Foil Kit for PM Analysers		

Gas Analyser	Zero Calibration		Span Calibration		Sample	Sample	Remark
	Zero Reading(ppm/ppb)		Span Reading (ppm/ppb)		Before	After	
	Old	New	Old	New			
SO2	3.1	0.12	97.20	100.00	15.80	12.90	ok
NO	2.4	0.32	22.40	24.00	4.30	3.10	ok
NO2	3.2	0.14	53.30	61.00	10.50	12.30	ok
NOX	5.6	0.46	75.70	100.00	14.80	15.40	ok
CO2	-9	0.30	1025.00	1007.00	431.00	471.00	ok

PM Analysers	Range	Amplification Factor		Sample	Sample	Remark
		Old Value	New Value	Before	After	
PM 10	1000	7120	6949	78	71	ok
PM 2.5	1000	6542	6855	54	40	ok


एस. सी. रंजन
S C RANJAN
उप महाप्रबंधक (मो एण्ड आई)
DGM (O&M C&I)
एन.टी.पी.सी. लि. - विंध्याचल
NTPC Ltd. - Vindhyachal



Recommendations of the Oversight Committee in its first quarterly report for Compliance by the various stakeholders

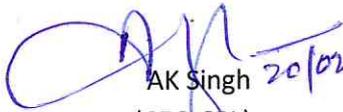
SN	Recommendations	Status
Power Plant		
<u>1</u>	The thermal power plants shall ensure that 100% fly ash utilization of the fly ash shall be ensured by them as per the Fly ash Notification.	A detailed action plan for achieving 100% fly ash utilization by SPL is submitted to MoEF&CC / MPPCB vide letter dated 28.08.2020 and the same is enclosed herewith as Annexure-1 for ready reference.
<u>2</u>	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.	A letter regarding status and implementation of new emission norms is already submitted vide letter dated 05-Feb-2021 and the same is enclosed herewith as Annexure-2 for ready reference
<u>3</u>	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.	A report on ash dyke stability testing by IIT BHU is already submitted to the Committee. In addition to this another comprehensive ash dyke stability study has been carried out by IIT BHU and report of the same is submitted to the MPPPCB on 20.08.2020 and to CPCB and MoEF&CC on 16.09.2020. The copies of the said reports are enclosed as Annexure-3 for ready reference.
<u>4</u>	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 ash in the ash dyke is kept in moist form and covered with vegetation to avoid any fugitive emission.

<u>5</u>	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 SPL
<u>6</u>	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.	Public Health Department is carrying out checkups for the detection of occupational diseases like silicosis, fluorosis etc. We understand that till date there is no case of fluorosis / silicosis reported by Public Health Department from any nearby villages
<u>7</u>	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.	A detailed reply has already be submitted by SPL to MPPCB latest being vide letter dated 15-Jan-2021
<u>8</u>	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 SPL
<u>9</u>	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 SPL
<u>10</u>	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.	SPL shall carry out the calibration of CAAQMS and CEMS and submit its report.
Coal Mine		
<u>1</u>	Road sweeping machines in sufficient numbers shall be procured and regular sweeping of the coal transport roads shall be undertaken to keep them dust free.	Not applicable to SPL Transportation of coal from SPL mines to Sasan power plant is done through the single flight overland coal conveyer (OLC).

<u>2</u>	Paving of the road side shoulders along the coal transport roads shall be undertaken within 3 months under the guidance and supervision of the district administration.	Not applicable to SPL Transportation of coal from SPL mines to Sasan power plant is done through the single flight overland coal conveyer (OLC)
<u>3</u>	Maintenance of railway sidings operated by NCL shall be undertaken as per the guidelines published by CPCB titled " <i>Inventorization of Railway Sidings and Guidelines for their Environment Management-March 2015</i> ".	Not applicable to SPL Transportation of coal from SPL mines to Sasan power plant is done through the single flight overland coal conveyer (OLC)
<u>4</u>	Utilization of fly ash in over burden (OB) of working mines and conducting pilot studies for the same as per Fly ash notification and CPCB guidelines shall be undertaken and 25% use fly ash in the OB dumps shall be done as per Fly Ash Notification, 1999.	A detailed action plan, covering referred aspect, for achieving 100% fly ash utilization by SPL is submitted to MoEF&CC / MPPCB vide letter dated 28.08.2020
<u>5</u>	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.	Public Health Department is carrying out checkups for the detection of occupational diseases like silicosis, fluorosis etc. We understand that till date there is no case of fluorosis / silicosis reported by Public Health Department from any nearby villages
<u>6</u>	The railway connectivity of the Block B Gorbi mine shall be completed within 3-6 months time to stop the road transportation of the coal. Consequently the operation of the coal loading railway siding of the Block B Gorbi mine shall be terminated thereafter.	Not Applicable to SPL
<u>7</u>	The railway sidings operated by NCL should be operated in accordance with the CPCB guidelines.	Not Applicable to SPL
<u>8</u>	All the coal mines shall calibrate all the CAAQMS 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.	SPL shall carry out the calibration of CAAQMS and CEMS and submit its report.

National Environmental Engineering Research Institute (NEERI):

<p>NEERI has been entrusted with the studies for the assessment of Environmental Damage Compensation (EDC) due to the ash dyke breach of M/s Essar Power MP Ltd., M/s Vindhyachal Super Thermal Power Station and M/s Sasan Power Ltd. Neither of the study report has been submitted even after a lapse of long time. NEERI may be instructed to submit the reports at the earliest.</p>	<p>NEERI has already been engaged for the said study. A team of NEERI Scientists has visited site from 22nd to 26th Dec-2020, carried out detailed site survey and collected samples.</p>
---	---


AK Singh 20/02/2022
(CEO-SPL)

Sasan Power Limited

CIN: U40102MH2006PLC190557

6 X 660 MW Sasan Ultra Mega Power Project
Gram: Siddhi khurd
Post Office: Tiyara
Singrauli – 486 886
Madhya Pradesh, INDIA
www.reliancepower.co.in

SPL/ /2020-21/33

Date: 28.08.2020

The Director-IA.I
Ministry of Environment, Forests and Climate Change
3rd Floor, Vayu Block
Indira Paryavaran Bhawan, Jor Bagh Road,
New Delhi-110003

Ref: Your letter No. J-13011/15/2006-IA.II (T) dated 13th July 2020

Kind Attn: Dr. S. Kerketta Director – IA.I

Sir,

This has reference to your letter mentioned under reference above vide which Sasan Power Limited (SPL) is requested to provide a concrete action taken or being taken by the company to achieve 100% fly ash utilization.

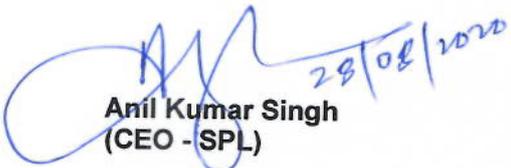
SPL is pleased to submit the attached **Annexure** which provides details of the concrete action taken or being taken by SPL to achieve 100% fly ash utilization for Sasan Ultra Mega Power Project

We once again express our deep sense of gratitude for your kind support for continuation of operation of the power plant.

Thanking You

Yours faithfully,

For **Sasan Power Limited**


Anil Kumar Singh
(CEO - SPL)

Encl. :

Annexure - Concrete action taken or being taken by SPL to achieve 100% fly ash utilization

CC:

1. The Chairman, Central Pollution Control Board
2. The Dy. Director General of Forests (C), MoEF&CC, Regional Office, Bhopal
3. The Chairman, MP Pollution Control Board, Bhopal

CONCRETE ACTION TAKEN OR BEING TAKEN BY SASAN POWER LIMITED (SPL) FOR ITS 6 X 660 MW SASAN ULTRA MEGA POWER PROJECT (SUMPP)

1. It is estimated that going forward, annual ash generation at SUMPP of SPL shall be approx. 51,50,000 Metric Tons (MT) of total ash out of which 80% (41,20,000 MT) shall be fly ash and balance 20% (10,30,000 MT) shall be bottom ash.
2. The above estimate is considering the annual coal consumption of 18.4 million Ton (MT) with ash content in coal as 28%.
3. The ash generation and its utilization for last 3 Financial Years (FY 2017-18 to FY 2019-20) was as under:

Financial Year	Fly Ash Generation (MT)	Fly Ash Utilization (MT)
2017-18	Fly Ash : 41,20,376 Bottom Ash : 10,30,097 Total Ash : 51,50,473	12,21,310
2018-19	Fly Ash : 40,22,186 Bottom Ash : 10,05,547 Total Ash : 50,27,733	14,91,694
2019-20	Fly Ash : 41,95,673 Bottom Ash : 10,48,918 Total Ash : 52,44,591	27,46,403

4. The details of fly ash utilization for FY 2019-20 are as under:

Sr. No.	Ash Utilization Avenue	Fly Ash Utilization (MT)
1	Cement	45,280
2	Fly-ash Bricks	1,264
3	Ready Mix Concrete	880
4	Low Laying Land Filling	26,98,119
5	Others (Cenosphere)	860
	Total	27,46,403

The data shows that filling of low lying area has been the major avenue of ash utilization for Sasan UMPP.

5. SPL has undertaken the following activities to achieve 100% Fly Ash utilization:

- a. Making fly ash available free of cost.
- b. Utilized fly ash in potential low lying area filling within the plant premises after obtaining permission from MP Pollution Control Board.
- c. Post in-principle approval of the transportation cost sharing proposal by Hon'ble Central Electricity Regulatory Commission (CERC) on 13-March-18, SPL initiated the process of entering into a long-term agreement with cement manufactures for lifting of fly ash from SUMPP on sharing of transporting cost basis.
- d. Inside the plant, for all CLSM (Controlled Low Strength Material), 50% of sand quantity is replaced with bottom ash and 30 -40% of cement quantity is replaced with Fly Ash.
- e. Fly Ash brick making unit of 9000/day capacity is installed within plant premises. Annually over 20 lakh bricks are utilized by SUMPP in its various construction related works.
- f. Workshops conducted for Brick Manufactures/ RMC producers for encouraging use of fly ash by highlighting its benefits.
- g. Various fly ash awareness campaigns and workshops have been organized at SPL and nearby villages for making public aware about fly ash usages and motivating them to come forward as an entrepreneur.
- h. SPL is continuously exploring opportunities for providing fly ash for road construction projects.
- i. Various meetings have been organized with the cement industries with an intention to increase the fly ash lifting from the plant.
- j. Regular meetings with the District Administration, MPPCB and GoMP officials conducted regarding constraints in the fly ash utilization from the power plant and also for seeking support for increasing the fly ash utilization.
- k. The ash deposited in ash ponds is being utilized in permitted activities like ash bund height raising of existing ash dykes, low lying area development, fly ash bricks / clay ash brick manufacturing and efforts being made for utilization in road embankment construction and mixing with mines OB etc.

I. SPL has also requested District Collector to allocate abandoned stone crusher void for filling with ash.

m. The ash utilization has increased from 1.77% in 2013-14 to 65.5% in FY 2019-20.

6. Reason for non-utilization of 100% fly ash:

Despite taking above mentioned efforts, SPL could not achieve 100% fly-ash utilization in FY 2019-20 for the following reasons:

a. SUMPP is located at approx. 250 Kms from the nearest cement plant cluster.

The fly ash demand of all the cement industries is getting fulfilled by the nearby power plants. Therefore, it is respectfully submitted that no cement plant prefers to lift fly ash from SUMPP because of high cost of transportation.

b. SPL had issued NIT for supply of ash on the transportation cost sharing basis but the process could not conclude due to non-availability of sufficient bids / lack of interest from cement companies due to abundant availability of fly-ash in their vicinity, at a distance nearer to them.

c. It is further submitted that the peak demand for fly ash by cement plants in the Singrauli region, where SUMPP is located, is around 9.1 Million-ton per year whereas the power plants in Singrauli region generate fly ash more than 25.5 Million-ton per year, i.e. 280% of the requirement. Therefore, there is an inherent mismatch between demand and supply of fly ash in the Singrauli region with ash generation far exceeding the demand.

d. Total fly ash consumption is fixed for the cement industries irrespective of the location from where they are lifting the fly ash for making Pozzolana Portland Cement (PPC).

e. It is humbly submitted that there is no substantial demand of fly ash in road construction works in the region. There is no substantial demand for fly ash in building construction works too.

f. It is stated that around 20 ash brick plants are operating in the region to partially meet the requirement of ash bricks but due to existence of red brick kilns in the region, demand for ash bricks is not increasing.

- g. District Collector has also advised the District Mining Department to identify the abandoned coal crusher voids where the fly ash can be filled but the same has not materialized till date.
 - h. Meeting was held with NHAI, PWD & NCL officials for seeking support for using ash in road construction and filling of abandoned mines. During meetings, officials of NHAI and PWD assured of utilisation of ash in road construction projects but no support has come so far.
 - i. Due to these challenges, a large quantity of ash remains unutilized and is being disposed in the ash dyke.
7. Moreover, as may please be observed from the ash utilization details of SUMPP mentioned in preceding paragraphs, the major part of ash utilization was achieved through ash filling in low lying areas. However, the same has been hampered because of the breach of retention wall of low-lying ash utilization area, which occurred on 10th April 2020.

8. Long term sustainable plan for achieving 100% fly ash utilization:

Under the circumstances mentioned above and in order to have long-term sustainable plan, SPL is exploring the possibility of taking fly ash to its operating Moher and Moher Amlohri Extension opencast captive coal mines, located at a distance of approx. 25 Kms, through pipeline in high concentration slurry mode for mixing with over burden for filling of de-coaled areas, which has now been permitted pursuant to MoEF&CC notification dated 21st May 2020.

Accordingly, SPL has initiated the process for getting approval from the relevant authorities stated as under:

- a. Central Institute of Mining and Fuel Research (CIMFR), Dhanbad has been engaged to carry out the technical feasibility and slope stability study for the said option. The visit of CIMFR scientists is expected after relaxation in the COVID 19 travel restrictions. The report submission for CIMFR will take another 2 months after their site visit.

- b. Once this project gets cleared technically by the CIMFR, Dhanbad, Sasan UMPP will approach Madhya Pradesh Pollution Control Board (MPPCB) for obtaining permission and seek approvals from other statutory / regulatory authorities, as may be required.
- c. Post obtaining permission from MPPCB, the execution of the said work will be taken up which is expected to be completed in nearly 18 Months.
- d. In view of above, 100% utilization of fly ash from SPL can happen only after 2 years from now, after execution of the said proposal of mixing fly ash with over burden dumps in the operating captive coal mines of SUMPP.
- e. Meanwhile, ash is being utilized in the bund height raising work of the existing ash dyke which would utilize approx. 2.2 to 2.3 Million MT / lagoon.

9. Ash utilization plan from FY 2020-21 onwards

a. FY 2020-21 (Estimated):

SN	Description	Unit	Q1 (Actual)	Q2 (Est.)	Q3 (Est.)	Q4 (Est.)	Total (Est.)
A	Ash Generation						
	Fly Ash	MT	1039777	1030000	1030000	1030000	4129777
	Bottom Ash		259944	257500	257500	257500	1032444
Total Ash	1299721		1287500	1287500	1287500	5162221	
B. Fly Ash Utilisation							
i)	Brick Manufacturing	MT	390	500	500	500	1890
ii)	Ready Mix Concrete	MT	123	200	1000	1000	2323
iii)	Low Lying area filling/ Area Development	MT	89550	0.0	0.0	0.0	89550
iv)	Ash Dyke raising (Downstream)	MT	0.0	0.0	51600	458000	509600
v)	Cement	MT	20210	7200	20000	20000	67410
vi)	Sasan Coal Mine	MT	0.0	0.0	0.0	0.0	0.0
	Total Fly Ash Utilisation	MT	110273	7900	73100	479500	670773
C	Fly Ash Utilisation percentage #	%	11	1	7	47	16

Dry Ash Utilization; Bottom ash disposed off in ash pond in slurry mode. Bottom ash will be utilized from the ash dyke as per the demand.

b. FY 2021-22 (Estimated):

SN	Description	Unit	Q1 (Est.)	Q2 (Est.)	Q3 (Est.)	Q4 (Est.)	Total (Est.)
A	Ash Generation						
	Fly Ash	MT	1030000	1030000	1030000	1030000	4120000
	Bottom Ash		257500	257500	257500	257500	1030000
Total Ash	1287500		1287500	1287500	1287500	5150000	
B. Fly Ash Utilisation							
i)	Brick Manufacturing	MT	500	500	500	500	2000
ii)	Ready Mix Concrete	MT	1000	200	1000	1000	3200
iii)	Low Lying area filling/ Area Development	MT	0.0	0.0	0.0	0.0	0.0
iv)	Dyke raising	MT	508000	408000	508000	500000	1924000
v)	Cement	MT	20000	7200	20000	20000	67200
vi)	Sasan Coal Mine	MT	0.0	0.0	0.0	0.0	0.0
	Total Fly Ash Utilisation	MT	529500	415900	529500	521500	1996400
C	Fly Ash Utilisation percentage #	%	51	40	51	51	48

Dry Ash Utilization; Bottom ash disposed off in ash pond in slurry mode. Bottom ash will be utilized from the ash dyke as per the demand.

c. FY 2022-23 (Estimated):

SN	Description	Unit	Q1 (Est.)	Q2 (Est.)	Q3 (Est.)	Q4 (Est.)	Total (Est.)
A	Ash Generation						
	Fly Ash	MT	1030000	1030000	1030000	1030000	4120000
	Bottom Ash		257500	257500	257500	257500	1030000
Total Ash	1287500		1287500	1287500	1287500	5150000	
B. Fly Ash Utilisation							
i)	Brick Manufacturing	MT	500	500	500	500	2000
ii)	Ready Mix Concrete	MT	1000	200	1000	1000	3200
iii)	Low Lying area filling/ Area Development	MT	0.0	0.0	0.0	0.0	0.0
iv)	Dyke raising	MT	508000	408000	558000	558000	2032000
v)	Cement	MT	20000	7200	20000	20000	67200
vi)	Sasan Coal Mine*	MT	0.0	0.0	458500	458500	917000
	Total Fly Ash Utilisation	MT	529500	415900	1038000	1038000	3021400
C	Fly Ash Utilisation percentage #	%	51	40	100	100	73

Dry Ash Utilization; Bottom ash disposed off in ash pond in slurry mode. Bottom ash will be utilized from the ash dyke as per the demand.

* Subject to the technical feasibility clearance by the CIMFR, Dhanbad and NOC from MPPCB & DGMS

10. Therefore, FY 2022-23 onwards, entire unutilized fly ash of SUMPP is proposed to be sent to its captive coal mine for mixing with mine OB to achieve 100% fly ash utilization whereas the bottom ash will be sent to the ash pond in slurry mode from where it will be utilized as per the demand.

Sasan Power Limited

CIN: U40102MH2006PLC190557

6 X 660 MW Sasan Ultra Mega Power Project
Gram: Siddhi khurd
Post Office: Tiwara
Singrauli – 486 886
Madhya Pradesh, INDIA
www.reliancepower.co.in

No.: SPL /2020-21/44

05th February, 2021

Director (Environment)
Madhya Pradesh Pollution Control Board (MPPCB)
Paryavaran Parisar, Sector E-5, Arera Colony
Bhopal-462016
Madhya Pradesh

Respected Sir,

Sub: Sasan Power Limited – FGD Implementation – Reg.

Ref: You letter क्रमांक/187/तक/ सी.ई - 4/मुप्रनिबो/2021 dated 18 January 2021 seeking the FGD implementation status at Sasan power Limited

1. This is with reference to your letter cited at Reference above wherein you have sought the FGD implementation status at the 6 units of Sasan Power Limited.
2. In this regard please find below the current status of FGD implementation:

Sr.	Particular	Implementation Status
1	Compliance of PM Emission Limit	Already Complying; hence no action required
2	Compliance of SOx Emission	Not Complying : Wet Limestone based FGD system to be installed in all 6 Units of Sasan UMPP
3	Current Status of Installation	<ul style="list-style-type: none">- Tender issued on 28th Sep 16.- DPR Submission to CEA in compliance with CERC order – 18th Jan 19- CEA Recommendation – 27th Mar 19.- Vendor Finalized and Contract awarded - 5th Dec 19- Financial Closure – Have already approached the lenders/banks for funding. FC Awaited- Implementation timeline - 22 months from Notice to Proceed (NTP) for 1st Unit and 31 months for the 6th Unit from NTP.

Thanking You

Yours Sincerely
For Sasan Power Limited


Sachin Mohapatra

(Station Director – Sasan Power Limited)

Copy to: Regional Office MP Pollution Control Board, Singrauli, Madhya Pradesh.

Sasan Power Limited

CIN: U40102MH2006PLC190557

6 X 660 MW Sasan Ultra Mega Power Project
Gram: Siddhi khurd
Post Office: Tiyara
Singrauli – 486 886
Madhya Pradesh, INDIA
www.reliancepower.co.in

SPL/2020-21/32

Date: 20.08.2020

The Member Secretary
Madhya Pradesh Pollution Control Board
Paryavaran Parisar,
Bhopal
Madhya Pradesh

- Ref: 1. Your letter No. 23 / MPPCB / MS / TS Singrauli / 2020 dt. 13.04.2010
2. SPL reply vide letter no. SPL/2020-21/03 dated 21.04.2020
3. Your letter No. 955 / TS / MPPCB / 2020 dt. 30.05.2020
4. SPL reply vide letter no. SPL/2020-21/26 dated 10.06.2020

Respected Sir,

This has reference to your letter mentioned under reference no 1 above vide which SPL was directed to depute an Institute of National repute to assess the design and structural safety of the ash dyke and other suggestions mentioned therein.

Accordingly, IIT-BHU was engaged for the abovementioned work.

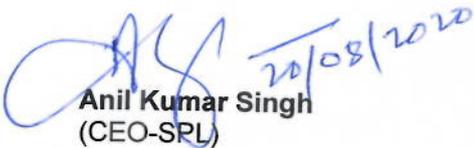
We are pleased to inform you that IIT-BHU has now submitted its report on "Stability Analysis of Ash Dyke, Proposed Raisings, Emergency Preparedness Plan and Instrumentation & Monitoring" and the same is attached herewith for your kind perusal please.

We once again express our deep sense of gratitude for your kind support for continuation of operation of the power plant and guidance to address the emergency situation.

Thanking You

Yours faithfully,

For Sasan Power Limited


Anil Kumar Singh
(CEO-SPL)

- CC: 1. Regional Officer, MPPCB, Singrauli
2. The Director (Environment), MPPCB, Bhopal

SPL/2020-21/38

Date: 16.09.2020

To

Er. Sunil Kumar Meena, Scientist - D
Central Pollution Control Board,
Regional Directorate
Bhopal, (MP) – 462016

Ref: Your E-mail dated 21-August-2020

Respected Sir,

This has reference to your email mentioned under reference above wherein Sasan Power Limited (SPL) has been advised to submit the detailed Action Taken Report (ATR) against the advisory issued by the Committee constituted by Hon'ble NGT in OA 31/2020. In this regard SPL is pleased to submit the detailed ATR as under:

SN	Actions Recommended	SPL Submission
1	To check the strength of the bunds created around the dykes/low lying areas quarterly and one time especially before the on-set of the monsoon through expert agencies of repute and to submit Action Taken Reports to regional offices of MPPCB, CPCB & MoEF&CC periodically.	<ol style="list-style-type: none">1. For assessment of the design and structural safety of the ash dyke of the Sasan UMPP, IIT-BHU was engaged and the report is already submitted. As per the IIT-BHU report "Existing bund is structurally stable and safe for filling with ash." The said report has already been submitted to MPPCB and the same is attached as Annexure 1.2. As suggested, the strength of the bunds created around the dykes/low lying areas will be checked every year before the monsoon through the expert agency of repute and Action Taken Reports will be submitted to regional offices of MPPCB, CPCB & MoEF&CC.
2	To expedite the ash cleaning work from Goiwahai drain to ensure that the resultant environment contamination is minimized and resources should be channelized to complete the task within 1 month and to submit Action Taken Reports to regional offices of MPPCB, CPCB & MoEF&CC on weekly basis.	<ol style="list-style-type: none">1. We would like to submit that the ash cleaning work from Gabaiya nalla is now almost completed and its natural width and flow is restored which is helping in avoiding the possibility of carrying away of ash from the some of the ash patches left on the edges of the nalla where the ash cleaning is work is still in progress.

		<p>2. Till date, approx. 2.1 Lac Ton of ash from nalla has already been lifted. Cleaning of remaining ash (estimated at 20,000 Tonnes), deposited on the sides of the nalla in very few patches is already under progress. We are relentlessly pursuing the ash lifting from the side of the nalla and taking every possible measure that the ash from the sides of the nalla does not reach Rihand River.</p> <p>3. Further, around 1.5 Lac Ton (approx. 94%) ash from agricultural or other land areas has also been cleared. Lifting of remaining ash of approx. 0.1 Lac Ton from two locations is hampered because of the resistance from land owners owing to their internal family conflicts. We are discussing the same with the district administration for expeditious resolution of these issues to enable us clean these patches and hope to resolve the same by 30th Sep'20. We are very happy to mention that farmers have already grown paddy in their agricultural fields and the condition of crop growth is also very good.</p> <p>4. We have excavated and lifted 6.0 lac ton of leftover ash from island – 4 inside the plant boundary. The collected ash has been used in strengthening of retaining wall of island – 3 low-lying area and used around permanent ash pond in accordance with the MPPCB approval dated 28.04.2020.</p> <p>Restoration of leftover area of approx. 5-6% would be completed by 30.09.2020. (Site photographs are attached vide Annexure 2).</p>
3	To take appropriate control measures to prevent the fly ash from reaching the Goiwahai drain and finally the Rihand River.	1. With achievement of natural water flow profile of Gabaiya Nalla after its cleaning, the effective water flow width increased resulting into reduction of velocity and hence reducing the particle carrying capacity of the flowing water.

		<p>2. Wherever there was no immediate approach for the dumpers to clear the ash, layer of soil cover was provided through Poclain and once the approach was established, the ash from the area was lifted immediately and shifted to designated low lying area around ash dyke.</p>
<p>4</p>	<p>In spite of the financial aid /compensation paid by the company to the affected people, the grievances of some of the affected people near Tola Badi village, Harrahawa are still to be addressed by the company in co-ordination with local authorities. The CSR cell of the company in co-ordination with the local administration shall set-up grievance redressal camps in each of the affected villages along the Goiwahai drain.</p>	<p>1. We had received 17 complaints from Bhadi Tola villagers about non disbursement of their compensations. After checking their compensation status, we found that 10 complainants were already the part of Revenue Deptt original List and accordingly Crop compensation paid in their bank accounts as per the instructions by the District Administration. Further, to the remaining 7 complainants, they were not the land owner. However they claimed of having loss of their grown vegetables. SPL has paid Rs. 5000/-directly to them. Further, support has also been provided to affected villagers for leveling their agricultural fields and digging 21 wells for irrigation of the fields. Approx 1 Km internal village roads connecting PMGSY Harrahawa have been strengthened benefitting Bhadi Tola villagers. Grievance redressal mechanism is already in place, wherein district admin officials (Tehsildar/SDM) along with Village Panchayat and CSR Cell of the company address the complaints and grievances of affected people.</p> <p>2. Grievances of the villagers from Jhanjhi Tola, Harrahawa, Siddhikhurd- Latbudwa Tola, Giddhakhadi Tola are also settled by paying crop compensation.</p> <p>3. CSR team is also visiting the affected villages on daily basis and genuine grievances are being timely resolved.</p>

5	To obtain prior permission from MPPCB before any disposal of fly ash / bottom ash in the low lying areas and ensure disposal as per the CPCB guideline.	In the past, SPL has always obtained prior permission from MPPCB/relevant authorities and ensured its compliance, for disposal of fly ash / bottom ash in any low lying areas. SPL will continue to do the same in future also.
6	To expedite the studies to be undertaken by IIT-BHU to assess the impact of aquifers in the fly ash breach.	SPL has already initiated the process of engaging IIT-BHU to assess the impact of aquifers in Island #4 area. Formal work-order is expected to be placed by 30-Sept-20
7	To expedite the environmental damage assessment studies with CSIR-NEERI so as to ensure the actual impact of fly ash breach on environment is assessed holistically.	NEERI has already been engaged for the said study. NEERI has already informed that they will be commencing their damage assessment study very soon.
8	Water and sediment analysis of gabaiya drain on a quarterly basis	<ol style="list-style-type: none">1. The first batch of water samples has already reached the laboratory on 20-Aug-2020 for analysis and its reports are expected to be received by 25-Sept-2020, which will be shared as soon as it is received.2. Further, second and third batch of water samples were also dispatched on 25-Aug-2020 and 14-Sept-2020 for its analysis and the results of the same will be shared as soon as it is received.

Thanking You

Yours faithfully,

For Sasan Power Limited


Anil Kumar Singh
(Chief Executive Officer)

Enclosures:

1. Annexure – 1 (IIT-BHU Dyke stability Report)
2. Annexure – 2 (Site Photographs)

CC:

1. Regional Officer, MPPCB, Singrauli
2. Dr. HVC Chari, MOEF&CC, Regional Office (W), Bhopal

ENCLOSURE 3

Essar Power M.P Limited
Village: Bandhora,
Post Karsualal,
Tehsil Mada,
Dist. - Singrauli,
Waidhan - 486 886
Madhya Pradesh.
India

Corporate Identity Number
U40100DL2005PLC201961

T +91 75090 61540 / 89669 02954
www.essar.com

Ref. No. : EP MPL/LA/6126/10
Dated : 25.02.2021

To,
The Director, Environment
MP Pollution Control Board
Paryawaran Parisar
E-5, Arera Colony (M.P.)
Bhopal-462 016

Subject: Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018.

Reference: Second Quarterly report of the Oversight Committee

Dear Sir,

With reference to your e mail, dated 11.02.2021 regarding Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018.

Essar Power MP Limited (the “**Corporate Debtor**” or “**EP MPL**”) was admitted into Corporate Insolvency Resolution Process (“**CIRP**”), in terms of *Section 7 of the Insolvency and Bankruptcy Code, 2016 (“IBC”)*, which has commenced w.e.f., **29 September 2020 (“Order”)** and Mr. Ashish Chhawchharia has been appointed as the Interim Resolution Professional (“**IRP**”) of the Corporate Debtor, pursuant to the order passed by the Hon'ble National Company Law Tribunal, Principal Bench, New Delhi (“**Hon'ble NCLT**”) vide Order dated 29 September 2020. Subsequently the appointment of IRP was confirmed as Resolution Professional (“**RP**”) by the Committee of Creditors (“**CoC**”) at its first meeting held on 05 November 2020.

Please find our applicable point wise reply are as under:

Recommendations of the Oversight Committee in its first quarterly report for Compliance by the various stakeholders

Thermal Power Plants:

- 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:**

As per MoEF notification on fly ash utilization and its amendment dated 25.01.2016, the company is taking concrete efforts.

EPMPL has entered in a MoU with M/S ASHTECH for 100% ash utilization. Further the company has made a 10 years agreement with M/s ASHTECH (India) Private Ltd. The parties through this agreement agree that ASHTECH shall be responsible for arranging transportation of fly ash from Plant end to the End users location and will ensure utilization of fly ash in compliance of extant notifications, order, circulars etc. from MoEF & CC and Pollution Control Board.

Ash utilization agreement with M/S ASHTECH has been already shared with MPPCB.

- B. For the achievement of new emission norms, equipment's like FGD, SCR/ SNCR etc shall be got installed as per the time lines provided to them by the CPCB:**

EPMPL has approached MoEF&CC for extension of deadline for Flu Gas Desulphurization (FGD) installation on 4th Feb 2020 and again on 28th Dec 2020 vide letter no EPMP/LA/6026/10 for three years. (Letter is attached for reference as Annexue-1)

- 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:**

Essar Power has roped in IIT – Roorkee for monitoring and also done strengthening work of Ash dyke in technically sound manner as per the design of IIT – Roorkee. The design is safe and timely maintenance is being done regularly by EPMPL.

- 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:**

EPMPL has taken up plantation in abandoned Ash dyke cell. Water is also sprayed regularly in Ashdyke to minimize air borne fly ash.

- 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:**

This is not applicable for 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:**

Under CSR, EPMPL has been organizing health camp for the villagers where specialized doctor attend the patients and free medicine is provided. Brief of health camp organized is attached as Annexure-2.

- 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.**

EPMPL is admitted into Corporate Insolvency Resolution Process ("CIRP"), in terms of Section 7 of the Insolvency and Bankruptcy Code, 2016 ("IBC").

MPPCB has already made claim of Rs 90.82 Cr. to Resolution Professional under CIRP..

- 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.**

This is not applicable for 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.**

This is not applicable for 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.**

CEMS last calibration was done in Dec,2020 and all CAAQMS remote calibration have been done in Feb,2021.

We here by submit this letter for your kind information please.

Yours sincerely,

For Essar Power MP Ltd.



Authorized Signatory

Ref. No. : EPMPL/LA/6026/10
Dated : 28.12.2020

Essar Power M.P. Limited
Village: Bandhora,
Post Karsualal,
Tehsil Mada,
Dist. - Singrauli,
Waidhan - 486 886
Madhya Pradesh.
India

Corporate Identity Number
U40100DL2005PLC201961

T +91 75090 61540 / 89669 02954
www.essar.com

To,

The secretary,
Ministry of Environment, Forest & Climate change
Indira Paryavaran Bhawan, Jorbagh Road
New Delhi- 110003.

Respected Sir,

Sub: Extension of time line for implementation of Flue Gas Desulphurization plant.

Reference: Our earlier letter dated 4th Feb'2020.

With reference to our earlier letter dated 4th Feb'2020 regarding extension of time line for implementation of Flue Gas Desulphurization (FGD) plant. Essar Power MP Limited ("EPMPL") is operating 2x600 MW coal-fired sub critical power plant located in Singrauli district, Madhya Pradesh. The plant is supported by an end-to-end raw material sourcing and evacuation infrastructure.

Currently EPMPL does not have any long term Fuel supply arrangement as Mahan Coal block allocated for this power project was cancelled by the Hon'ble Supreme Court of India in September 2014. EPMPL also does not having any Long Term power sale agreement, except 5% net generation PPA with GoMP/ MPPMCL on variable charge. The power is being sold under short term arrangement through IEX or through bilateral transaction. EPMPL is not able to operate its 1200 MW power plant round the year at its full capacity and it is mostly operating only one unit at part load of around 300 MW and almost 800 MW capacity is lying idle for most part of the year. In view of above issues, EPMPL's financial position is stressed and is categorized under stressed power project in the list prepared by Ministry of Power.

Currently EPMPL is undergoing the Corporate Insolvency Resolution Process ("CIRP") under the Insolvency and Bankruptcy Code, 2016 ("Code" or "IBC") as directed vide order dated 29th Sep' 2020 ("Order") of the Hon'ble National Company Law Tribunal, Principal Bench, New Delhi ("Hon'ble NCLT"). And pursuant to the order Mr. Ashish Chhawchharia was appointed as the Interim Resolution Professional ("IRP") of the Company and subsequently appointed as the Resolution Professional ("RP"), pursuant to the appointment by the Committee of Creditors ("CoC") at the first meeting of the CoC.

In spite of various challenges, the Company has managed to keep the plant operational by virtue of coal procured through e bidding through special forward scheme of CIL for stranded power plants.

EPMPL had invited the International Competitive Bidding for the supply and Installation of Flue gas Desulphurization plant ("FGD") and Auxiliaries. We have received technical proposals from Zhejiang TUNA Environmental Science & Technology Co., Ltd. ("Tuna") and China Energy Conservation and Environmental Protection Group ("CECEP") on 16th March 2020 and 15th May 2020 respectively. The commercial proposal of Tuna and CECP were submitted during August 2020 and September 2020 respectively.

In order to comply with the revised environmental norms, as notified by MOEF during December 2015, EPMPL would need to install Flue Gas Desulphurization system which would additionally require around INR 0.6 to 0.7 Crore/MW of the capacity. But, due to the prevailing ambiguity in Indian power sector and considering EPMPL is undergoing CIRP due to default on payments and its stressed liquidity situation, EPMPL is unable to take up the additional capex to fund the installation of additional system/equipment such as Flue Gas Desulphurization plant so as to comply with the revised environmental norms.

Considering all the above factors, it is highly unlikely to meet these revised environmental norms, within the given timeline of Dec 2020. Hence, we kindly request MOEF to consider the extension of 3 years after the management changeover (as suggested by MOP for stressed power assets category) for implementing the FGD&Auxilaireis.

Looking forward to your kind support.

Thanking You

Yours faithfully,
For Essar Power MP Limited



Authorized Signatory

CC: The Secretary, Ministry of Power

Mega Health Camp' in Karsualal village

Essar Power Mahan recently organized a 'Mega Health Camp' in collaboration with the District Health Department in Karsualal village, Singrauli district, Madhya Pradesh.

A team of five doctors from Northern Coalfields Limited, District Health Department and Essar-supported health center comprising of general physicians, gynecologists and dermatologists led the camp.

Additionally, Essar Power supported with food and logistics. Over 450 patients benefited from the health camp.

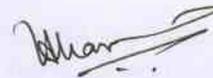


Recommendations of the Oversight Committee in its first quarterly report for Compliance by the Jaypee Nigrie Super Thermal Power Plant

S. No.	Recommendations of the Oversight Committee	Current Status of action as on 30-01-2021 from Jaypee Nigrie Super Thermal Power Plant
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 2018 - 19 was 88.62% & in 2019 - 20 was 109.57%.</p> <p>Having long term MoU with End User (Cement Industry).</p> <p>Efforts have been made to utilize/dispatch 100% currently generated fly ash and disposal of stocked 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 the Units, so as to control SO₂ Emission in order to meet New Emission Norms of MoEF&CC Notification dated 07.12.2015.</p> <p>FGD Status - NIT issued on 31.12.2019. Since no bids have been received till date (i.e. by 30.01.2021), bids submission date has been extended up to 31.03.2021.</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.</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.	<p>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. No Fly Ash is being disposed into the ash dykes in Dry form. Ash Pond Top layer is always covered with water.</p>

Man

		However, mobile water sprinkling arrangement is in place for using as and when required for controlling air borne fly ash.
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 & who so ever may come. Providing Mobile Hospital & Ambulance Service to 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 are given Annual Maintenance Contract and are being Calibrated on Quarterly basis by Original Equipment Manufacturers. The last visit Calibration Reports are attached as Annexure - I



Vinod Sharma

Sr. President

Jaypee Nigrie Super Thermal Power Plant Nigrie

(A Unit of Jaiprakash Power Ventures Ltd.)

Singrauli 486669 (M.P.)

CALIBRATION REPORT FOR GAS ANALYZERS S710

JAYPEE NIGRIE		Model: S710		SICK INDIA PVT LTD			
Calibration Date: 29.10.2020		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, Jaiprakash 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: 28.04.2021</p>							
S.N.	Cylinder No	Expiry date of calibration cylinder	Component	Cylinder Value (unit)	Before Calibration Value	After Calibration Value	Remarks
1	SGC-43106	01/01/2021	SO2	771 ppm	777 ppm	772 ppm	Calibrated
2	SGC-43106	01/01/2021	NO	758 ppm	750 ppm	759ppm	Calibrated
3	SGC-43106	01/01/2021	CO2	35.53 %	34.60 %	35.53 %	Calibrated

For Sick India Pvt Ltd



For JPVL

[Handwritten Signature]
Ran'ant S

CALIBRATION REPORT FOR GAS ANALYZERS S710

JAYPEE NIGRIE		Model: S710		SICK INDIA PVT LTD			
Calibration Date: 29.10.2020		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: 28.04.2021</p>							
S.N.	Cylinder No	Expiry date of calibration cylinder	Component	Cylinder Value (unit)	Before Calibration Value	After Calibration Value	Remarks
1	SGC-43106	01/01/2021	SO2	771 ppm	762 ppm	773 ppm	Calibrated
2	SGC-43106	01/01/2021	NO	758 ppm	765 ppm	760ppm	Calibrated
3	SGC-43106	01/01/2021	CO2	35.53 %	34.90 %	35.52 %	Calibrated

For Sick India Pvt Ltd



For JPVL

[Signature]
Ravi Kant Sin

Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Date: 24.12.2020

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

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)	2.2	0.00	21.70	20.90	200 PPB	229.00	200.00	1.070	0.935	OK
NO (PPB)	0.5	0.00	41.8	44.6	160 PPB	153.70	160.00	1.161	1.207	OK
NOX (PPB)	2.9	0.00	50.7	54.8	200 PPB	198.10	200.00	1.212	1.212	OK
CO (PPM)	0.066	0.00	-0.055	0.009	2 PPM	2.65	2.00	0.972	0.734	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	7042	7033	OK
PM 2.5	1000	7041	7020	OK

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 Thermo Fisher Scientific

Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Date: 24.12.2020

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

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	0.00	14.4	18.2	200 PPB	193.70	200.00	0.77	0.79	OK
NO (PPB)	2.1	0.00	5.9	6.1	160PPB	182.00	160.00	1.99	1.53	OK
NOX (PPB)	13.7	0.00	5.9	15.6	200 PPB	257.00	200.00	1.22	1.24	OK
CO (PPM)	0.003	0.00	0	0.003	4 PPM	3.630	4.00	1.00	1.10	OK

Foil calibration -		Zero value - 0.0	Span value - 1021 ug/m3		Remark
PM Analysers	Range	Amplification Factor		New Vluce	
		Old Value			
PM 10	1000	7088			OK
PM 2.5	1000	6969			OK

JPrL

Chitranshi K...

P. Singh
Thermo Fisher Scientific



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Date: 24.12.2020

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

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)	14.3	0.00	67.8	55.9	200 PPB	257.00	200.00	1.03	0.80	OK
NO (PPB)	-0.3	0.00	34	29.2	160 PPB	185.00	160.00	1.53	1.32	OK
NOX (PPB)	0.3	0.00	45.8	40.4	200 PPB	228.00	200.00	1.23	1.24	OK
CO (PPM)	0.092	0.00	1.806	1.816	2 PPM	2.09	2.00	1.52	1.45	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	7220	6992	OK
PM 2.5	1000	6196	7017	OK


 Chitranjan Kumar


 Thermo Fisher Scientific



Ambient Air Quality Monitoring Station (AAQMS)

CALIBRATION REPORT

Date: **24.12.2020**

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

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)	2.8	0.00	12.9	15.4	200 PPB	201.00	200.00	0.61	0.60	OK
NO (PPB)	-1.8	0.00	22.4	22.9	160 PPB	145.40	160.00	1.74	1.91	OK
NOX (PPB)	0.1	0.00	20.7	23.7	200 PPB	175.70	200.00	0.91	0.94	OK
CO (PPM)	0.052	0.00	-0.06	-0.008	2 PPM	1.93	2.00	1.03	1.06	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	7080	7326	OK
PM 2.5	1000	7201	7022	OK

Ch. Harsharan Kumar

P. Singh
Thermo Fisher Scientific



**Recommendations of the Oversight Committee in its first quarterly report for Compliance
by the various stakeholders: Hindalco Industries Ltd. Mahan Aluminum**

1. **Thermal Power Plants:**

SI	Condition	Status
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.	Presently, our average fly ash utilization is 85% (approx.). Fly-ash utilization is being increased by further tie ups and/or long-term agreements with the cement manufacturers / industries, brick manufacturers etc. Moreover, the approval from MPPCB is awaited apropos low-lying area filling with fly ash.
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.	We have already commenced the ground work required for FGD related compliance(s). Ref: <u>ANNEXURE - I</u>
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.	The visit of numerous experts from reputed organizations/institutions like IIT-BHU is organized YoY, i.e., on a year-on-year basis to study and monitor the ash dyke strength (including other aspects). Besides, the fly ash dyke area is being monitored regularly by the concerned individual / manager (ash dyke) on a fortnightly basis.
D	Air borne fly ash from the ash dykes, specifically during summers should be controlled through	Our ash dyke has vegetation that prevents air borne fly

	arrangements of water sprinkling, vegetation and other scientific measure.	ash from the ash dykes, especially during summers. Photographs are annexed herewith and marked as <u>ANNEXURE - II</u>
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
F	Health checkup 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.	Due to the extant COVID-19 pandemic we haven't been able to conduct any medical camp since April, 2020. This fiscal year we intend to do the same.
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
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
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
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.	The calibration for all CAAQMS and CEMS are being done regularly. The calibration certificate is annexed herewith and

		marked as <u>ANNEXURE – III</u>
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ANNEXURE – I

GROUND WORK FOR FGD





Vegetation on Ash dyke





CALIBRATION CERTIFICATE

Certificate No: NKSS/CEMS/HIL/2020/171/C
 Customer : M/s. Hindalco Industries Ltd Baragawan M.P.

Date of Issue: 12-01-2021

Instrument Details:

Instrument : Online Stack SPM Analyzer
 Make : Forbes Marshall
 Model : DCEM 2100
 Serial No. : 733

Station Name : Stack- 1
 Date of Calibration : 11-01-2021
 Due Date : 10-04-2021

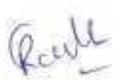
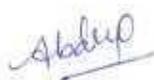
Calibration Details:(Test Data)

Calibration Date	Zero % Opacity	100% Opacity	Remarks
11-01-2021	00.02%	94.8%	Dust monitor model no DCEM 2100 is calibrated successfully

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Operational Checks:-

Normalizing inputs	Temperature	Ok	Serial Comms.	Ok	Plant Status	Ok
	Span Check 100%	Ok	Data Valid	Ok	Contact	Ok
	Alarm Level 1/2	Ok	Alarm Led	Ok		

 Calibrated By: Ram kishan pal Service Engineer		 Reviewed By: S.MD.Abdul Razak Sr. Service Engineer
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NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secunderabad, Telangana State - 500 015
 Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
 Ph: +91 40 48514821 E-mail: info@nksquare.com , Website : nksquare.com

CALIBRATION CERTIFICATE



Certificate No : NKSS/CEMS/HIL/2020/164/H

Date of Issue : 05-12-2020

Customer : M/s. Hindalco Industries Ltd., Bargawan, Singrauli M.P.

Instrument Details:

Instrument : Online Stack Gas Analyzer (SO₂, NO_x, CO)

Make : SIEMENS

Model : ULTRAMAT-23

Serial No. : B5-009

Station Name : CEMS-1

Date of Calibration : 03-12-2020

Due Date : 02-03-2021

Calibration Gas Details:

NO Gas : 746.0 ppm NO, Balance N₂
 SO₂ Gas : 740.0 ppm SO₂, Balance N₂
 CO Gas : 373 ppm CO, Balance N₂
 N₂ Gas : 99.999% purity

Calibration Equipment Details:

Details	N ₂ Gas Cylinder	SO ₂ Gas Cylinder	NO Gas Cylinder	CO Gas Cylinder
Sl. No.	15616	15555	19214	19214
Expiry Date	27-01-2021	28-01-2021	28-01-2021	28-01-2021

Calibration Details:

Parameter	Zero Calibration			Span Calibration		
	Standard Gas Concentration	Measured Value	% of Deviation	Standard Gas Concentration	Measured Value	% of Deviation
SO ₂	0.0 ppm	0.0 ppm	0	740.0 ppm	735.0 ppm	-0.67
NO _x	0.0 ppm	0.0 ppm	0	746.0 ppm	758.0 ppm	1.6
CO	0.0 ppm	0.0 ppm	0	373.0 ppm	374.0 ppm	0.26

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By:

Ram Kishan Pal
Ram Kishan Pal
 Service Engineer



Reviewed by:

Abdul razak
Abdul razak
 Sr. Service Engineer

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secunderabad, Telangana State - 500 015

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Ph: +91 40 48514821 E-mail: info@nksquare.com , Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/CEMS/HIL/2020/171/C

Date of Issue: 12-01-2021

Customer : M/s. Hindalco Industries ltd Baragawan M.P.

Instrument Details:

Instrument : Online Stack SPM Analyzer
Make : Forbes Marshall
Model : DCEM 2100
Serial No. : 729

Station Name : Stack- 2
Date of Calibration : 09-01-2021
Due Date : 08-04-2021

Calibration Details:(Test Data)

Calibration Date	Zero % Opacity	100% Opacity	Remarks
09-01-2021	00.02%	89.8%	Dust monitor model no DCEM 2100 is calibrated successfully

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Operational Checks:-

Normalizing inputs	Temperature	Ok	Serial Comms.	Ok	Plant Status	Ok
	Span Check 100%	Ok	Data Valid	Ok	Contact	Ok
	Alarm Level 1/2	Ok	Alarm Led	Ok		


Calibrated By:
Ram kishan pal
Service Engineer




Reviewed By:
S.MD.Abdul Razak
Sr. Service Engineer

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secunderabad, Telangana State - 500 015
Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
Ph: +91 40 48514821 E-mail: info@nksquare.com , Website : nksquare.com

CALIBRATION CERTIFICATE



Certificate No : NKSS/CEMS/HIL/2020/159/H

Date of Issue : 05-12-2020

Customer : M/s. Hindalco Industries Ltd., Bargawan, Singrauli M.P.

Instrument Details:

Instrument : Online Stack Gas Analyzer (SO₂, NO_x, CO)
Make : SIEMENS
Model : ULTRAMAT-23
Serial No. : B5-027

Station Name : CEMS-2
Date of Calibration: 03-12-2020
Due Date : 02-03-2021

Calibration Gas Details:

NO Gas : 746.0 ppm NO, Balance N₂
SO₂ Gas : 740.0 ppm SO₂, Balance N₂
CO Gas : 373.0 ppm CO, Balance N₂
N₂ Gas : 99.999% purity

Calibration Equipment Details:

Details	N ₂ Gas Cylinder	SO ₂ Gas Cylinder	NO Gas Cylinder	CO Gas Cylinder
Sl. No.	18931	15532	19236	19236
Expiry Date	27-01-2021	28-01-2021	28-01-2021	28-01-2021

Calibration Details:

Parameter	Zero Calibration			Span Calibration		
	Standard Gas Concentration	Measured Value	% of Deviation	Standard Gas Concentration	Measured Value	% of Deviation
SO ₂	0.0 ppm	0.0 ppm	0	740.0 ppm	752.0 ppm	0.16
NO _x	0.0 ppm	0.0 ppm	0	746.0 ppm	751.0 ppm	0.67
CO	0.0 ppm	0.0 ppm	0	373.0 ppm	374.0 ppm	0.26

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By: Ram Kishan Pal Service Engineer		Reviewed by: Abdul Razak Sr. Service Engineer
---	--	--

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secunderabad, Telangana State - 500 015
Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/CEMS/HIL/2020/171/C
Customer : M/s. Hindalco Industries Ltd Baragawan M.P.

Date of Issue: 12-01-2021

Instrument Details:

Instrument : Online Stack SPM Analyzer
Make : Forbes Marshall
Model : DCEM 2100
Serial No. : 722

Station Name : Stack- 3
Date of Calibration : 08-01-2021
Due Date : 07-04-2021

Calibration Details:(Test Data)

Calibration Date	Zero % Opacity	100% Opacity	Remarks
08-01-2021	00.02%	93.8%	Dust monitor model no DCEM 2100 is calibrated successfully

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Operational Checks:-

Normalizing inputs	Temperature	Ok	Serial Comms.	Ok	Plant Status	Ok
	Span Check 100%	Ok	Data Valid	Ok	Contact	Ok
	Alarm Level 1/2	Ok	Alarm Led	Ok		

 Calibrated By: Ram kishan pal Service Engineer		 Reviewed By: S.MD.Abdul Razak Sr. Service Engineer
--	---	--

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CALIBRATION CERTIFICATE



Certificate No : NKSS/CEMS/HIL/2020/160/H

Date of Issue : 05-12-2020

Customer : M/s. Hindalco Industries Ltd., Bargawan, Singrauli M.P.

Instrument Details:

Instrument : Online Stack Gas Analyzer (SO₂, NO_x, CO)
Make : SIEMENS
Model : ULTRAMAT-23
Serial No. : B5-004

Station Name : CEMS-3
Date of Calibration : 25-11-2020
Due Date : 24-02-2021

Calibration Gas Details:

NO Gas : 746.0 ppm NO, Balance N₂
SO₂ Gas : 740.0 ppm SO₂, Balance N₂
CO Gas : 373.0 ppm CO, Balance N₂
N₂ Gas : 99.999% purity

Calibration Equipment Details:

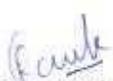
Details	N ₂ Gas Cylinder	SO ₂ Gas Cylinder	NO Gas Cylinder	CO Gas Cylinder
Sl. No.	18903	19228	19226	19226
Expiry Date	27-01-2021	28-01-2021	28-01-2021	28-01-2020

Calibration Details:

Parameter	Zero Calibration			Span Calibration		
	Standard Gas Concentration	Measured Value	% of Deviation	Standard Gas Concentration	Measured Value	% of Deviation
SO ₂	0.0 ppm	0.0 ppm	0	740.0 ppm	747.0 ppm	0.94
NO _x	0.0 ppm	0.0 ppm	0	746.0 ppm	752.0 ppm	0.80
CO	0.0 ppm	0.0 ppm	0	373.0 ppm	377.0 ppm	1.07

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By:  Ram Kishan Pal Service Engineer		Reviewed by:  Abdul Razak Sr. Service Engineer
---	---	--

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CALIBRATION CERTIFICATE

Certificate No: NKSS/CEMS/HIL/2020/171/C
Customer : M/s. Hindalco Industries ltd Baragawan M.P.

Date of Issue: 12-01-2021

Instrument Details:

Instrument : Online Stack SPM Analyzer
Make : Forbes Marshall
Model : DCEM 2100
Serial No. : 723

Station Name : Stack- 4
Date of Calibration : 07-01-2021
Due Date : 06-04-2021

Calibration Details:(Test Data)

Calibration Date	Zero % Opacity	100% Opacity	Remarks
07-01-2021	00.02%	90.8%	Dust monitor model no DCEM 2100 is calibrated successfully

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Operational Checks:-

Normalizing inputs	Temperature	Ok	Serial Comms.	Ok	Plant Status	Ok
	Span Check 100%	Ok	Data Valid	Ok	Contact	Ok
	Alarm Level 1/2	Ok	Alarm Led	Ok		

 Calibrated By: Ram kishan pal Service Engineer		 Reviewed By: S.MD.Abdul Razak Sr. Service Engineer
--	---	--

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CALIBRATION CERTIFICATE



Certificate No : NKSS/CEMS/HIL/2020/161/H

Date of Issue : 05-12-2020

Customer : M/s. Hindalco Industries Ltd., Bargawan, Singrauli M.P.

Instrument Details:

Instrument : Online Stack Gas Analyzer (SO₂, NO_x, CO)
Make : SIEMENS
Model : ULTRAMAT-23
Serial No. : B5-009

Station Name : CEMS-4
Date of Calibration : 03-12-2020
Due Date : 02-03-2021

Calibration Gas Details:

NO Gas : 746.0 ppm NO, Balance N₂
SO₂ Gas : 740.0 ppm SO₂, Balance N₂
CO Gas : 373 ppm CO, Balance N₂
N₂ Gas : 99.999% purity

Calibration Equipment Details:

Details	N ₂ Gas Cylinder	SO ₂ Gas Cylinder	NO Gas Cylinder	CO Gas Cylinder
Sl. No.	15616	15555	19214	19214
Expiry Date	27-01-2021	28-01-2021	28-01-2021	28-01-2021

Calibration Details:

Parameter	Zero Calibration			Span Calibration		
	Standard Gas Concentration	Measured Value	% of Deviation	Standard Gas Concentration	Measured Value	% of Deviation
SO ₂	0.0 ppm	0.0 ppm	0	740.0 ppm	752.0 ppm	1.62
NO _x	0.0 ppm	0.0 ppm	0	746.0 ppm	758.0 ppm	1.6
CO	0.0 ppm	0.0 ppm	0	373.0 ppm	374.0 ppm	0.26

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By: Ram Kishan Pal Service Engineer		Reviewed by: Abdul razak Sr. Service Engineer
---	--	--

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CALIBRATION CERTIFICATE

Certificate No: NKSS/CEMS/HIL/2020/171/C
Customer : M/s. Hindalco Industries ltd Baragawan M.P.

Date of Issue: 12-01-2021

Instrument Details:

Instrument : Online Stack SPM Analyzer
Make : Forbes Marshall
Model : DCEM 2100
Serial No. : 721

Station Name : Stack- 5
Date of Calibration : -06-01-2021
Due Date : 05-04-2021

Calibration Details:(Test Data)

Calibration Date	Zero % Opacity	100% Opacity	Remarks
06-01-2021	00.02%	91.8%	Dust monitor model no DCEM 2100 is calibrated successfully

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Operational Checks:-

Normalizing inputs	Temperature	Ok	Serial Comms.	Ok	Plant Status	Ok
	Span Check 100%	Ok	Data Valid	Ok	Contact	Ok
	Alarm Level 1/2	Ok	Alarm Led	Ok		

Ram kishan pal
Calibrated By:
Ram kishan pal
Service Engineer



S.M.D. Abdul Razak
Reviewed By:
S.M.D. Abdul Razak
Sr. Service Engineer

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CALIBRATION CERTIFICATE



Certificate No: NKSS/CEMS/HIL/2020/162/H

Date of Issue : 05-12-2020

Customer : M/s. Hindalco Industries Ltd., Bargawan, Singrauli M.P.

Instrument Details:

Instrument : Online Stack Gas Analyzer (SO₂,NOX, CO)
Make : SIEMENS
Model : ULTRAMAT-23
Serial No. : B5-008

Station Name : CEMS-5
Date of Calibration : 03-12-2020
Due Date : 02-03-2021

Calibration Gas Details:

NO Gas : 746.0 ppm NO, Balance N₂
SO₂ Gas : 740.0 ppm SO₂, Balance N₂
CO Gas : 373.0 ppm CO, Balance N₂
N₂ Gas : 99.999% purity

Calibration Equipment Details:

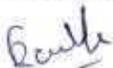
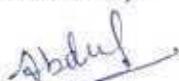
Details	N ₂ Gas Cylinder	SO ₂ Gas Cylinder	NO Gas Cylinder	CO Gas Cylinder
Sl. No.	15558	19215	19219	19219
Expiry Date	27-01-2021	28-01-2021	28-01-2021	28-01-2021

Calibration Details:

Parameter	Zero Calibration			Span Calibration		
	Standard Gas Concentration	Measured Value	% of Deviation	Standard Gas Concentration	Measured Value	% of Deviation
SO ₂	0.0 ppm	0.0 ppm	0	740.0 ppm	754.0 ppm	1.89
NO _x	0.0 ppm	0.0 ppm	0	746.0 ppm	749.0 ppm	0.40
CO	0.0 ppm	0.0 ppm	0	373.0 ppm	372.0 ppm	-0.26

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By:  Ram Kishan Pal Service Engineer		Reviewed by:  Abdul razak Sr. Service Engineer
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CALIBRATION CERTIFICATE

Certificate No: NKSS/CEMS/HIL/2020/171/C
Customer : M/s. Hindalco Industries ltd Baragawan M.P.

Date of Issue: 12-01-2021

Instrument Details:

Instrument : Online Stack SPM Analyzer
Make : Forbes Marshall
Model : DCEM 2100
Serial No. : 732

Station Name : Stack- 6
Date of Calibration : 04-01-2021
Due Date : 03-04-2021

Calibration Details:(Test Data)

Calibration Date	Zero % Opacity	100% Opacity	Remarks
04-01-2021	00.02%	98.8%	Dust monitor model no DCEM 2100 is calibrated successfully

Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Operational Checks:-

Normalizing inputs	Temperature	Ok	Serial Comms.	Ok	Plant Status	Ok
	Span Check 100%	Ok	Data Valid	Ok	Contact	Ok
	Alarm Level 1/2	Ok	Alarm Led	Ok		

Ram kishan pal
Calibrated By:
Ram kishan pal
Service Engineer



S.M.D. Abdul Razak
Reviewed By:
S.M.D. Abdul Razak
Sr. Service Engineer

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CALIBRATION CERTIFICATE



Certificate No: NKSS/CEMS/HIL/2020/163/H

Date of Issue : 05-12-2020

Customer : M/s. Hindalco Industries Ltd., Bargawan, Singrauli M.P.

Instrument Details:

Instrument : Online Stack Gas Analyzer (SO₂,NOX, CO)
Make : SIEMENS
Model : ULTRAMAT-23
Serial No. : B5-005

Station Name : CEMS-6
Date of Calibration : 03-12-2020
Due Date : 02-03-2021

Calibration Gas Details:

NO Gas : 746.0 ppm NO, Balance N₂
SO₂ Gas : 740.0 ppm SO₂, Balance N₂
CO Gas : 373.0 ppm CO, Balance N₂
N₂ Gas : 99.999% purity

Calibration Equipment Details:

Details	N ₂ Gas Cylinder	SO ₂ Gas Cylinder	NO Gas Cylinder	CO Gas Cylinder
Sl. No.	18893	15559	19232	19232
Expiry Date	27-01-2021	28-01-2021	28-01-2021	28-01-2021

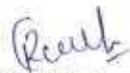
Calibration Details:

Parameter	Zero Calibration			Span Calibration		
	Standard Gas Concentration	Measured Value	% of Deviation	Standard Gas Concentration	Measured Value	% of Deviation
SO ₂	0.0 ppm	0.0 ppm	0	740.0 ppm	746.0 ppm	0.81
NO _x	0.0 ppm	0.0 ppm	0	746.0 ppm	745.0 ppm	-0.13
CO	0.0 ppm	0.0 ppm	0	373.0 ppm	372.0 ppm	-0.26

Accepted Tolerance: $\pm 2\%$

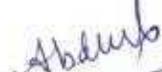
Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By:


Ram Kishan Pal
Service Engineer



Reviewed by:


Abdul razak
Sr. Service Engineer

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/177/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM-10 Analyzer

Station Name : Town Ship

Make: Metone Instruments, U.S.A

Date of Calibration : 15-09-2020

Model: BAM-1020

Due Date: 14-03-2021

Serial No: R13470

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	808 $\mu\text{g}/\text{m}^3$	813 $\mu\text{g}/\text{m}^3$	0.61

Accepted Tolerance: +2 %

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/176/H**

Date of Issue: 19-09-2020

Customer: M/s Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM -2.5 Analyzer

Station Name : Town Ship

Make: Metone Instruments, U.S.A

Date of Calibration : 15-09-2020

Model: BAM-1020

Due Date : 14-03-2021

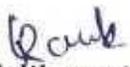
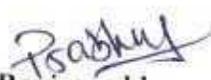
Serial No: R13473

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	789 $\mu\text{g}/\text{m}^3$	798 $\mu\text{g}/\text{m}^3$	1.12

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
--	---	--

NK SQUARE SOLUTIONS

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/178/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindaico Industries Ltd., Bargawan, Singrauli, M.P.

Instrument Details:

Instrument: SO2 Analyser

Make: Horiba, Japan

Model: APSA-370

Serial No: UT2LRGU8

Station Name : Town Ship

Date of Calibration: 15-09-2020

Due Date: 14-03-2021

Calibration Gas Detail:

Calibration

Diluter: CGS-12

SO2 Gas: 99.3 ppm SO2, Balance N2.

Serial No : 749516

Calibration Equipment Details:

Ratio: 1: 200

Details	SO2 Gas Cylinder
Serial Number	9940
Expiry Date	20.01.2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
SO2	0.0ppm	0.0ppm	0.470 ppm	0.476 ppm	1.26

Acceptable Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

Calibrated by:
Rana Kishan Pal
Service Engineer



Reviewed by:
Prabhu Kishore
Sr. Service Engineer

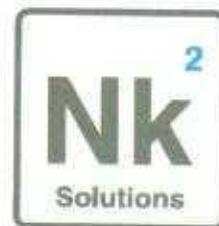
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CALIBRATION CERTIFICATE



Certificate No: **NKSS/AAQMS/HIL/2020/175/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: NOx Analyzer

Make: Horiba, Japan.

Model: APNA-370

Serial No: TLXMKVT4

Station Name: Township

Date of Calibration: 15-09-2020

Due Date: 14-03-2021

Calibration Gas Details:

Calibration Diluter: CGS-12

NO Gas: 99.3 ppm NO, Balance N₂.

Serial No: 749516

Calibration Equipment Details:

Ratio: 1: 200

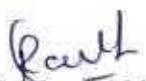
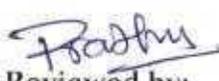
Details	NO Gas Cylinder
Serial Number	10130
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
NO	0.0ppm	0.0 ppm	0.470	0.465	-1.07

Accepted Tolerance: + 2 %

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/174/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: CO Analyzer

Make: Horiba, Japan.

Model: APMA-370

Serial No: 3PJPNNDDQ

Station Name: Township

Date of Calibration: 15-09-2020

Due Date: 14-03-2021

Calibration Gas Details:

Calibration Diluter: CGS-12

CO Gas: 100 ppm CO, Balance N₂.

Serial No: 749516

Calibration Equipment Details:

Ratio: 1: 200

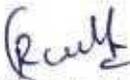
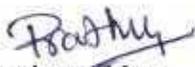
Details	CO Gas Cylinder
Serial Number	9952
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
CO	0.0ppm	0.0 ppm	0.850 ppm	0.852 ppm	0.23

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/2020/167/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM -10 Analyzer

Station Name : ETP SITE

Make: Metone Instruments, U.S.A

Date of Calibration : 15-09-2020

Model: BAM-1020

Due Date : 14-03-2021

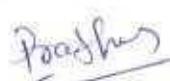
Serial No: R13472

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	850 $\mu\text{g}/\text{m}^3$	859 $\mu\text{g}/\text{m}^3$	1.04

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

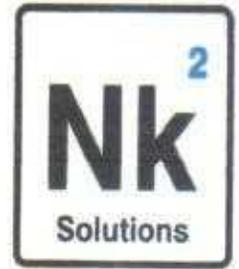
 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
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Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/166/H**

Date of Issue: 19-09-2020

Customer: M/s Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM-2.5 Analyzer

Station Name : ETP SITE

Make: Metone Instruments, U.S.A

Date of Calibration : 15-09-2020

Model: BAM-1020

Due Date : 14-03-2021

Serial No: R13471

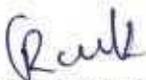
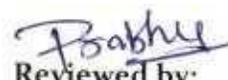
Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	806 $\mu\text{g}/\text{m}^3$	808 $\mu\text{g}/\text{m}^3$	0.24

Accepted Tolerance: + 2 %

Result: The Calibration of above instrument is performed and it meets the acceptance

Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
--	---	--

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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/20120/168/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P.

Instrument Details:

Instrument: SO2 Analyser

Make: Horiba, Japan.

Model: APSA-370

Serial No: P60BBGRL

Station Name : ETP SITE

Date of Calibration: 15-09-2020

Due Date: 14-03-2021

Calibration Gas Details

Calibration Diluter: CGS-12

SO2 Gas: 99.3 ppm SO2, Balance N2.

Serial No : 749516

Calibration Equipment Details:

Ratio: 1: 200

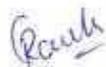
Details	SO2 Gas Cylinder
Serial Number	9940
Expiry Date	20.01.2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
SO2	0.0ppm	0.0ppm	0.480 ppm	0.476 ppm	-0.84

Acceptable Tolerance: + 2 %

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
---	---	---

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CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/HIL/2020/165/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: NOx Analyzer

Make: Horiba, Japan

Model: APNA-370

Serial No: SNE8MDK5

Station Name: ETP SITE

Date of Calibration: 15-09-2020

Due Date: 14-03-2021

Calibration Gas Details:

Diluter: CGS-12

NO Gas: 99.3 ppm NO, Balance N₂

Serial No: 749516

Calibration

Calibration Equipment Details:

Ratio: 1: 200

Details	NO Gas Cylinder
Serial Number	10130
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
NO	0.0ppm	0.0 ppm	0.480	0.482	0.41

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

Ram Kishan Pal
Calibrated by:
Ram Kishan Pal
Service Engineer



Prabhu Kishore
Reviewed by:
Prabhu Kishore
Sr. Service Engineer

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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/2020/164/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: CO Analyser
 Make: Horiba, Japan.
 Model: APMA-370
 Serial No: DJ9KVJUV

Station Name: ETP SITE
 Date of Calibration: 15-09-2020
 Due Date: 14-03-2021

Calibration Gas Details:

Calibration Diluter: CGS-12
 CO Gas: 100 ppm CO, Balance N2.
 Serial No: 749516

Calibration Equipment Details:

Ratio: 1: 200

Details	CO Gas Cylinder
Serial Number	9952
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
CO	0.0ppm	0.0 ppm	0.850 ppm	0.860ppm	1.16

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance

Criteria.

<p>Calibrated by:</p> <p><i>Ram Kishan Pal</i> Ram Kishan Pal Service Engineer</p>		<p>Reviewed by:</p> <p><i>Abdul Razak</i> Abdul razak Sr. Service Engineer</p>
---	--	---

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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/2020/162/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM-10 Analyzer

Station Name : Cooling Tower

Make: Metone Instruments, U.S.A

Date of Calibration : 16-09-2020

Model: BAM-1020

Due Date : 15-03-2021

Serial No: U11749

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	808 $\mu\text{g}/\text{m}^3$	813 $\mu\text{g}/\text{m}^3$	0.61

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram kishan pal Service Engineer		 Reviewed by: Abdul Razak Service Engineer
--	---	---

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/161/H**

Date of Issue: 19-09-2020

Customer: M/s Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM -2.5 Analyzer

Station Name : Cooling Tower

Make: Metone Instruments, U.S.A

Date of Calibration : 16-09-2020

Model: BAM-1020

Due Date : 15-03-2021

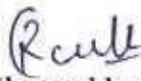
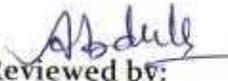
Serial No: U11748

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	822 µg/m ³	828 µg/m ³	0.72

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram kishan pal Service Engineer		 Reviewed by: Abdul razak Service Engineer
---	---	--

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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/2019/107/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P.

Instrument Details:

Instrument: SO₂ Analyser

Station Name : Cooling Tower

Make: Horiba, Japan.

Date of Calibration: 16-09-2020

Model: APSA-370

Due Date: 15-03-2021

Serial No: SN5L0J96

Calibration Gas Details

Calibration Diluter: CG5-12

SO₂ Gas: 99.3 ppm SO₂, Balance N₂.

Serial No : 749516

Calibration Equipment Details:

Ratio: 1: 200

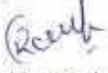
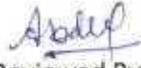
Details	SO ₂ Gas Cylinder
Serial Number	9940
Expiry Date	24.11.2019

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
SO ₂	0.0ppm	0.0ppm	0.480 ppm	0.476 ppm	-0.83

Acceptable Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated By: Ram Kishan Service Engineer		 Reviewed By: Abdul razak Sr. Service Engineer
---	---	--

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/160/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: NOx Analyzer

Make: Horiba, Japan.

Model: APNA-370

Serial No: UW0DJ3TF

Station Name: Cooling Tower

Date of Calibration: 16-09-2020

Due Date: 15-03-2021

Calibration Gas Details:

Calibration Diluter: CGS-12

NO Gas: 99.3 ppm NO, Balance N₂.

Serial No: 749516

Calibration Equipment Details:

Ratio: 1: 200

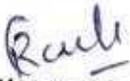
Details	NO Gas Cylinder
Serial Number	10130
Expiry Date	20-01-2021

Calibration Details:

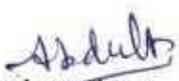
Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
NO	0.0ppm	0.0 ppm	0.480	0.483	0.62

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.


Calibrated by:
Ram kishan pal
Service Engineer




Reviewed by:
Abdul razak
Service Engineer

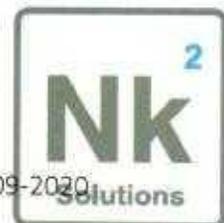
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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/2020/159/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: CO Analyzer

Make: Horiba, Japan.

Model: APMA-370

Serial No: S3L9X6KF

Station Name: Cooling Tower

Date of Calibration: 16-09-2020

Due Date: 15-03-2021

Calibration Gas Details:

Calibration Diluter: CGS-12

CO Gas: 100 ppm CO, Balance N₂.

Serial No: 749516

Calibration Equipment Details:

Ratio: 1: 200

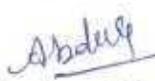
Details	CO Gas Cylinder
Serial Number	9952
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
CO	0.0ppm	0.0 ppm	0.750 ppm	0.746ppm	-0.53

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Abdul Razak Sr. Service Engineer
--	---	---

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/172/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM -10 Analyzer

Station Name : Reservoir

Make: Metone Instruments, U.S.A.

Date of Calibration : 16-09-2020

Model: BAM-1020

Due Date: 15-03-2021

Serial No: U11746

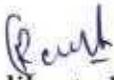
Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	808 $\mu\text{g}/\text{m}^3$	814 $\mu\text{g}/\text{m}^3$	0.73

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance

Criteria.

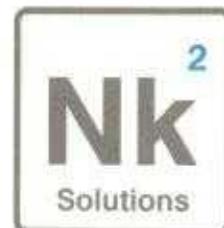
 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
---	---	---

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CALIBRATION CERTIFICATE

Certificate No: **NKSS/AAQMS/HIL/2020/171/H**

Date of Issue: 19-09-2020

Customer: M/s Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: PM -2.5 Analyzer

Station Name : Reservoir

Make: Metone Instruments, U.S.A

Date of Calibration : 16-09-2020

Model: BAM-1020

Due Date : 15-03-2021

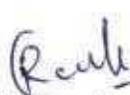
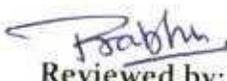
Serial No: U11747

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	789 $\mu\text{g}/\text{m}^3$	792 $\mu\text{g}/\text{m}^3$	0.37

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Service Engineer
---	---	---

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CALIBRATION CERTIFICATE



Certificate No: **NKSS/AAQMS/HIL/2020/173/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P.

Instrument Details:

Instrument: SO2 Analyser

Station Name : Reservoir

Make: Horiba, Japan.

Date of Calibration : 16-09-2020

Model: APSA-370

Due Date : 15-03-2021

Serial No: B4JCHRAL

Calibration Gas Details

Calibration Diluter: CGS-12

SO2 Gas: 99.3 ppm SO2, Balance N2.

Serial No : 749516

Ratio: 1: 200

Calibration Equipment Details:

Details	SO2 Gas Cylinder
Serial Number	9940
Expiry Date	20.01.2021

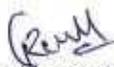
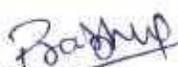
Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
SO2	0.0ppm	0.0ppm	0.450 ppm	0.457ppm	1.53

Acceptable Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance

Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
---	---	---

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CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/HIL/2020/170/H

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: NOx Analyzer

Station Name: Reservoir

Make: Horiba, Japan.

Date of Calibration: 16-09-2020

Model: APNA-370

Due Date: 15-03-2021

Serial No: 1HMMG70X

Calibration Gas Details:

NO Gas: 99.3 ppm NO, Balance N₂.

Calibration Diluter: CGS-12

Serial No: 749516

Ratio: 1: 200

Calibration Equipment Details:

Details	NO Gas Cylinder
Serial Number	10130
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
NO	0.0ppm	0.0 ppm	0.450	0.456	1.31

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
---	---	---

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CALIBRATION CERTIFICATE



Certificate No: **NKSS/AAQMS/HIL/2020/169/H**

Date of Issue: 19-09-2020

Customer: M/s. Hindalco Industries Ltd., Bargawan, Singrauli, M.P

Instrument Details:

Instrument: CO Analyzer

Station Name: Reservoir

Make: Horiba, Japan.

Date of Calibration: 16-09-2020

Model: APMA-370

Due Date: 15-03-2021

Serial No: VASVMMT2

Calibration Gas Details:

Calibration Diluter: CGS-12

CO Gas: 100 ppm CO, Balance N2.

Serial No: 749516

Ratio: 1: 200

Calibration Equipment Details:

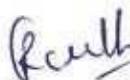
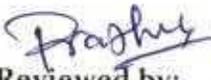
Details	CO Gas Cylinder
Serial Number	9952
Expiry Date	20-01-2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
CO	0.0ppm	0.0 ppm	0.850 ppm	0.855 ppm	0.51

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Ram Kishan Pal Service Engineer		 Reviewed by: Prabhu Kishore Sr. Service Engineer
---	---	---

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Ph: +91 40 48514821 E-mail: info@nksquare.com , Website : nksquare.com



hemant Sharma <hsharma1091@gmail.com>

ENCLOSURE 6

Action Taken Report for Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018

2 messages

RO MPPCB Singrauli <romppcb.sgrl@gmail.com>

Sat, Feb 20, 2021 at 11:09 AM

To: hemant Sharma <hsharma1091@gmail.com>, hksharma-pcb@mp.gov.in

----- Forwarded message -----

From: **General Manager(Environment/IMS)** <gmenv.ncl@coalindia.in>

Date: Sat, 20 Feb, 2021, 11:00 am

Subject: Action Taken Report for Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018

To: Ro MPPCB <romppcb.sgrl@gmail.com>

Dear Sir,

Please find below the Action Taken Report in respect of projects of Northern Coalfields Limited for Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018.

Compliance status is prepared based on information provided by projects of NCL -

2.	Coal Mines:	
	Points for Compliance	Compliance Status
A	Road sweeping machines in sufficient numbers shall be procured and regular sweeping of the coal transport roads shall be undertaken to keep them dust free	10 nos. of Road Sweeping Machines have been procured and deployed in different projects for regular sweeping of coal transportation road for control of fugitive dust emission. 4 more nos. of such machines are expected to be delivered shortly. These will also be utilized for keeping coal transport roads dust free.
B	Paving of the road side shoulders along the coal transport roads shall be undertaken within 3 months under the guidance and supervision of the district administration.	Road side shoulders have been paved all along the coal transport road from Jayant and Block-B Project to Spur-I and Spur- II Siding respectively.
C	Maintenance of railway sidings operated by NCL shall be undertaken as per the guidelines published by CPCB titled " <i>Inventorization of Railway Sidings and Guidelines for their Environment Management- March 2015</i> ".	Railway sidings are being maintained as per the CPCB guidelines published in March 2015. Following Pollution control measures have been taken at Railway Sidings: <ul style="list-style-type: none"> ▪ Fixed water sprinklers have been provided for suppression of dust. ▪ Wind breaking wall has been constructed all along the coal stock area. ▪ Proper drainage system has been developed. ▪ Continuous water sprinkling is done by means of water tankers and Mist Guns. ▪ Metallic/ concrete roads have been constructed from main road upto siding.

D	Utilization of fly ash in over burden (OB) of working mines and conducting pilot studies for the same as per Fly ash notification and CPCB guidelines shall be undertaken and 25% use fly ash in the OB dumps shall be done as per Fly Ash Notification, 1999.	<ul style="list-style-type: none">▪ Utilization of 25 % fly ash with overburden has serious safety implications which has been deliberated in the 44th meeting of Standing Committee on Safety in coal mines held on 12.02.2020 (Annexure-1). In the meeting it has been noted that – as per the discussions held between MoEF&CC with other stake holders including DGMS, fly ash dumping has been allowed only in abandoned mines and dumping should not be done in working mines. ▪ During discussions of 7th meeting of task force constituted by ministry of power for fly ash filling held on 09.10.2020 (MoM enclosed as Annexure-2), Coal India Limited (CIL) informed that mixing of Fly ash with OB involves operational and safety issues. In view of these concerns, CIL submitted that clause 8(i) of Gazette notification dt. 03.11.2009 needs to be reviewed and fly ash dumping can only be allowed in abandoned mines. ▪ Exemption of operational mines from provision of Fly Ash Notification 2009/2020 was discussed in the Joint Secretary level meeting of Ministry of Coal (MoC) and MoEF&CC held on 10.11.2020. MoEF&CC informed in this meeting that it is in receipt of representation/comments of CIL / MoC on draft Fly Ash notification 2020. These representations are under consideration and an appropriate decision will be taken by MoEF&CC in the issue shortly (MoM attached as Annexure-3). ▪ Exemption of operational mines from provision of Fly Ash Notification 2009/2020 was also discussed in the Additional Secretary level meeting of MoC and MoEF&CC held on 16.12.2020 (MoM attached as Annexure-4), in which MoC mentioned that mixing of fly ash with OB in running OC mines is not conducive on account of slope stability issues & safety considerations. MoEF&CC suggested that the safety and other issues involved with the utilization of fly ash in operational mines should be scientifically studied and study report shared with it to arrive at an informed decision. ▪ NCL has approached IIT (BHU), Varanasi to carry out scientific study of fly ash utilization/ mixing with Over burden in running / operating mines of NCL along with ascertaining the slope stability issues, safety aspects of OB Dumps, men and machineries.
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E	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.	Health-camps are organized by NCL projects periodically for local population as part of CSR activities 'Sab Swasth' under following categories :- <ul style="list-style-type: none"> ▪ General health camps – includes free diagnosis, tests and distribution of free medicines. ▪ Specialized health camps – e.g. anemia detection camp, cancer detection camp, diabetic camp, eye camp, child health check-up camp etc. Also, 4 No. of ambulances have been engaged with the objective of providing basic healthcare services at the doorsteps of nearby villagers.
F	The railway connectivity of the Block B Gorbi mine shall be completed within 3-6 months time to stop the road transportation of the coal. Consequently the operation of the coal loading railway siding of the Block B Gorbi mine shall be terminated thereafter.	The construction work of railway track for transportation of coal by rail from Block-B mine is in progress. (physical progress of work is 75%) Due to hindrance by nearby villagers in construction of railway track, work is getting delayed. However, efforts are being made for early completion the work.
G	The railway sidings operated by NCL should be operated in accordance with the CPCB guidelines.	Spur-I and Spur-II Morwa Railway Sidings are currently being used by NCL for Coal loading. These sidings are being operated as per CPCB guidelines.
H	All the coal mines shall calibrate all the CAAQMS 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.	There are total 09 nos. of CAAQMS installed in different projects of NCL. The data being generated by CAAQMS is shared online with respective MPPCB and CPCB servers. Calibration of each CAAQMS is being done on monthly basis.

Regards,

General Manager (Environment),
Northern Coalfields Limited, Singrauli

General Manager(Environment/IMS) <gmenv.ncl@coalindia.in>
To: hemant Sharma <hsharma1091@gmail.com>

Mon, Feb 22, 2021 at 1:54 PM

Dear Sir,

Please find below the Action Taken Report in respect of projects of Northern Coalfields Limited for Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018.

From: "General Manager(Environment/IMS)" <gmenv.ncl@coalindia.in>

To: "Ro MPPCB" <romppcb.sgrl@gmail.com>

Sent: Saturday, February 20, 2021 11:00:07 AM

Subject: Action Taken Report for Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA 164 /2018

[Quoted text hidden]

2 attachments



Annex-4 Studying the safety and other issues involved with theutilization of fly ash in Operational mines.pdf
5595K



Annexures- 1 to 3.pdf
10549K

No. CCSD-51013/08/2018-CCSD
Government of India
Ministry of Coal

Room No 622-A, Shastri Bhawan,
New Delhi, dated: 10th April, 2020

To,

All the members of the Standing Committee on Safety in Coal Mines (As per list):

Subject: Minutes of the 44th meeting of the Standing Committee on Safety in Coal Mines held on 16.10.2019 at 3.00P.M in New Delhi under the Chairmanship of Hon'ble Minister of Parliamentary Affairs, Coal and Mines.

I am directed to forward herewith a copy of minutes of the 44th meeting of the Standing Committee on Safety in Coal Mines held on 16.10.2019 at 3.00 P.M in New Delhi under the Chairmanship of Hon'ble Minister of Parliamentary Affairs, Coal and Mines for and necessary action. The Action Taken Report on the various decisions taken in the meeting may be furnished to this Ministry at the earliest.

Enclosures- as stated.

Sd/-

(Hitlar Singh)
Under Secretary to Govt. of India
Tel: 23382269

Copy to:

1. PS to Hon'ble Minister of Parliamentary Affairs, Coal and Mines.
2. PSO to Secretary (Coal)
3. PPS to Additional Secretary (Coal)
4. PS to Project Adviser
5. PS to Director (Technical)
6. Technical Director, NIC, Ministry of Coal (Requested to put this minutes on the website of this Ministry).

List of the Members of the Standing Committee on Safety in Coal Mines:

1. Joint Secretary, Bureau Head, Safety in Mines, Ministry of Labour & Employment, Shram Shakti Bhavan, New Delhi. (kalpana.r@nic.in)
2. The Director General, Directorate General of Mines Safety, Dhanbad (Jharkhabnd) (Fax: 0326-2221027, Dhanbad)(Ph: 0326-2-221000)
3. The Chairman, Coal India Ltd., Coal Bhawan, Rajarhat, Kolkata-700156
4. The Chairman/Managing Director, Singareni Collieries Company Ltd., Kothagudem Collieries, Khamam Distt (A.P.) (Fax Dir(P&P): 08744-245293)(Ph: 08744-242602,242382)
5. The Chairman/Managing Director, Neyveli Lignite Corporation, P.O.Neyveli (T.N.) (Fax: DGM(Safety):04142-252645,2522646) (Ph: 04142-252492)
6. The Chairman/Managing Director, Bharat Coking Coal Ltd, .Koyala Bhawan, Koyala Nagar, Dhanbad.
7. The Chairman/Managing Director, Eastern Coalfields Ltd., Sanctoria, P.O.Dishergarh, Distt. Burdwan (West Bengal)
8. The Chairman/Managing Director, Mahanadi Coalfield Ltd., Sambalpur, (Orissa).
9. The Chairman/Managing Director, Central Coalfields Ltd., Dharbhanga House, Ranchi(Jharkhand)
10. The Chairman/Managing Director, Northern Coalfields Ltd., Singrauli, P.O. Singrauli Collieries, Distt. Sidhi (M.P.).
11. The Chairman/Managing Director, South Eastern Coalfields Ltd., Seepat Road, Bilalpur (M.P.).
12. The Chairman/Managing Director, Western Coalfields Ltd., Civil Lines, Nagpur.
13. The Chairman/Managing Director, North Eastern Coalfields, Margrata, Assam.
14. The Chairman/Managing Director, Central Mine Planning and Design Institute, Gondwana Place Kanke Road, Ranchi (Jharkhand).
15. Director (Personnel), Coal India Ltd., Coal Bhawan, Rajarhat, Kolkata-700156
16. Director (Technical), Coal India Ltd., Coal Bhawan, Rajarhat, Kolkata-700156
17. GM (S&R), Coal India Ltd Coal Bhawan, Rajarhat, Kolkata-700156
18. Managing Director, Jharkhand State Mineral Development Corporation, Khanij Nigam Bhavan,Doranda,Ranchi(Jharkhand)(Fax,No.0651-491916) (Ph:2491841, 2491842, 2491807, 2490767)
19. Shri N. K. Purohit, Addl. General Manager, Gujarat Industries Power Co. Ltd., (Surat Lignite Power Plant), Village .Nani Naroli,Taluka, Mangrol, Distt. Surat-394110 (Fax No. 02629-261073, 261074 & 0265-2231207)

20. Private Coal Mines:

S.No	Name of Coal Mine	Successful Bidder / Allottee	Address	Email
1.	Chotia	BALCO	Shri S.K. Roongta, Chairman, Bharat Aluminum Company Ltd, Aluminium Sadan, Core-6, Scope Office Complex, Lodhi Road, New Delhi - 110003	afroz.ali@vedanta.co.in
2.	Gare Palma IV-4	HINDALCO	Shri Satish Pal, Managing Director, Hindalco Industries Ltd, Aditya Birla Centre, 3rd Floor, 'B' Wing, S.K. Ahir Marg, Worli, Mumbai - 400030	shouvik.majumder@adityabirla.com
3.	Gare Palma IV-5	HINDALCO		shouvik.majumder@adityabirla.com

4.	Gare Palma Sector I	Gujarat State Electricity Corporation Limited	Shri Raj Gopal, IAS, Chairman, Principal Secretary, Gujarat State Electricity Corporation Ltd, Vidyut Bhawan, Race Course, Vadodara, Gujarat - 390007	eefuel2.gsecl@gebmail.com
5.	Gare Palma Sector II	Maharashtra State Power Generation Co Ltd	Shri Chandrashekhar Bawankule, Chairman, Maharashtra State Power Generation Co. Ltd, Prakashgad, Plot No. G-9, Bandra (East), Mumbai - 400051	ccfmc@mahagenco.in / edfuel@mahagenco.in
6.	Gare Palma Sector III	Chhattisgarh State Power Generation Co Ltd	Shivraj Singh, IAS (Retd), Chairman, Chhattisgarh State Power Generation Corporation Ltd, Ground Floor, Vidyut Sewa Bhawan, Dangania, Raipur, Chhattisgarh-492013	espgcl.coal@gmail.com
7.	Gare-Palma Sector-IV/8	Ambuja Cements Ltd	Shri Ajay Kapur, Managing Director, Ambuja Cements Ltd, Elegant Business Park, MIDC Cross Road 'B', Office Andheri Kurla Road, Andheri (East), Mumbai - 400059	kamlesh.sharma.ext@ambujacement.com
8.	Gidhmuri, Paturia	Chhattisgarh State Power Generation Co Ltd	Shivraj Singh, IAS (Retd), Chairman, Chhattisgarh State Power Generation Corporation Ltd, Ground Floor, Vidyut Sewa Bhawan, Dangania, Raipur, Chhattisgarh-492013	espgcl.coal@gmail.com
9.	Parsa	RRVUNL	The Chairman & Managing Director, Rajasthan Rajya Vidyut Utpadan Nigam Ltd, Vidyut Bhawan, Jyoti Nagar, Janpath, Jaipur - 302005	fuel.rvun@gmail.com
10.	Parsa East, Kanta Basan	RRVUNL		fuel.rvun@gmail.com
11.	Talaipalli	NTPC Ltd	Shri Gurdeep Singh, Chairman-cum Managing Director, NTPC Ltd, NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110001	usnandam@ntpc.co.in / akdash@ntpc.co.in
12.	Madanpur South	APMDCL	Shri Vekaiah Chowdary, Vice-Chairman & Managing Director, Andhra Pradesh Mineral Development Corp. Ltd, 294/1D, Tadigadapa to Enikepadu, 100 Ft. Road, Kanur, Vijaywada - 521137	apmdcltd@yahoo.com
13.	Badam	Bihar State Power Generation Co Ltd	Shri Pratyaya Amrit, Chairman-cum Managing Director, Bihar State Power Generation Co. Ltd, 5th Floor, Vidyut Bhawan, Bailey Road, Patna - 800001	chiefengincerbpsgcl@gmail.com
14.	Banhardih	Jharkhand Urja Utpadan Nigam Ltd	The Chairman-cum-Managing Director, Jharkhand Urja Utpadan Nigam Limited, Engineering Building, H.E.C, Dhurwa, Ranchi, Jharkhand - 834004	faiztaiyab@ntpc.co.in
15.	Brinda and Sasai	Tata Sponge Iron Ltd	Shri D.P. Deshpande, Managing Director, TATA Sponge Iron Limited, SBI Building, 2nd Floor, Circuit House Area (East), Jamshedpur, Jharkhand - 931001	rajcecuml@rediffmail.com

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16.	Chatti Bariatu, Chatti Bariatu South	NTPC Ltd	Shri Gurdeep Singh, Chairman-cum Managing Director, NTPC Ltd, NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110001	usnandan@ntpc.co.in / akdash@ntpc.co.in
17.	Dumri	HINDALCO	Shri Satish Pal, Managing Director, Hindalco Industries Ltd, Aditya Birla Centre, 3rd Floor, 'B' Wing, S.K. Ahir Marg, Worli, Mumbai - 400030	shouvik.majumder@adityabirla.com
18.	Jitpur	Adani Power Limited	Shri Rajesh Adani, Managing Director, Adani Power Ltd, Shikhar, 10th Floor, 'A' Wing, Near Mithakhali Circle, Navrangpura, Ahmedabad - 380015	abhishek.shah@adani.com
19.	Kathautia	HINDALCO	Shri Satish Pal, Managing Director, Hindalco Industries Ltd, Aditya Birla Centre, 3rd Floor, 'B' Wing, S.K. Ahir Marg, Worli, Mumbai - 400030	shouvik.majumder@adityabirla.com
20.	Kerandari	NTPC Ltd	Shri Gurdeep Singh, Chairman-cum Managing Director, NTPC Ltd, NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110001	faiztaiyab@ntpc.co.in
21.	Lohari	ARAANYA MINES PRIVATE LIMITED	Shri Alok Rungta, Director, Araanya Mines Pvt. Ltd, Near Ramgarh Gym Khana Club, Opp. Ashok Cinema, Ranchi Road, Jharkhand - 829117	anpl.ramgarh@gmail.com
22.	Meral	Trimula Industries Limited	Shri Ayush Goel, Managing Director, Trimula Industries Limited, 301, 3rd Floor, Udyog Vihar, Phase-II, Gurgaon-122002	ayush.goel@gulfpetrochem.com
23.	Moitra	JSW STEEL LIMITED	The Chairman-cum Managing Director, JSW Steel Ltd, JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai, Maharashtra - 400051	ranapratap.singh@jsw.in
24.	Pachhwara Central	Punjab State Power Corp Ltd	Shri Er. Baldev Singh Saran, Chairman-cum Managing Director, Punjab State Power Corp. Ltd., Room No. 411, 4th Floor, Seven Storey Building, The Mall Patiala, Punjab - 147001	sefaelcspcl@gmail.com
25.	Pachhwara North	WBPDCL	Shri Santranu Basu, IAS, Chairman-cum Managing Director, West Bengal Power Development Corp. Ltd, Bidyut Unnayan Bhaban, Plot No - 3/C, LA Block, Sector-III, Salt Lake City, Kolkata - 700098	ambarroy@wbpdcl.co.in
26.	Parbatpur-Central	SAIL	Shri Anil Kumar Chaudhary, Chairman, SAIL, Ispat Bhawan, Lodhi Road, New Delhi - 110003	sailcro2015@gmail.com
27.	Rajbar D & E	Tenughat Vidyut Nigam Ltd	Shri Champra Linda, Chairman, Tenughat Vidyut Nigam Ltd, Hinoo, Doranda, Ranchi, Jharkhand - 834004	rajanvnl@gmail.com

28.	Saharpur Jamarpani	UP Rajya Vidyut Utpadan Nigam Ltd	Shri Alok Kumar, Chairman, UP Rajya Vidyut Utpadan Nigam Ltd, Shakti Bhawan, 14-Ashok Marg, Lucknow - 226001	se.ncb@uprvunl.org
29.	Patal East	JSMDC	Shri Aboobacker Siddique P. (IAS), Chairman cum Managing Director, Jharkhand State Mineral Development Corporation Ltd, Khanij Nigam Bhawan, Doranda, Ranchi - 834002	contact@jismdc.in
30.	Tubed	DVC	The Chairman, Damodar Valley Corporation, NBCC Towers, Hall No. 03, Bhikaji Cama Place, New Delhi - 110066	sudhir.mukherjee@dvc.gov.in
31.	Kotre basantpur & Pachmu	CCL	The Chairman-cum Managing Director, Central Coalfields Limited, Darbhanga House, Ranchi, Jharkhand - 834001	gmkbpccl@coalindia.in / dtop.ccl.cil@coalindia.in
32.	Amarkonda Murga Dangal	ECL	The Chairman-cum Managing Director, South Eastern Coalfields Limited, Seepat Road, Bilaspur, Chhattisgarh - 495006	hodpnp.ccl@coalindia.in
33.	Brahmini & Chichro Parsimal	ECL		hodpnp.ccl@coalindia.in
34.	Amelia North	Jaiprakash Power Ventures Limited	Shri Manoj Gaur, Chairman, Jaiprakash Power Venture Ltd, Complex of Jaypee Nigric Super Thermal Power Plant, Tehsil Sarai, Nigrie, Singrauli, Madhya Pradesh - 486669	nm.jha@jalindia.co.in
35.	Bicharpur	UltraTech Cement Limited	Shri K.K. Maheshwari, Managing Director, Ultra tech Cement Ltd, 'B' Wing, Ahura Centre, 2nd Floor, Mahakali Caves Road, Adheri (East), Mumbai - 400009	syed.khadry@adityabirla.com
36.	Sial Ghoghri	RELIANCE CEMENT COMPANY PRIVATE LIMITED	Shri B.R. Nahar, Managing Director, Reliance Cement Company Pvt. Ltd, 'H' Block, 1st Floor, Dhirubhai Ambani Knowledge City, Navi Mumbai, Maharashtra - 400710	sandeep.jain@rc.birlacorp.com
37.	Suliyari	APMDCL	Shri Vekaiiah Chowdary, Vice-Chairman & Managing Director, Andhra Pradesh Mineral Development Corp. Ltd, 294/1D, Tadigadapa to Enikepadu, 100 Ft. Road, Kanur, Vijaywada - 521137	apmdcltd@yahoo.com
38.	Amelia	THDC	Shri D.V. Singh, Chairman-cum Managing Director, THDC India Ltd, Plot No-20, Sector-14, Kaushambi, Ghaziabad (U.P) - 201010	vijaythdc@rediffmail.com
39.	Baranj I, Baranj II, Baranj III, Baranj IV, Manora Deep & Kiloni	Karnataka Power Corporation Ltd	Shri V. Ponnuraj, Managing Director, Karnataka Power Corporation Ltd, Shakti Bhawan, 82, Race Course Road, Bengaluru - 560001	se-mines@karnatakapower.com

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40.	Belgaon	Sunflag Iron and Steel Company Limited	Shri Pranav Bhardwaj, Managing Director, Sunflag Iron & Steel Company Ltd, 33, Mount Road, Sardar, Nagpur - 440001	skgupta@sunflagsteel.com
41.	Marki Mangli III	B.S. Ispat Limited	The Managing Director, B.S. Ispat Limited, 3, L.S.C Pamposh Enclave, Greater Kailash-I, New Delhi - 110048	bp.misra@bsilindia.com
42.	Marki Mangli-I	Topworth Urja and Metals Ltd	The Chairman-cum Managing Director, Topworth Urja & Metals Ltd, 308, 3rd Floor, Ceejay House, Dr. Annie Besant Road, Worli, Mumbai - 400018	anand.azami@topworthgroup.com
43.	Nerad Malegaon	INDRAJIT POWER PRIVATE LIMITED	The Managing Director, Indrajit Power Pvt. Ltd, 4th Floor, Uttam House, 69, P.D. Mello Road, Carnac Bunder, Mumbai - 400009	sandeep.naik@uttamgalva.com
44.	Dulanga	NTPC Ltd	Shri Gurdeep Singh, Chairman-cum Managing Director, NTPC Ltd, NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110001	usnandam@ntpc.co.in / akdash@ntpc.co.in
45.	Mandakini B	NTPC Ltd.		usnandam@ntpc.co.in / akdash@ntpc.co.in
46.	Manoharpur & Manoharpur Dipside	Odisha Coal & Power Limited	Shri Hemant Sharma, Chairman, Odisha Coal & Power Ltd, Zone-A, Ground Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751023	kshirod.brahma@oepi.org.in
47.	Naini	The Singareni Collieries Co Ltd	Shri N. Sridhar, IAS, Chairman-cum Managing Director, The Singareni Collieries Corp. Ltd, Kothagudem Collieries, Bhadradi Kothagudem, Distt-Telangana - 507101	egm_bd@seclmines.com
48.	Utkal-E, Utkal-D	NALCO	Shri Dr. Tapan Kumar Chand, Chairman-cum Managing Director, NALCO, Nalco Bhavan, P/1, Nayapalli, Bhubaneswar, Orissa - 751013	sanjay.patel@nalcoindia.co.in
49.	Talabira-II & III	NLC	Shri Rakesh Kumar, Chairman-cum Managing Director, NLC India Ltd, 1st Floor, No-8, Mayor Sathyamurthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpat, Chennai - 600031	gmtalabira.nlc@gmail.com
50.	Baitarni west	Odisha Mining Corporation	Shri Sanjeev Chopra, IAS, Chairman, Odisha Mining Corporation Ltd, OMC House, Bhubaneswar - 751001	sarangikailash@gmail.com
51.	Rampia & Dip side of Rampia	WCL	The Chairman-cum-Managing Director, Western Coalfields Limited, Coal Estate, Civil Lines, Nagpur, Maharashtra - 440001	
53.	Bijahan	WCL		
53.	Utkal -A	MCI	The Chairman-cum Managing Director, Mahanadi Coalfields Limited, Jagriti Vihar, Burla, Distt. Sambalpur, Odisha - 768020	

54.	Tadicherla-I	Telangana State Power Generation Corporation Limited	Shri Prabhakar Rao, Chairman cum Managing Director, Telangana State Power Generation Corporation Ltd, Kalyan Nagar, Erragadda, Hyderabad, Telangana - 500045	ee.com@tsgenco.co.in
55.	Penagaddppa	The Singareni Collieries Company Limited	Shri N. Sridhar, IAS, Chairman-cum Managing Director, The Singareni Collieries Corp. Ltd, Kothagudem, Distt-Telangana - 507101	cgm_bd@seclmines.com
56.	Ardhagram	OCL Iron and Steel Ltd	Shri B.P. Mishra, Managing Director, OCL Iron & Steel Ltd, Village: Lamloi, P.O. Garvana, Rajgangpur, Orissa - 770017	bp.misra@bsilindia.com
57.	Barjora	WBPDCI	Shri Santramu Basu, IAS, Chairman-cum Managing Director, West Bengal Power Development Corp. Ltd, Bidyut Unnayan Bhaban, Plot No - 3/C, LA Block, Sector-III, Salt Lake City, Kolkata - 700098	ambarroy@wbpdcl.co.in
58.	Barjora (North)	WBPDCI		ambarroy@wbpdcl.co.in
59.	Gangaramchak, Gangaramchak Bhadulia	WBPDCI		ambarroy@wbpdcl.co.in
60.	Kasta East	WBPDCI		ambarroy@wbpdcl.co.in
61.	Khagra Joydev	Damodar Valley Corporation	The Chairman, Damodar Valley Corporation, NBCC Towers, Hall No. 03, Bhikaji Cama Place, New Delhi - 110066	sudhir.mukherjee@dvc.gov.in
62.	Sarisatalli	CESC Limited	Shri Sumit Ghosh, Chief Executive Officer, CESC Ltd, Cesc House, 4th Floor, Chowringhee Square, Near Esplante Metro Station, Kolkata - 700001	jha.shashwat@gmail.com
63.	Tara East & West	WBPDCI	Shri Santramu Basu, IAS, Chairman-cum Managing Director, West Bengal Power Development Corp. Ltd, Bidyut Unnayan Bhaban, Plot No - 3/C, LA Block, Sector-III, Salt Lake City, Kolkata - 700098	ambarroy@wbpdcl.co.in
64.	Trans Damodar	THE DURGAPUR PROJECTS LIMITED	Shri Ashis Saha, Managing Director, The Durgapur Project Ltd, Dr B C Roy Avenue, Durgapur, West Bengal - 713201	ambarroy@wbpdcl.co.in
65.	Gourangdih ABC	West Bengal Mineral Development Corporation Limited	Shri Amlan Basu, Chairman, West Bengal Mineral Development & Trading Co. Ltd, 3, Nellie Sengupta Sarani, (Lindsay Street), 2nd Floor, Kolkata - 700087	
66.	East of Damoria	BCCL	The Chairman-cum Managing Director, Bharat Coking Coal Limited, Koyla Bhawan, Koyla Nagar, Dhanbad, Jharkhand - 826005	
67.	Sarshatalli	CESC Ltd	CESC House, Chowringhee Square, Kolkata, West Bengal	cesclimited@rp-sg.in
68.	Pakri-Barwadih	NTPC	Room No. 119, 1st Floor, R & D Building NTPC EOC, Sector-24, Noida, Uttar Pradesh-201301	ntpccc@ntpc.co.in

69.	Moher, Moher-Amlohri Extn.	Sasan Ultra Mega Power Project (Sasan UMPP)	Sasan Ultra Mega Power Project (Sasan UMPP)	Muddu.Shriniwas@relianceada.com
70.	Gare Palma IV/1	Chairman, CIL (CUSTODIAN)	COAL BHAWAN, PREMISE NO. -04 MAR, PLOT NO. - AF-III, ACTION AREA -1A, NEWTOWN, RAJARHAT, KOLKATA - 700156	gmsnm.cil@coalindia.in
71.	Gare Palma IV/2 & 3			

21 MEMBERS FROM TRADE UNION

1. Dr. B.K. Rai, All India Vice President, BMS, Purana Bazar Pathakhera, PO: Pathakhera, Dist. Betal (M.P.), (Mob): 09425331943(Mail): drbkrai1944@gmail.com
2. Shri Surender Kumar Pandey, All India Secretary, ABKMS, (BMS), Q.No. 1/C-107, PO: Bishrampur Surajpur(Chhatisgarh) (F):07775-264300 (M):09425254623,Mail: surendra_abkms@yahoo.com
3. Shri Manas Kumar Mukherjee, Secretary, AICWF (CITU), B-9/7, Dhankuni, Housing Estate, PO: Dankuni Dist.:Hooghly, W.Bengal Pin:712311, (M): 09836810077 /9433269224 Mail: manas041955@yahoo.com & manas041955@gmail.com
4. Shri V. P. Singh, President, CMOAI, GM (MM), C/O- Office of the GM, Dipka Area, SECL, P.O. Dipka Chhatisgarh- 495452. Mob.: 09425531663. E-mail: vpsingh221059@gmail.com
5. Sri K.N. Singh, President, IMMA, Plot no. B-18, Kushum Vihar, P.O- BCCI. Town Ship, Dist - Dhanbad, Pin - 826005.Mob no. 9431729395, Email : knsingh1941@gmail.com
6. Shri Nathulal Pandey, President HKMF, (HMS), 1864, Wright Town, Jabalpur, MP, Pin - 482001, (Mail) nathulalpandey@gmail.com, (M) 9425155619
7. Shri Ramendra Kumar, President, AITUC, P.O. Bhurkunda Colliery, Dist .Hazaribagh. Jharkhand-829106, ramendra.aituc@rediffmail.com, 9431392715

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Minutes of the 44th Meeting of the Standing Committee on Safety in Coal Mines under the Chairmanship of Hon'ble Minister of Coal held on 12th February 2020

The 44th meeting of the Standing Committee on Safety in Coal Mines was held on 12th February, 2020 in New Delhi under the Chairmanship of Hon'ble Minister of Coal, Mines & Parliamentary Affairs, Shri Pralhad Joshi.

1. The list of participants is enclosed as Annexure.
2. At the outset, floral tribute was paid to those who laid down their lives for the cause of Coal Industry since the last meeting of the Standing Committee on safety in coal mines and one-minute silence was observed in memory of all departed souls.
3. Secretary (Coal) while welcoming to the 44th meeting of Standing Committee, highlighted the importance of safety for sustaining growth in coal sector. He advised all stakeholders such as DGMS, producing coal/lignite companies, trade unions (TUs) to work together for enhancing safety standards of mine and to ensure achievement of zero accident target in the mines. He, further, emphasized on significance of coal in the growth of the nation. Considering 22-23% of total consumed coal which are being imported, there is a need of coal production of country to be enhanced with safety.
4. **Confirmation of the minutes of the 43rd Meeting:** The minutes of the 43rd meeting of the Standing Committee on Safety in Coal Mines held on 21.08.2018 were proposed for confirmation. In this context, Project Adviser, MOC informed that no comments were received from any members. However, Shri Manas Mukherjee, representative CITU informed that his comments in context of Gokul Mine incident was not properly presented and his email to MOC in this regard was not taken into cognizance. He proposed that under point 2(v) of the minutes the last line on women safety was for all coal mines rather than for underground mines, and as such the last statement may be modified as "...for deployment of women in coal mines." The same was adopted and the minutes were confirmed with the above modification.
5. Director (Tech), CIL made a brief power point presentation (PPT) highlighting performance of CIL on production, off take, major milestones achieved by subsidiaries of CIL and accident statistics.
6. Followings points were highlighted by Hon'ble members of the Standing Committee during deliberation:
 - a. **Delay in organizing Standing Committee on safety in coal mines meeting :**
 - i. Representatives of TUs expressed their unhappiness for not organizing meeting of Standing Committee on Safety in Coal Mines since Aug. 2018 and it was desired that meeting should be held twice in a year as per norms.
 - ii. Hon'ble Minister of Coal, Mines & Parliamentary Affairs Shri Pralhad Joshi assured the house that meeting of Standing Committee on Safety in Coal Mines shall be held twice in a calendar year and the next meeting would be held in the month of August/ September, 2020.
 - iii. The Hon'ble Minister also directed that the agenda of the meeting should be circulated well in advance to the Members as desired by them.
 - b. **Maintenance and repairing of company quarters –**
 - i. Dr. B K Rai, Representing BMS pointed out that even after assurance given during last meeting, repairing of company's quarters was not completed.
 - ii. Shri Surender Kumar Pandey, Representing BMS said that identification process for residential quarters for repairing was not correct.
 - iii. Shri Manas Mukherjee, Representing CITU desired that the

roads inside residential colonies, water supply and other amenities should also be improved along with repairing of residential quarters.

- iv. Shri N Gopalkrishnan, Rep. of CMOAI pointed out that delay in repairing of residential quarters was due to non-issuance of work order in time by civil department.
- v. DP, CIL informed the house about the current status of repairing of residential quarters in CIL. He said that requisite work orders for repairing have been issued by the concerned civil department and repairing jobs will be completed at the earliest in all subsidiaries.
- vi. Chairman, CIL said that many civil contracts for repairing of residential quarters get terminated at time of execution due to various reasons.
- vii. Hon'ble Minister desired that CIL should share all requisite information related to the repairing of residential quarters with all TU representatives through email. All repairs as appropriate may be carried out immediately.

Action: Coal companies

c. Status of Mining shoes & gumboots:

- i. Shri Surender Kumar Pandey of BMS said that no gumboots were issued by SECL after 2018. He further pointed out poor quality of "LIBERTY" brand mining shoes supplied by SECL. He desired that DGMS should take note of it as "LIBERTY" had DGMS approval.
- ii. Shri Ramendra Kumar, Representing AITUC, desired that Owner should ensure that mining shoes are provided once in every six months.
- iii. Shri Manas Mukherjee of CITU remarked that that standards for gumboot has not fixed.
- iv. DT, CIL informed that standardization of mining shoes and gumboots has already done by the Committee constituted for this purpose by the Ministry and a report of the same has given in Agenda Notes.
- v. DGMS informed the house that it is the responsibility of owner of mine to ensure that workmen is not allowed in the mine without gumboots.

Action: Coal companies

d) Utilisation of Safety Budget:

- i. Shri Surender Kumar Pandey of BMS pointed out under-utilization of safety budget in all subsidiary of CIL except MCL and desired that procurement process should be expedited.

- ii. Citing fatal accident at Rajmahal OC mine of ECL and Bharatpur Opencast (OC) mine of MCL due to overburden (OB) dump slope failure, Dr. B K Rai of BMS desired that procurement of slope stability radars may be expedited.

Action: Coal companies

e) Strata Control Management:

- i. Shri Surender Kumar Pandey of BMS said that all underground (UG) mines of SECL are using resin capsules for roof bolting purpose but only 28 nos of 30T anchorage testing machines have been provided. He desired that all UG mines, where resin capsules are used, should be given 30T anchorage testing machines. He also pointed out that the recommendations of the 9th National Safety Conference (NSC) are not being complied. He further desired that Area level Strata Control Cell should be strengthened.
- ii. DT, CIL informed that RMR (Rock Mass Rating) based SSR (Systematic Support Rules) have been framed in all UG mines and the mechanized drilling arrangements have provided for drilling for roof bolting purpose. He further informed that emphasis are given on blast free mining.
- iii. CMD, CMPDI said that cement capsules based roof bolting system are predominate in CIL's UG mines, which requires lesser capacity of anchorage testing machines and that type of anchorage testing machines are available in all UG mines.
- iv. Hon'ble Minister suggested exploring the possibility of having at least one 30T anchorage testing machine in all UG mines of CIL.

f) Safety issues related to fly ash dumping in OC mines :

- i. Shri Surender Kumar Pandey of BMS mentioned that one Overman was fatally injured due to a slide of fly ash dump at Gare Palma OC Mine and he desired that dumping of fly ash in all running OC mines should be stopped.
- ii. It was noted that dumping of fly ash in mines is being done as per MOEF&CC directives and a meeting with MOEF&CC with other stakeholders including DGMS was held for detailed discussion on ramifications on mine safety. It was also noted that as per the discussions fly ash dumping has been allowed only in abandoned mines, and dumping should not be done in working mines.
- iii. Dy. DG, DGMS mentioned that abandoned mine can be used for fly ash dumping. Proper benching of fly ash dump should be done and dump slope as per natural angle of repose should be maintained to avoid accident.

g) Medical Infrastructures:

- i. Shri Ramendra Kumar of AITUC pointed out that life-saving ambulance is yet to be provided in all areas of CIL.
- ii. Shri Surender Kumar Pandey of BMS said that outdated 6-lead ECG, 300mA X-ray machines and films for detecting coal worker

pneumoconiosis are still in use in most of PME (Preliminary Medical Examination) Centers of CIL.

- iii. Shri Manas Mukherjee of CITU desired that all medical instruments used in PME centers need to be upgraded at regular intervals keeping in trail of advancement of technology. He further desired that the effect of machine vibration on the operator's body should be assessed.
- iv. Hon'ble Minister advised to deploy at least one advanced life saving ambulance in all mines of CIL and at least one advanced X-Ray machine in all CIL administered hospitals.

h) Medical personnel:

- i. Dr B K Rai said that there are huge shortages of doctors in CIL and selected doctors are not joining mine / area level hospitals.
- ii. Shri Nathulal Pandey, representing HMS, suggested that the requisite power to appoint medical practitioners may be delegated to the concerned subsidiary to speed up appointment process.
- iii. Shri N Gopal krishnan of CMOAI pointed out that the career growth of doctors in CIL are very limited.
- iv. In this context, Chairman, CIL informed that it is a very common problem in all rural health care system in all states of India. Since, mines are located at very remote places, most of the selected doctors are, therefore, not willing to join in CIL's mine or area level hospital.
- v. Secretary (coal) suggested that the last date for joining of selected doctors in CIL hospitals should be indicated and that should be communicated to all selected doctors. It should be explored if better terms and conditions can be given to doctors serving in mine areas.

i) Dust problem in residential colonies of coal mines:

- i. Shri Manas Kumar Mukherjee of CITU desired that movement of trucks through residential colonies should be stopped and separate road / bye-pass road should be constructed for coal transport beyond the periphery of residential colonies.
- ii. DT, CIL informed that in many mines dedicated separate road for coal transport have been constructed. He further informed that CIL has already chalked out plan for first mile connectivity by using conveyors, silos and other infrastructure for coal loading and transport and several steps are in progress in those identified mines.
- iii. Hon'ble Minister desired that coal transport through residential colonies should be avoided, as far as possible and bye-pass road should be constructed on priority. He further stressed on expediting activities marked in First Mile Connectivity Project of CIL.

j) Amendment of Mine Vocational Training Rules (MVTR) – 1966:

- i. Shri Surendra Kumar Pandey of BMS desired that DGMS should expedite the amendment of the Mine Vocational Training Rules (MVTR) – 1966 so that proper training could be imparted to all employees.
- ii. DGMS informed the house that draft of new amended MVTR has been finalized by Section-12 Committee of the Mines Act- 1952 and would be notified in due course of time after essential scrutiny by MOL&E.

k) Amendment of Mine Rescue Rules (MRR) - 1985:

- i. Shri Surendra Kumar Pandey of BMS pointed out that there are inadequacies in existing MRR-1985, and desired DGMS should take initiative to amend the existing MRR-1985 for dealing with emergency keeping in view of development in mines.
- ii. DGMS informed the house that draft amendment of MRR has framed and under consideration of Section-12 Committee of the Mines Act-1952. He further informed that the amendment of the Mines Act is under consideration and a draft has been framed in this context.

l) Participation of private coal mining companies in standing Committee meeting:

- i. Representatives of TUs expressed their strong dissatisfaction over private coal companies' attitude towards the Standing Committee on safety in coal mines. They pointed out that there are about 71 private owned coal mines of 26 companies, which are operating today but only handful of them are actually participated in the meeting. Most of these companies have failed to provide information needed for preparation of Agenda Notes of the meeting.
- ii. It was noted that the sub-committee constituted for the purpose had inspected SASAN coal mine in Singrauli District in Jan. 2019.

m) Status of statutory persons:

- i. Shri Ramendra Kumar of AITUC raised the issue of shortages of statutory manpower. He further said that the root cause of shortages in statutory manpower is due to the post of blocked for non-availability of suitable SC/ST candidates even though many eligible candidates are available. He suggested such posts may be de-notified and all eligible persons may be allowed to fill up the vacancies. He further said that requirement of statutory manpower in each mine should be assessed by DGMS.
- ii. Dr B K Rai of BMS desired that DGMS should conduct statutory competency examination regularly.
- iii. Shri Manas Kumar Mukherjee of CITU desired that Mine Surveyor should be used for designated statutory jobs only.
- iv. Citing several court cases, Shri N Gopalkrishnan of CMOAI desired that HR function of CIL should be improved. He further suggested that current "Promotion Policy" of CIL may be re-looked keeping view of wide resentment among E-6 level mining executives. DP, CIL mentioned that the same will be discussed separately in CIL.
- v. DGMS explained the house about current system of conducting competency examination through on-line method. He said that examination for Mining Sirdar shall be held after Sept. 2020.

n) Ratification of recommendations of ILO- 176:

- i. Shri Ramendra Kumar, Shri Surendra Kumar Pandey and Shri Manas Mukherjee desired that the Govt. of India should ratify the recommendations of ILO-176 for ensuring protection of workers' occupational health and safety, which was pending for a long time. They stated that already 91 countries have ratified the same.

- ii. Joint Secretary, MOL&E, informed that existing statutes are to be compared with provisions of ILO-176 before taking a call on the issue. Secretary (Coal) assured to take up the issue with Secretary, MoL&E..
- iii. Hon'ble Minister advised the Secretary (Coal) to prioritise this issue.

o) Bio-metric attendance:

- Dr B K Rai of BMS mentioned that as per Govt. of India directives bio-metric attendance is mandatory, but compulsory bio-metric attendance for contractual employees are yet to be made.
- DP, CIL informed the house that barring two areas; attendance of all departmental employees in CIL are made through bio-metric system.

p) Securities of employees working in coalfields

- i. Citing recent murder of employee during night shift in SECL, Dr B K Rai of BMS desired appropriate steps in consultation with concerned State Government must be taken for ensuring security of employees. He desired MOC to take up matter with Chief Secretary of Madhya Pradesh to enhance security of employees residing in the coalfields.
- ii. Shri Ramendra Kumar of AITUC also mentioned about lawlessness in coalfields of CCL and desired security of employees should be ensured.
- iii. Shri Surendra Kumar Pandey of BMS desired that private security guard may be engaged in place of "NAGAR SAINIK" in coal mines of Chhattisgarh under SECL and he expressed his unhappiness over role of CISF in the context of ensuring security of employees in SECL.

7. Meeting ended with the vote of thanks to the Chair.



Annexure - 2
एन टी पी सी लिमिटेड
(एन टी पी सी लिमिटेड)
NTPC Limited
(A Govt. of India Enterprise)

Date:- 26.10.2020

OFFICE MEMORANDUM

Sub: Record Notes of Discussions of 7th meeting of Task Force held on 09.10.2020 through VC on Microsoft Teams Platform – reg

Kindly refer to the meeting held through VC, chaired by ED (SSEA), NTPC Ltd. to review status of Mine Void allocation for backfilling with Ash.

In this regard, record notes of discussion are enclosed for information and necessary action.

Sahoo
(Laxmidhar Sahoo)
General Manager,
Ash Management, NTPC Ltd.
Mob-7328816804

Distribution:

- As per list at Annexure – I

Record Notes of Discussions of 7th meeting of Task Force held on 9.10.2020 through VC on Microsoft Teams Platform

7th meeting of the Task Force (constituted by Ministry of Power to identify, review and recommend the list of Mines for ash back filling) was organized on 9th October, 2020 through VC on Microsoft Teams platform. List of participants is attached as **Annexure- I**.

At the outset, ED (SSEA), NTPC Limited, Convener of the Task Force, welcomed all the members. He briefed about the draft Gazette Notification issued by MoEF & CC and its impact on TPPs and Mining Organizations. Thereafter, discussions were held on actionable points of the last (6th) meeting and allocation of new mine voids. Following are the major points of discussions / recommendations of the Task Force, which emerged during this meeting:-

1. **Identification of more mines for allocation:** List of 21 mines was shared in the last meeting by CIL with a comment that it will be reviewed quarterly. CIL informed the list of mines for ash filling has been reviewed by CIL and that there is no addition in the list of 21 mines shared earlier.

2. NTPC and DVC expressed apprehension that these 21 mine voids are grossly insufficient in view of the tough Ash Utilization targets, specifically for Pithead TPPs. List needs to be reviewed and more mines need to be added. Convener of Task Force requested that CIL may revisit / review the first list of mines wherein 285 mines were identified for ash filling and that some more mines may be added. CIL agreed to revisit / review the first list of 285 mines and share the updates on the same in a period of one month. He also shared that with new technology, some underground mines are proposed to be converted into Open Cast mines and that stripping ratio too has increased resulting in issue of handling OB. In view of above two factors, a substantial increase in list of Mine voids will not be there. MOEF & CC member informed that they have received a letter dated 08.10.2020 from M/s DB Power to instruct SECL to allocate Chhal Mines of SECL for back filling of ash in mines. CIL member replied that Chhal Mine is planned for expansion and cannot be allocated for ash filling. Suitable reply may please sent to M/s DB Power in this regard by CIL. (Action: CIL)
3. NTPC shared that as per Gazette Notification dated 03.11.2009, issued by MoEF & CC, at least 25% ash is to be used with OB for dumping / mine back filling. It will help in achieving tough target of 100% Ash Utilization by Pit Head TPPs. NTPC vide letter dated 05.08.2020 had requested NCL / ECL / MCL / SECL / WCL / SCCL for use of ash in backfilling with OB. On this issue, CMPDIL informed that they have already highlighted the environmental and safety issues (stability of dumps, air & water pollution etc.) associated in back filling of ash with OB dumps. CIL also added that coal companies are also facing scarcity of land for OB dump. CIL also informed that mixing of ash with OB is having many issues including operational and safety issues and this clause of Gazette Notification needs to be reviewed. In view of all these concerns, in the present scenario, fly ash dumping can only be allowed in abandoned mines. It was informed that the matter will be deliberated in MoEF & CC upon receipt of comments/inputs from MOC/CIL as part of the inter-ministerial consultations. (Action: MOC / MOEF & CC)
4. On non-availability of more abandoned coal mine for ash filling as well as constraints of ash filling in operational mines as shared by CIL / CMPDIL, convener of Task Force pointed out that both these aspects limits the utilization of fly ash in mines. For ensuring 100 % utilization of fly ash by power industry, he stressed upon identification and

5. CPCB shared that as far as safety aspects are concerned during ash filling with OB in operating mines, DGMS may examine mine safety on case-to-case basis. It was added that if M/s Jindal can use ash with OB for back filling, why other companies can not? It was further added that apart from considering economic viability by coal companies, compliance of ash utilization norms in view of national interest should also be given due importance. On this issue, CIL shared that M/s Jindal's mines are new & small in size, whereas safety and operational issues becomes many fold in big mines. In addition, slope failure may have huge impact where stripping ratio is high. In view of this, in operational mines, ash filling with OB dumps is not possible.
- (Action: DGMS)
6. NTPC shared that the draft Gazette Notification on fly ash utilization issued by MoEF & CC and its penalty provisions may put the power plants and mining companies in a big problem. It will be critical especially for pithead stations where there are no users / takers of fly ash and mining companies are unable to allocate mine for ash filling because of their technical / commercial constraints. In such conditions, how the power plants will achieve 100% ash utilization. Members from CIL, CMPDIL and Ministry of Coal opined that draft Gazette Notification on fly ash utilization should not be finalized by MoEF & CC unilaterally. A committee may be constituted for finalization of Gazette Notification with technically supported decision on all provisions. MoEF & CC shared that inter-ministerial consultations will be held for finalization of draft notification after receipt of comments from concerned Ministries/Organizations.
- (Action : MoEF & CC)
7. CIL shared that putting conditions of use of ash in mines is affecting viability of coal companies, especially for big mines. It was added that nearly Rs. 100 Crore has been deposited by CIL / its subsidiaries to State PCBs in the form of BGs towards CTE / CTO on use of ash in mine filling conditions. On this issue, MoEF & CC shared that Ministry may consider the issue on receipt of representation from CIL regarding constraints on obtaining CTE/CTO
- (Action: MoEF&CC)
8. Ministry of Mines (MoM) had earlier submitted a list of 84 abandoned mines of minerals other than coal. In the last meeting of the Task Force, it was agreed that Ministry of Mines will review the list of mines, other than Coal mines and come out with revised list along with mine location / co-ordinates, void capacity and feasibility of ash filling these mines. Now, it has been shared that all the 84 mines are shallow mines and ownership of these mines is with respective State Govt. Status about co-ordinates, void capacity and feasibility of ash filling etc. is not known to Ministry of Mines. However, Ministry of Mines can arrange more details about mines which may be useful for TPPs for ash filling among earlier circulated list.
- (Action- MOM)
9. DVC shared that its BTPS plant has been allocated Govindpur mine by CCL which has only 85000 Cu.m capacity. Being an UG mine & such a small volume, it is very difficult to be filled up. It was further stated that its CTPS plant has been allocated Murlidih mine by BCCL which has capacity of 1.5 lakh Cum, however, major constraint with this is that water body (River Damodar) is within 500 meter. On this CIL commented that most of the mines are in proximity of water bodies. It was thus requested by DVC that this condition of proximity of water body may be redefined by MoEF & CC. It was then shared that its DSTPS and MTPS also have been allocated only small capacity mine voids and that alternate mines available near these plants has been identified by DVC. CIL / its subsidiaries may allocate the identified alternate mines to DVC. On this point, CIL shared that available mine have already been allocated and that the alternate mines suggested by DVC are not available for ash filling. DVC/CIL was asked to share a map showing mine

boundary and river to understand the issue and arrive at possible solution.

(Action- CIL / MOEF)

The Meeting ended with vote of thanks by Convener of Task Force to all participants.

Annexure- I

List of Task Force members and others present during the meeting:-

Sl. No.	Name (S/Sh.)	Designation	Organization
1.	S M Chowdhury	ED (SSEA)	NTPC - Convener
2.	Ajitesh Kumar	Dy. Secretary	MoC
3.	A K Diwakar	Chief Manager	MoC/ CIL
4.	Md. Aftab Ahmad	Director (M)	DGMS
5.	N. Subramanyam	Joint. Director	MoEF&CC
6.	S K Paliwal	Addl. Director	CPCB
7.	Pushpender Gaur	Dy. Controller of Mines	Indian Bureau of Mines, MoM
8.	Shankar	GM (Env.)	CIL
9.	Baleshwar Thakur	Director	CEA (TCD)
10.	Ashish Srivastawa,	Dy. Director	CEA (TCD)
11.	Dr. C N Ghosh	Chief Scientist	CIMFR
12.	V K Pandey	Chief Manager (Env)	CMPDIL
13.	Dr. Vinita Arora	Chief Manager (Env)	CMPDIL
14.	Md. Eyasin	CE (EM&PC)	DVC
15.	B B Chugh	GM	NTPC
16.	L. D. Sahoo	GM	NTPC
17.	S. K. Pathak	AGM	NTPC
18.	Ashwani Tyagi	DGM	NTPC
19.	Subhash C Kalia	Sr. Manager	NTPC

No.SDC/13/2020-CPIAM
Government of India
Ministry of Coal
(SDC Section)

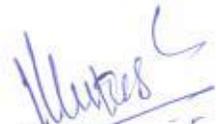
Shastri Bhavan, New Delhi
Date 17th November, 2020

Office Memorandum

Subject:	Minutes of JS level Meeting held on 10.11.2020 to discuss the EC/FC proposals and various cross cutting issues
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I am directed to refer to the discussions held during the above said meeting held virtually on 10.11.2020 and to forward the minutes of meeting enclosed at Annexure-I for kind information.

Encl: As above


(Mukesh)

Under Secretary to the Govt. of India.
Email : mukesh.61@nic.in

To

Mrs. Geeta Menon
Joint Secretary,
Ministry of Environment, Forest and Climate Change,
Jor Bagh, New Delhi.

Minutes of the JS level meeting of MoC and MoEF&CC held on 10.11.2020 to review the EC proposals of CIL and cross cutting issues relating to Environmental Clearances

1. Meeting was held virtually. List of Officers present is at Annexure – A.
2. At the outset, background of the meeting was briefly explained by JS (BPP). It was informed that as per the directions of Hon'ble Minister of Coal, a SOP was got approved for streamlining the approval of EC/FC proposals and one of the activities of SOP was to conduct regular meeting of the officers of MOEF&CC and MoC with an aim to ensure timely processing of EC/FC proposals and also to take decisions on policy issues, if any.
3. It was decided to review the active EC proposals first to be followed by discussion on cross cutting issues relating to EC and other connected matters.

4. Pending EC Proposals

4.1 Request for Issuance of formal EC Order

Sl.	Project	Comp.	Last EAC Meeting	Outcome of discussion
1	Cluster-VIII	BCCL	28.9.2020	File is in the office of Hon'ble Minister for approval.
2	Hingula OC (Amendment EC)	MCL	15.11.2019	MoEF&CC informed that proposal is not being considered as a violation. However, proposal is to be resubmitted by Project proponent for consideration.
3	Bina OC	NCL	13.12.2018	Clarification has been sought from DFO, Singrauli on 02.11.2020 regarding forest land broken before 1980. NCL to follow up.
4	Pauni-II OC	WCL	28.9.2020	File is in the office of Hon'ble Minister for approval.
5	Umrer OC	WCL	28.9.2020	WCL is to submit revised Mining Plan for further necessary action. A letter will be issued by MoEF&CC.
6	Nandira UG	MCL	28.9.2020	Approved by Hon'ble Minister. Formal letter will be issued shortly.
7	Tapin South	CCL	28.9.2020	File is in the office of Hon'ble Minister for approval.

4.2 Request for Issuance of TOR

Sl.	Project	Comp.	EAC meet	Outcome of discussion
1	Bhurkunda Colliery	CCL	30.8.2019	MoEF&CC will shortly be issuing a clarification with regard to issuance of TOR in such violation cases. Operation of mine at 1993-94 production level will be allowed with a condition that PP shall apply for fresh EC with EIA/EMP within a stipulated timeline.
2	Kabribad OC	CCL	22.4.2020	
3	Giridih OC	CCL	22.4.2020	
4	Block B OC	NCL	28.9.2020	Standard ToR granted. Specific ToR under finalization. Meanwhile, PP may proceed with the conditions stipulated in Std.ToR

4.3 Request for consideration of EC proposal in Next EAC Meeting

Sl.	Project	Comp.	Date of Upload	Outcome of discussion
1	Cluster 10 Amendment	ECL	30.10.2020	Proposal will be considered in forthcoming EAC meeting

4.4 Request for transfer of following EC proposals for consideration of EAC (Violation)

Sl.	Project	Comp.	Date of upload/EAC	Outcome of discussion
1	Pundi OC	CCL	14.4.2018	Proposal will be considered in coming EAC meetings
2	Sirka OC	CCL	24.01.2020 (EAC)	
3	Kathara OC	CCL	29.5.2020 (EAC)	Discussed in EAC meeting of October 2020.
4	Tikak OC	NEC	03.10.2029 (EAC)	Proposal will be considered in Sectoral EAC meeting
5	Tirap OC	NEC	29.5.2020 (EAC)	Additional information sought by MoEF&CC.

5. Cross cutting issues

5.1 Re- opening of online portal for re-validation of left out ECs (EIA 1994) under Environmental Impact Assessment (EIA) Notification 2006

It was advised that such left out projects may apply for fresh EC under violation category.

5.2 Public Notice instead of Public Consultation (PC) in Revalidation Proposals

MoEF&CC informed that EAC had recommended for Public Notice in some cases and Public consultation (including Public Hearing) in other after due deliberations. Hence, Public consultation (including Public Hearing) should be conducted wherever it has been recommended by EAC.

CIL submitted that SPCBs not issuing public notice even in the cases where EAC has recommended for the same. CIL was advised to forward a note regarding this to MoEF&CC so that a direction may be issued to SPCBs for issuance of public notice in such cases.

5.3 Mechanism for dealing old Violation cases

The issue is under consideration at MoEF&CC and a mechanism for dealing such cases will be introduced shortly.

5.4 Issuance of Consent to Operate (CTO) in Violation Cases

The issue is under consideration at MoEF&CC and a clarification in this regard is likely to be issued shortly. Operation of mine at 1993-94 production level will be allowed with a condition that PP shall apply for fresh EC with new EIA/EMP within a stipulated timeline.

5.5 Exemption from Consent to Establish (CTE)

Matter is subjudice as the same is under consideration at Hon'ble High Court of Delhi. Hence, no action can be taken as of now.

5.6 Exempting operational mines from provision of fly ash notification 2009/2020

MoEF&CC informed that it is in receipt of representation/comments of CIL/Ministry of Coal in this regard on Draft Fly Ash Notification 2020. These representation are under consideration and an appropriate decision will be taken on the issue shortly.

5.7 Modification in notification dated 21.5.2020 – doing away with use of 34 % ash coal in TPPs beyond 500 KM

MoEF&CC submitted that it will consider the proposed changes in the notification. In this regard, CIL was directed to forward a note to MoEF&CC on:

- Middlings - Generation of Middlings, its GCV, manner of its use etc.
- Environment friendly manner for disposal of rejects

Meeting ended with thanks to the Chair.

Annexure – A

Sl. No.	Name	Office
From MoEF&CC		
1.	Mrs. Geeta Menon	Joint Secretary
2.	Shri Lalit Bokolia	Scientist F
3.	Shri Sharath K Pallerla	Scientist F
4.	Shri Munna K Shah	Scientist D
From Ministry of Coal		
1.	Shri BP Pati	Joint Secretary
2.	Shri Ajitesh Kumar	Dy. Secretary
3.	Shri AK Diwakar	Ch. Manager
From Coal India Limited		
1.	Shri Shankar C Subramanian	GM (Environment)

No. SDC/13/2020-CPIAM/ SDC
Government of India
Ministry of Coal
(SDC Section)

Shastri Bhavan, New Delhi
Date: 14th January, 2021

To
The CMD
Coal India Limited,
Kolkata, West Bengal.

Subject:	Studying the safety and other issues involved with the utilization of fly ash in Operational mines
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Sir,

Kind attention is invited to the minutes of high level meeting of MoC and MoEF&CC held on 16.12.2020 (copy enclosed), wherein matter pertaining to exemption of operational mines from the fly ash notification 2009 (flagged by CIL for consideration) was deliberated and it was suggested (Para-5.4 of the minutes) to carry out a scientific study on the subject to arrive at an informed decision.

In view of the above, it is requested that the subject matter may be got studied technically through a team of suitable experts including DGMS and a study report covering all aspects relating to use of fly ash in operational OC and Underground mines along with appropriate recommendations may be submitted in 3 Months' time at mukesh.61@nic.in

Encl: As above


(Mukesh)

Under Secretary to Government of India

Copy: CMD, CMPDI

**Submitted for Kind Information to
Chairman CIL.**

**Further, Action wrt Study of Fly Ash
is imperative. GM Environment
CIL may please take needful action.**

257339/2021/O/o US(LA&IR/CBA-I/SDC)

No. SDC/13/2020-CPIAM/ SDC
Government of India
Ministry of Coal
(SDC Section)

Shastri Bhawan, New Delhi
Date: 8th January, 2021

Office Memorandum

Subject: Minutes of the High level meeting of MoC and MoEF&CC held on 16.12.2020 to discuss the cross cutting issues relating to EC, FC and other matters. – reg

I am directed to forward herewith the Minutes of the High level meeting of MoC and MoEF&CC held on 16.12.2020 on the subject matter as per Annexure for kind information.

Encl. As above.



(Mukesh)

Under Secretary to the Govt. of India.
mukesh.61@nic.in

To,

Secretary,
Ministry of Environment, Forest and Climate Change,
Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi-110 003.

Minutes of the High level meeting of MoC and MoEF&CC held on 16.12.2020 to discuss the cross cutting issues relating to EC, FC and other matters

1. Meeting was held virtually. List of Officers present is at Annexure – A.
2. Agenda/issues to be covered are placed at Annexure-B.
3. At the outset, Additional Secretary (Coal) welcomed the participants and thanked MoEF&CC for its recent initiatives toward simplification of various processes such as streamlining the approval procedures for exploration in forest land, May-2020 notification allowing use of coal in TPPs without stipulation of ash % or distance, establishing Online process of EC/FC Clearances, etc. Thereafter he talked about background of the meeting and said that the issues for discussions are basically requests for some small reforms towards establishing ease of doing business in coal sector.
4. Thereafter EC related issues were taken up followed by FC issues. A Power point Presentation covering the various cross cutting issues was shared (Copy placed at Annexure-C). The record of discussion on deliberations is as under:
5. Issues relating to EC, Fly ash notification and May 2020 Notification on coal washing:

5.1 Public Notice instead of Public Consultation (PC) in all 50 Revalidation Proposals

MoEF&CC informed that out of 28 cases of CIL, where Public Notice had been recommended by EAC, only 6 cases have been processed so far after lapse of almost 2 years. PPs need to expedite the compliance of observation of EAC/ToR. It was also submitted that Public Consultation (including Public Hearing) was recommended in 22 proposals by the EAC after due deliberations. Hence, Public consultation (including Public Hearing) should be conducted wherever it has been recommended by EAC.

As regards delay in compliance of EAC recommendations and deadlines given by EAC, it was decided that PP should comply the EAC's recommendations made in 50 revalidation cases during next 6 months' time.

5.2 Violation cases

(a) Lateral transfer of violation cases

While appraising EC/EC re-validation proposals of some of the old mines, EAC has pointed few cases of violation (coal production exceeding marginally/production beyond life) and referred back the proposal to MoEF&CC for appropriate action. Applying these proposals afresh for consideration by EAC (Violation) will result in delay. MoC suggested that such cases may be considered for lateral transfer to EAC (Violation).

It was informed by MoEF&CC that violation cases detected during appraisal will be dealt by Sectoral EAC itself and accordingly project proponents may apply highlighting the observation of EAC earlier in its cover letter.

(b) Deletion of Para-8 (1) of Violation ToR

Para-8(1) of ToR issued in violation cases mentioned that 'no CTO to be issued till the grant of EC', which resulted in confusion and delay in issue of CTO by JSPCB. Later on a

clarification had to be issued to JSPCB for issuance of CTO at existing approved EC capacity/1993-94 production level. MoC suggested that Para-8(1) needs to be deleted from the ToR (violation).

MoEF&CC informed that Para-8 (1) as above is being deliberated by Ministry for requisite clarity.

(c) General direction to SPCBs for issuing CTO in violation cases

In violation cases pertaining to CCL, Ranchi, JSPCB was issued a clarification (26.04.2019) by MoEF&CC to issue the CTO on existing EC capacities duly approved by Regulatory authority/ 1993-94 level production if mines are granted Term of Reference (ToR) by EAC (Violation). As the above clarification was issued to JSPCB, other SPCBs are not issuing CTOs in similar cases. A general direction to all SPCBs may be issued.

MoEF&CC intimated that matter regarding issuance of CTO at approved EC capacity/CTO production level is under consideration and appropriate guidelines/instructions will be issued shortly.

(d) Issuance of ToR for Expansion Projects of SCCL encompassing violation mines in the cluster proposed for EC

Mines of SCCL (18 Nos.) is under consideration at MoEF&CC for obtaining EC under EAC (Violation). In order to achieve 100 MT production by FY 2024, SCCL has prepared few PRs for Expansion Projects (clusters) including some violation mines (out of 18). ToR for these expansion projects is not being issued pending clearance of violation cases of constituent mines. Early issue of ToR for these projects will facilitate timely preparation of EIA/EMP for these expansion projects.

The issue will be examined by MoEF&CC for appropriate decision.

5.3 No need of Consent to Establish (CTE) once EC granted by MoEF

MoC explained that at present, all mines have to obtain CTE from SPCB even though the EC obtained from MoEF&CC carries all terms and conditions prescribed in CTE. Thus, obtaining CTE does not serve any purpose and remains as mere duplication of job. Even, CPCB advisory of 02.02.2017 also supports the above view point.

It was agreed that idea was conceptually good. However, doing away with the requirement of CTE will involve amendments in the governing Acts. Further, it was also informed that the matter is sub-judice as the advisory issued by CPCB has been challenged before Hon'ble High Court of Delhi. However, MoEF&CC will work on the suggestion.

5.4 Exempting operational mines from provision of fly ash notification 2009/2020

MoC explained that it understands the importance of fly ash disposal and has been holding regular meetings with coal companies for identification of suitable sites for fly ash disposal. 21 abandoned mines have been identified for fly ash disposal and list forwarded to Ministry of Power. Fly ash dumping is in process in some mines and for other mines

formalities are underway to start fly ash disposal in line with MoEF&CC/CPCB guidelines. List of abandoned mines is being reviewed at regular intervals for further addition of mines. Also, bottom ash is being used as stowing material in few UG Mines of SECL & SCCL and scope for using bottom ash in other UG stowing mines is being explored.

Further, MoC informed that transportation & mixing of fly ash with OB in progressive mine closure in the running OC mines is not conducive on account of slope stability issues & safety considerations. Mixing fly ash with OBR will not only bring down the operational efficiency of mines, but also require additional land for keeping OBR causing significant impact to the overall economics of mine. These limitations have been submitted to MoEF by MoC/CIL/CMPDI in various communications/reports made in past and also highlighted on several occasions at various fora involving MoEF&CC, NITI Aayog, Task Force of MoP, etc.

MoEF&CC suggested that the safety and other issues involved with the utilization of fly ash in Operational mines, as brought out, should be scientifically studied and study report shared with it to arrive at an informed decision.

5.5 Modification in notification dated 21.5.2020 regarding coal washing

MoC informed that Middling is a good quality by-product (high GCV) of coking coal washeries and efficiently used in conventional TPPs. It seems word 'Middling' has got inadvertently inserted in the notification.

Further, all rejects may not be suitable for use in FBC boilers. Low GCV rejects may have to be dumped in mine voids with environmental safeguards. Hence, Para-2 (1) (ii) may be suitably modified.

The proposed modification will be examined by MoEF&CC.

5.6 Quality of EIA/EMP reports

MoC informed that CIL has developed an online portal for peer and expert review of EIA/EMP reports for improvement in the quality of report and rectification of incomplete/inconsistent information in the report. MoC has directed CIL to assign at least 20 % of its work to agencies other than CMPDI.

5.7 Non-compliance of EC conditions

MoC shared that CIL has started the system of 3rd party audit of EC compliances and has got 20 mines audited from ICFRE. Further, 35 mines are going to be audited shortly in the next phase.

In addition, SDC Cell has been created in MoC to interalia monitor the EC compliances through online MDMS Portal. Coal companies have also established committees at Area & HQ level to monitor the compliance of EC conditions. With these arrangements in place, status of EC compliance will certainly improve. Star rating of mines has also been initiated in which environmental safe guard is one of the parameters.

MoEF&CC suggested for designating one senior level officer at corporate level in each subsidiary responsible for completeness of data in EIA/EMP and for compliance of EC condition in mines. MoC will issue necessary directions to SCCL, NLCIL, CIL and subsidiaries.

5.8 Incomplete submission/compliance on observation of EAC

MoC will examine the matter and issue suitable directions to coal companies.

6. FC Related Issues:

6.1 Issue of working in Non- forest area of an expansion Project if Stage-I is available

This issue has recently been discussed in the FAC Meeting and suitable directions will be issued shortly by MoEF&CC.

6.2 Delegation of power for grant of FC for linear coal projects (Road, Belt, etc.) involving less than 40 Ha land to regional offices for early implementation of projects

Delinking FMC projects from connected mine will facilitate early implementation of these projects due to faster clearances. Hence, it was suggested by MoC that FMC projects be treated as stand-alone linear project by MoEF&CC and dealt separately from mining project.

MoEF&CC will examine the matter and issue suitable directions in this regard.

6.3 Tree enumeration through remote sensing

It was informed by MoEF&CC that studies have been taken up on the subject by use of LiDAR and Drone technology inviting IITs. The outcomes are awaited. The results would be validated to take a decision for adoption of the technology. It was also informed that there is a guideline of 2003 which prescribes tree enumeration on sampling basis in cases where forest area is in excess of 10 Ha. MoEF&CC was requested for sharing the said guideline for circulation to coal companies.

6.4 Matters pertaining to FRA and Gram Sabha

MoEF&CC suggested that these issues are governed by MoTA. It was decided to hold a joint consultation of MoC, MoEF&CC and MoTA for discussion on the issue. MoC will prepare agenda and suggestions in detail and share the same in advance.

6.5 CA in double degraded land for States reporting non-availability of non-forestland

MoEF&CC informed that it has issued a directive allowing use of degraded forestland which is not in control of State Forest Department in States (not covered in the working plan/are of revenue nature) for CA purpose. It was also informed that Jharkhand has substantial quantum of such land.

MoEF&CC was requested to share the copy of aforesaid guidelines/directives for wider circulation amongst coal companies.

6.6 CPSU Status of SCCL for CA Purpose

MoC averred that for all intent and purposes it treats SCCL as CPSU. Annual targets & linkages are decided by MoC. SCCL adopts coal pricing of CIL and procurement of land is also facilitated by MoC under CBA Act. Hence, continuation of CPSU status for CA purpose will facilitate faster clearances and SCCL will be able to open new mines for reaching 100 MT production target.

MoEF&CC requested MoC to submit the aforesaid justification for further consideration.

6.7 Directive of Hon'ble Supreme Court – Grassing of reclaimed areas

MoEF&CC brought out that coal companies need to abide by the directive issued by Apex Court and followed up by MoEF&CC guidelines dated 14.01.2020 for grassing of technically reclaimed areas under progressive/final mine closure activities and submit a compliance report every 6 months. MoC assured to issue directives to coal companies.

6.8 Return of Diverted forest land after final closure and reclamation

MoEF&CC intimated that due to provisions of CBA Act, diverted forest land is not being returned to Forest department even after final closure and reclamation. MoC informed that these may continue to be accepted for CA purposes.

Meeting ended with thanks to the Chair.

Annexure – A

Sl. No.	Name	Office
From MoEF&CC (EC Division)		
1.	Shri Ravi S Prasad	Additional Secretary
2.	Mrs. Geeta Menon	Joint Secretary
3.	Shri Lalit Bokolia	Scientist F
4.	Shri Sharath K Pallerla	Scientist F
5.	Shri Munna K Shah	Scientist D
6.	Shri N Subrahmanyam	Scientist D
From MoEF&CC (Forest Division)		
1.	Shri Sisir Kumar Ratho	ADG (Forest)
2.	Shri Sandeep Sharma	AIG (Forest)
From Ministry of Coal		
1.	Shri Vinod Kumar Tiwari	Additional Secretary
2.	Shri Ajitesh Kumar	Dy. Secretary
3.	Shri AK Diwakar	Ch. Manager

From: Shri Pramod Agrawal
Sent: 14 January 2021 15:39
To: Binay Dayal; Shekhar Saran
Cc: M K Singh; C S SINGH; Shankar C Subramanian; Shankar C Subramanian; Sanjay Dubey
Subject: Fwd: Studying the safety and other issues involved with the utilization of fly ash in Operational mines

For perusal.

-
From: "Mukesh" <mukesh.61@nic.in>
To: "Shri Pramod Agrawal" <chairman.cil@coalindia.in>, "Shekhar Saran" <cmd.cmpdi.cil@coalindia.in>
Cc: "Ajitesh Kumar" <ajiteshkumar@nic.in>, "ATISH KUMAR DIWAKAR" <ak.diwakar@coalindia.in>, "Hitesh Pareek" <hitesh.pareek@gov.in>
Sent: Thursday, January 14, 2021 3:13:41 PM
Subject: Studying the safety and other issues involved with the utilization of fly ash in Operational mines

Subject: Studying the safety and other issues involved with the utilization of fly ash in Operational mines.

Please find attached herewith OM Dated 14/1/2021 for information and appropriate action.

Regards,
US(SDC)
Ministry of Coal.

-

Second Quarterly report of the Oversight Committee for State of MP in compliance with order dated 14-07-2020 in OA
164 /2018

ENCLOSURE 7

Amelia (North) Coal Mine A Unit of Jaiprakash Power Ventures Limited	
Sr. No.	Points Reply
1	<p>Road sweeping machines in sufficient numbers shall be procured and regular sweeping of the coal transport roads shall be undertaken to keep them dust free.</p> <p>1. 09 nos. of mobile sprinklers are continuously spraying water for controlling the fugitive emissions at mine and at CHP area. 2. Static Sprinklers have been installed for 2600 meters length for dust suppression.</p> <p>Has been complied with and no coal transportation by road is being done outside the mine premises.</p>
2	<p>Paving of the road side shoulders along the coal transport roads shall be undertaken within 3 months under the guidance and supervision of the district administration.</p>
3	<p>Maintenance of railway sidings operated by NCL shall be undertaken as per the guidelines published by CPCB titled "Inventorization of Railway Sidings and Guidelines for their Environment Management- March 2015".</p> <p>Is being complied with.</p>
4	<p>Utilization of fly ash in over burden (OB) of working mines and conducting pilot studies for the same as per Fly ash notification and CPCB guidelines shall be undertaken and 25% use fly ash in the OB dumps shall be done as per Fly Ash Notification, 1999.</p> <p>In case of opencast mines, overburden material swells up upto 20% due to blasting or fracturing. Hence in most of the opencast mines, dump space is found to be insufficient for the OB removed from the face. Accommodation of 25% fly ash in the OB would require substantial volume of overburden to be dumped externally, which in turn, will consequently result in the requirement of additional land area. Acquisition of land is already an uphill task under the present scenario.</p> <p>Accommodation of fly ash in the OB dumps would also require raising the height of the dumps which would be detrimental to the safety of the mine. Concurrent fly ash dumping during mining operation is considered hazardous with respect to safety and is not recommended due to the following reasons:</p> <ul style="list-style-type: none"> In operating opencast mines, if fly ash is dumped in dry form, then its transportation and dumping would be an issue of concern, as it is



(Handwritten signatures and initials)

likely to generate excessive dust. However, if it is mixed in wet form, the internal friction angle of such a mixture being very less, the stability of dumps will always be at risk.

- Dumping of fly ash in OB dumps would increase the population of vehicles. A simultaneous movement of higher capacity and lower capacity dump trucks, would create unsafe conditions, owing to limited space of mine operations.
- Mixing of overburden and fly ash tends to deviate the mining procedure, which are difficult operations due to huge volumes involved and non-availability of any safe technology to carry out such operations. Further the additional process is likely to adversely affect mine operating costs.
- Leaching effect of the fly ash in dumps is also hazardous as the OB dumps are exposed to surrounding forest area and water bodies. Kanchan River flows on the Eastern side of mining lease area which feeds water to Kanchan reservoir at Northern side of mining lease area. This reservoir provides water to the irrigation canal system for irrigation to 28 villages downstream.
- An NGT Case No 117/2016 is already on going and Hon'ble Supreme Court of India on 19.11.2019 has granted stay on the Judgement of NGT. Under these circumstances the dumping of Fly Ash is likely to aggravate the existing problems which may lead to the cancellation of the Stay granted by the Hon'ble Supreme Court and thereby lead to closure of the mine.

Besides the above, the related matter has already been put in the Hon'ble Supreme Court by M/s Northern Coalfields Ltd, against the Judgment & Final Order dated 24.05.2019 & 11.10.2019 passed by the Hon'ble NGT, Principal



AS

[Signature]

[Signature]

		<p>Bench, New Delhi in O.A. No. 453 of 2019. In the hearing dated 06.12.2019, Hon'ble Supreme Court has granted stay of recoveries in the mean time (which is for the Demand Notices issued by MPPCB to Nigahi Project of M/s Northern Coalfields Ltd for non-utilization of fly ash). Final Judgment of the Hon'ble supreme court is still awaited.</p> <p>There is acute shortage of dumping space in both internal dumps as external dumps have been completed and any addition of fly ash from neighbouring power plant will aggravate the problems and the situation may land us in closure of the mine.</p> <p>Free medical Check-up facility and Free Medicines are being provided to nearby villages and who so ever may come.</p> <p>24 hours ambulance service is being provided to nearby villages.</p>
5	<p>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.</p>	
6	<p>The railway connectivity of the Block B Gorbi mine shall be completed within 3-6 months time to stop the road transportation of the coal. Consequently the operation of the coal loading railway siding of the Block B Gorbi mine shall be terminated thereafter.</p>	NA
7	<p>The railway sidings operated by NCL should be operated in accordance with the CPCB guidelines.</p>	NA
8	<p>All the coal mines shall calibrate all the CAAQMS 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.</p>	<p>All the 3 Nos. CAAQMS (Continuous Ambient Air Quality Monitoring System) have been calibrated on 24/01/2021 and are connected with Environment Surveillance center of MPPCB & CPCB server and data is being transmitted.</p>



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[Handwritten signature]

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Office of the Divl Rly Manager (C)

Dhanbad-826001

Dhanbad, dt 11.02.2021

No. C.710/MPPCB/DHN/21

**H K Sharma
Director Environment,
MP Pollution Control Board
Bhopal**

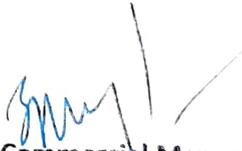
Sub: Compliance report of Railway Sidings.

**Ref: Second Quartely report of the Oversight Committee for State of
MP in compliance with order dated14.07.20 in OA 164/2018.**

Railway has taken many steps to meet the measures for pollution control at SGRL and MHDA railway sidings/goods shed. Railways has always tried to comply with the direction of the regulators and has taken all possible measures to control the pollution at goods shed. Point wise compliance is as under:-

- a) Tender for construction of 06 feet height of Boundary wall along with 20 feet height of fencing/protection screen for pollution control at Singrauli and Mahadeiya Railway siding/goods shed has been awarded to M/s K K Agrawal, At PO- Chandwa, Main Road Chandwa, Latehar-829203 and Letter of Acceptance has been issued in f/o M/s K K Agrawal on 18.05.2020 and 10.06.2020 respectively. It is expected that it will be completed within six months.
- b) Fixed water sprinklers have yet not been installed but regular water sprinkling through water tanker is being done at regular intervals in the goods shed at various points like loading/ unloading/stacking areas etc to mitigate dust pollution.
- c) Tarpaulin is ensured to cover the loaded wagons during transportation to mitigate dust pollution.
- d) Small and big tress surrounding the goods shed exists. New plantation will be made in vacant area and some after construction of boundary wall so that saplings are not destroyed.

We are committed to meet the defined measures to control dust pollution in the railway sidings and in case of any shortfalls, the guidelines issued vide "Inventorization of Railway Sidings and Guidelines for their Environment Management-March 2015" will be adhered to within a short period of time.


Sr. Div.Commercial Manager
East Central Railway
Dhanbad

कार्यालय नगर पालिक निगम सिंगरौली, जिला— सिंगरौली म0प्र0

क्रमांक / 10844 / तकनीकी / 2021,
प्रति,

सिंगरौली, दिनांक:— 5-3-21

क्षेत्रिय अधिकारी
म0प्र0 प्रदूषण नियंत्रण बोर्ड
भकूआर नौगढ
जिला— सिंगरौली म0प्र0

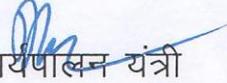
विषय:— माननीय एन जी टी प्रकरण क्रमांक 164/218 के अन्तर्गत गठित ओव्हर साईट कमेटी की प्रथम तिमाही प्रतिवेदन के अनुपालन संबंधी प्रतिवेदन भेजने वावत्।

सन्दर्भ:— आपका पत्र क्रमांक / 278 / क्षे0का / प्र0नि0बो / 2021 दिनांक 04.03. 2021।

—00—

उपरोक्त विषयांकित के सम्बन्ध में लेख है कि नगर पालिक निगम सिंगरौली क्षेत्रान्तर्गत विभिन्न स्थानों में 13 नग आर ओ प्लान्ट की स्थापना की गई है। जिससे आम जनमानस को शुद्ध पेयजल उपलब्ध हो रहा है। निगम क्षेत्रान्तर्गत यू आई डी एस एस एम टी योजना अन्तर्गत जल प्रदाय योजना का कार्य पूर्ण किया जाकर जल प्रदाय किया जा रहा है। जिन वार्डों के कुछ भागों में जल प्रदाय नहीं किया जा रहा है उन वार्डों में पाईप लाईन डालने का कार्य प्रगति पर है।

अतः सन्दर्भित पत्र के क्रम में चाही गई जानकारी सादर सम्प्रेषित है।


कार्यपालन यंत्री
नगर पालिक निगम
सिंगरौली

ENCLOSURE 10**कार्यालय मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी जिला सिंगरौली (म0प्र0)**कं0/मु0चि0अ0/2021/ 24 21
प्रति

सिंगरौली दिनांक 06/03/2021

कलेक्टर महोदय,
जिला-सिंगरौली म0प्र0

विषय - माननीय एन.जी.टी. प्रकरण क्रमांक 164/2018 के अन्तर्गत गठित ओवरसाइट कमेटी कि प्रथम तिमाही प्रतिवेदन के अनुपालन संबंधी प्रतिवेदन भेजने बाबत।

संदर्भ:- क्षेत्रीय कार्यालय म0प्र0 प्रदूषण नियंत्रण बोर्ड जिला सिंगरौली का पत्र क्रमांक/278/क्षे.का./प्रनिबो/2021/सिंगरौली दिनांक 04.03.2021।

—000—

उपरोक्त विषयांतर्गत संदर्भित पत्र के परिपालन में अनुरोध है कि जिला चिकित्सालय सह ट्रामा सेन्टर बैडन जिला सिंगरौली में सिलिकोसिस, फ्लोरोसिस (Silicosis, Fluorosis) की बीमारी नहीं है। जाँच एवं उपचार की सुविधा उपलब्ध है। जानकारी श्रीमान जी की ओर सादर सम्प्रेषित है।

for
मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी
जिला-सिंगरौली (म0प्र0)
सिंगरौली दिनांक 06/03/2021कं0/मु0चि0अ0/2021/ 24 22
प्रतिलिपि:- की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।

1. क्षेत्रीय अधिकारी म0प्र0 प्रदूषण नियंत्रण बोर्ड भकुआर नौगढ़ जिला सिंगरौली मध्यप्रदेश भोपाल।

for
मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी
जिला-सिंगरौली (म0प्र0)

कार्यालय कलेक्टर (खाद्य) जिला सिंगरौली (म.प्र.)

क्रमांक /354 /खाद्य /2021

सिंगरौली दिनांक 06-3-21

प्रति,

क्षेत्रीय अधिकारी,
म.प्र. प्रदूषण नियंत्रण बोर्ड
भुकुआर नौगढ़
जिला सिंगरौली (म.प्र.)

- विषय :- माननीय एन जी टी प्रकरण क्रमांक 164/218 के अंतर्गत गठित ओव्हर साईट कमेटी की प्रथम तिमाही प्रतिवेदन के अनुपालन संबंधी प्रतिवेदन भेजने बाबत।
- संदर्भ :- आपका पत्र क्रमांक/278/क्ष.का/प्र.नि.बो./2021 सिंगरौली दिनांक 04.03.2021

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विषयान्तर्गत प्रधानमंत्री उज्ज्वला योजना के तहत 109881 हितग्राहियों गैस कनेक्शन प्रदाय किया गया है।

चाही गई जानकारी प्रस्तुत है।

संलग्न :- गैस कनेक्शन रिपोर्ट


जिला आपूर्ति अधिकारी
जिला सिंगरौली (म.प्र.)

27-01-		OMC-		ALL		State-		Madhya Pradesh											
District	PPAC Code	OMC	Distributor Code	Distributor Name	KYC Filled	Internal Dedupe Reject	NIC Dedupe Suspect	Internal Safety Suspect	Internal Safety / Other Suspect	NIC Dedupe Pending	Rejected Application	Cleared Application	SV Issued	SV Issued Burner and Refill Loan	SV Issued Burner Loan	SV Issued Refill Loan	SV Issued No Loan	KYC Cancelled	Connect on Installed
Singrauli	1883	BPC	119003	ANJALI GAS AGENCY	9084	520	22	0	4	57	39	8171	7551	6071	0	0	1480	271	7551
Singrauli	1883	BPC	204008	CHANDRALOK BHARAT GAS GRAMIN VITRAK	5367	564	0	0	0	372	1	4409	4231	4223	1	0	7	21	4053
Singrauli	1883	BPC	124497	DHRUB GAS AGENCY	18065	1288	4	0	4	383	6	14765	14488	13477	12	27	972	1605	14283
Singrauli	1883	BPC	204773	SHREE BHARAT GAS GRAMIN VITRAK	308	15	12	0	10	47	0	223	196	195	0	0	1	1	195
Singrauli	1883	BPC	205633	SHRI KRISHNA BHARAT GAS	477	103	0	0	0	68	0	296	271	253	0	0	18	10	231
Singrauli	1883	HPC	11774030	HANSDHWAJ HP GAS GRAMIN VITRAK	11099	805	10	0	0	7	0	10254	9672	8742	9482	9260	460	13	8110
Singrauli	1883	HPC	11026930	Shiv HP Gas Gramin Vitrak	3982	534	2	0	0	54	0	3344	3023	3011	3331	3332	7	48	2729
Singrauli	1883	IOC	249606	CHITRANGI INDANE GRAMIN VITRAK	15948	413	17	0	0	21	233	15134	14276	13224	135	67	850	130	14080
Singrauli	1883	IOC	275038	F. D. INDANE	13353	381	0	0	0	2	12	11989	11338	10353	80	35	870	969	11340
Singrauli	1883	IOC	169924	HARIHAR INDANE	14399	534	0	0	0	92	114	13166	12068	11273	2	154	629	473	11899
Singrauli	1883	IOC	265033	NIGARI INDANE GRAMIN VITRAK	12851	1705	109	0	0	158	58	10730	9634	9415	0	52	167	91	9464
Singrauli	1883	IOC	169970	PREMKANTA INDANE	10420	310	0	0	0	76	21	9918	9386	8889	53	62	382	95	9382
Singrauli	1883	IOC	312829	RAJIMLAN INDANE GRAMIN VITRAK	6578	462	1	0	0	85	127	5835	3936	3936	0	1	-1	68	3827
Singrauli	1883	IOC	287361	SARAI INDANE GRAMIN VITRAK	15336	1045	85	0	0	80	15	14073	13010	12953	0	6	51	38	12737
					137257	8679	262	0	18	1502	626	122337	113070	106015	13096	12996	5893	3833	108881