

**MINUTES OF THE 61<sup>st</sup> EAC (THERMAL & COAL MINING PROJECTS)  
MEETING HELD ON 28-29 July, 2016**

**A.** The 61<sup>st</sup> meeting of the Expert Appraisal Committee (EAC) for Thermal & Coal mining projects was held on 28-29 July, 2016 in the Ministry to consider the proposals in coal mining sector. The list of participants and the project proponents are at Annexure-I & II respectively.

**B. Confirmation of Minutes:**

The Committee confirmed minutes of the 58<sup>th</sup> EAC meeting held on 23-24 June, 2016.

**C. The following proposals were considered.**

**Agenda 61.1**

**Marki Mangli - III Opencast Coal Mining Project 0.21 MTPA of M/s B. S. Ispat Limited in ML area of 275 ha located in District Yavatmal (Maharashtra) - For consideration of EC**

61.1.1 The proposal is for Environmental Clearance to Marki Mangli - III Opencast Coal Mining Project 0.21 MTPA of M/s B. S. Ispat Limited in ML area of 275 ha located in District Yavatmal (Maharashtra). At the outset, Shri I.J. Talwar (Head of Mines) submitted that due to the untimely demise of the concerned Director of the Board of Directors, no senior level representatives as required under the relevant instructions, could attend the meeting. This was accepted by the EAC.

61.1.2 The Committee, in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016 noted the following:-

(i) The EIA/EMP reports were submitted without carrying out the public hearing. Page 2 of the Executive Summary of the EIA states that 'The EAC (Coal & Thermal) has prescribed Terms of Reference by waiving public hearing as per the prescribed ToR dated 1<sup>st</sup> February, 2016.

(ii) It was seen from para 3 of the ToR issued by the MoEF&CC on 1<sup>st</sup> February, 2016 that the following had been stated-

“Based on the recommendations of the EAC, the Ministry hereby accords ToR to the Marki Mangli-III Opencast Coal Mining Project of 0.21 MTPA in ML area of 275 ha in villages Ardhwan, Ruikot, Bhendala, Ruikot, Mukutban, District Yavatmal (Maharashtra) in favour of M/s B. S. Ispat Ltd without Public Hearing, with the generic terms of reference as under.....”.

(iii) The EAC pointed that it had (in its meeting on 7<sup>th</sup>-8<sup>th</sup> Jan 2016) in fact, recommended grant of ToR with public hearing, and no exemption from public hearing had been agreed to in light of the fact that this was a case of grant of fresh ToR, and because the last public hearing for all the 3 blocks of Marki Mangli (Blocks II, III & IV) taken together was conducted in the year 2007 i.e. approximately nine years ago.

(iv) *Since the case had been taken forward contrary to the EAC's recommendations, the EAC was not in a position to consider the proposal and referred it back to the MoEF&CC.*

(v) The EAC also pointed out that since the ToR had been issued by the Ministry without

taking into account its recommendations, para-3 of the ToR as at (ii) above, should have been phrased more clearly to indicate as to which Authority had waived the requirement of public hearing. In this connection, the EAC further pointed out that in terms of para-8 (ii) of the Principal EIA Notification dated 14<sup>th</sup> September, 2006 issued by the MoEF&CC, a procedure had been clearly laid down in case there is a difference of opinion between the EAC and the regulatory authority. While prima facie it appeared from the Notification that prescribing ToRs came within the exclusive domain of the concerned EACs without the Regulatory Authority having any say in the matter, however, the said para-8 (ii), on its full reading, made it clear that the stipulated procedure applied at all stages of the EC process.

(vi) The EAC was of the view that in case the matter was going to be referred back at a later stage by the MoEF&CC to the EAC in terms of the procedure contained in para-8 (ii) of the Notification, then to save time of the PP, the EAC desired that the Mine Plan approval issued by the Ministry of Coal (presently attached in the EIA as Annex 2.1.A / Annex 1.4) should be clearly examined to see whether it was actually valid for the PP's allotted Marki Mangli block-III. This was because the Mine Plan approval was dated 31<sup>st</sup> January, 2008/5<sup>th</sup> February, 2008, it was a combined approval for all the three blocks II, III & IV, and also, it stood not in the PP's name, but in the name of the previous allottee M/s Shree Virangana Steel Ltd. In addition, for grant of EC a Mine Closure Plan is also required. The PP had, in the background EIA document circulated to the EAC brought out that the application for Mine Closure Plan had been submitted to the Ministry of Coal in September, 2015, but approval for the same had not yet been received.

61.1.3 As stated in para 61.1.2 (iv) above, the proposal is referred back to the MoEF&CC.

## **Agenda 61.2**

### **Coal Washery of 2.5 MTPA of M/s Hind Multi Services Pvt. Ltd in an area of 10.11 ha located in District Bilaspur (Chhattisgarh) - For consideration of EC**

61.2.1 The proposal is for grant of Environmental Clearance to Coal Washery of 2.5 MTPA of M/s Hind Multi Services Pvt. Ltd in an area of 10.11 ha located in Village Gataura, Tehsil Masturi, District Bilaspur (Chhattisgarh)

61.2.2 The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- i. The project was accorded ToR vide letter No.J-11015/410/2013-IA.II (M) dated 30.12.2014
- ii. Latitude and longitude for the project site are :

<b>Corner No.</b>	<b>Latitude</b>	<b>Longitude</b>
	<b>Office, Weigh Bridge &amp; Railway Siding</b>	
1.	22° 3' 40.72" N	82°14' 26.12" E
2.	22°3' 33.40" N	82°14' 22.93" E
3.	22°3' 33.49" N	82°14' 21.50" E
4.	22°3' 35.33" N	82°14' 21.15" E
5.	22°3' 41.77" N	82°14' 21.72" E
	<b>Plant Premises</b>	

1	22° 03' 39.4" N	82°14' 04.5" E
2	22° 03' 38.4" N	82°14' 07.7" E
3	22° 03' 35.2" N	82°14' 09.2" E
4	22° 03' 38.4" N	82°14' 11.5" E
5	22° 03' 42.0" N	82°14' 13.2" E
6	22° 03' 37.2" N	82°14' 13.2" E
7	22° 03' 33.0" N	82°14' 09.0" E
8	22° 03' 24.8" N	82°14' 06.4" E
9	22° 03' 24.8" N	82°14' 00.4" E
10	22° 03' 31.6" N	82°14' 00.8" E

- iii. There is no joint venture.
- iv. M/s Hind Multi Services Pvt. Ltd has made a MoU with M/s KSK Mahanadi Power Company Ltd located at Akaltara, District Janjgir Champa (Chhattisgarh) within 40-45 km from the project site, for supply of 2.4 MTPA raw coal for washing.
- v. MoUs has been made with three power plants for utilisation of washery rejects, with the details as under:-

Sr. No.	Name of the Industry	Location	MoU Capacity
1	M/s GR Sponge & Power Ltd. (Power Plant)	Plot No. 102, Phase II, Siltara Industrial Area, Raipur, Chhattisgarh	Purchase of 1,20,000 TPA washery reject coal
2.	M/s NR Sponge Pvt. Ltd. (Power Plant)	Village Bahesar, Phase II, Siltara Industrial Area, Raipur, Chhattisgarh	Purchase of 1,38,000 TPA washery reject coal
3.	M/s KSK Mahanadi Power Company Ltd. (Power Plant)	At village Nariyara, Dist. Janjgir Champa, Chhattisgarh	Purchase of 6,00,000 TPA washery reject coal
<b>Total</b>			<b>8,58,000 TPA</b>

- vi. Employment generated / to be generated: It is estimated to employ direct / indirect employment of 100 people of various skills.
- vii. Benefits of the project: The proposed project of coal washery at Gataura village would provide development of area and consequent indirect and direct job opportunities which would finally result in improvement in the quality of life of people in the central region and especially in the area around the coal washery site.
- viii. The land usage of the project will be as follows:

Sl. No.	Description	Area (in acres)
1.	Washery Area	9.0
2.	Reject Disposal Area	2.5
3.	Coal Storage Yard & Truck Tripping System Yard	2.0
4.	Raw Water Reservoir	1.5
5.	Fabrication/Construction Yard	1.5
6.	Green Belt	8.0
7.	Others	0.5
	<b>Total</b>	<b>25.0</b>

Critically Polluted area is Korba, which is 55.7 km away from the site in NE.

- ix. The washery operation shall be a closed system with wagon loading arrangement
- x. The seasonal data for ambient air quality has been documented and all results at all

stations are within prescribed limits.

- xi. Transportation: Coal will be sourced from SECL Bilaspur mines and will be transported by Rail/Road upto Gatora Railway station and from there in covered trucks by Road upto the Washery site (1.0 km dedicated road). Railway siding is already completed. Washed Coal from the Plant will be transported by Road in covered trucks directly to the different customers (Power plants, Cement Plants and sponge Iron Plants) or by road upto Gatora Railway station and from there by rail. Mode of transport of washed coal will depend on the MOU with the customers who may specify either road or rail transport mode.
- xii. There is no R & R involved. There are no PAFs.
- xiii. Cost: Total capital cost of the project is Rs.35 Crores. CSR Cost: 33 Lakhs. Environmental Management Cost (Capital cost Rs.**391.7 Lakh**, annual recurring cost Rs. **104.0 Lakh**).
- xiv. Kharang Nadi flows at a distance of 2.1 km W and Arpa River flows at a distance of 2.5 km SW. Water requirement will be met from Kharang River.
- xv. Daily water requirement for the proposed plant is 1000 m<sup>3</sup>/day. Proposed to obtain the requisite water from Kharang river (2.1 KM W) or Arpa River anicut (2.5 KM SW). Water will be brought to the project site by pipeline laid from the anicut to the washery site.
- xvi. Application for withdrawal of water from Kharang/ Arpa river has been submitted to Jal Sansadhan Vibhag, Chhattisgarh.
- xvii. There are no national Parks, wildlife sanctuary, biosphere reserves in 10 km study area.
- xviii. There is no forest area involved in the project site.
- xix. Total afforestation plan shall be implemented covering an area of 8.0 ha. Green Belt over an area of 8.0 ha. Density of tree plantation 2500 trees/ ha of plants.
- xx. There are no court **cases/violation** pending with the project proponent.
- xxi. Public Hearing was held on 28th August, 2015 at premises of Govt. middle school, village Karra, Tehsil Masturi, District Bilaspur (Chhattisgarh). The issues raised during the public hearing include coal dust, pollution of water bodies, impact on agriculture etc.
- xxii. A detailed plan will be prepared after receipt of the approval from Jal Sansadhan Vibhag, Chhattisgarh.

61.2.3 The Committee, after detailed deliberations (**in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016**) noted the following:-

(i) Coal linkage for the washery has to be clearly spelt out along with requirement of the M/s KSK Mahanadi Power Company Ltd, which has done MoU for 30% ash contained washed coal located within 40 km of the washery.

(ii) It was informed by the project proponent that M/s KSK Mahanadi Power Company Ltd also have a requirement for washery rejects for their power plant usage. As such, the facilities available with the power plant for using rejects need to be clarified.

(iii) There is a difference between the presentation circulated/made during the meeting and the background papers submitted i.e. EIA in respect of the following:-

- (a) Coal characteristics (Slide No.19)
- (b) Yield of washed coal (Slide No.19)
- (c) MoU in respect of raw coal and washed coal (Slide No.17)
- (d) Source of water (EIA report mentions only Kharang River, whereas in the presentation it is indicated as Arpa River/Kharang River)
- (e) Different statements regarding water availability, for example in Table 1.4 item (V), it is stated that the application has already been submitted to the State Department for the permission and the same is in process and is attached at Annexure-V. However,

on page 30 of the EIA report, in para 2.8.2, contradictory statement has been given, where it has been stated 'copy of permission for drawal of water from Kharang river is given in Annexure-V.

- (f) Mode of transport of washed coal (Slide No.35)
- (g) Budgetary allocation out of CSR capital funds of Rs.2 crores as proposed at item (ix) page 211 of EIA documents against Rs.33 lakhs as proposed by the PP in their presentation (Slide No.72)

The EAC pointed out to the PP that as per instructions, no change can be made in any document after the EIA has been circulated to the members, without the specific permission of the MoEF&CC to do so.

(iv) Data on air prediction for PM 2.5 is inadequate. Neither the emission factors for controlled and uncontrolled fugitive emissions, nor the mitigation measures for controlling emission from the washery were provided.

(v) The surface water, ground water and soil quality data provided indicates that chloride levels are exactly the same (Slides 49, 50 & 61), which is highly unlikely and raises question on authenticity of the data. Similarly, the values for sulphate and nitrate are exactly the same in respect of ground water and soil quality which again is highly unlikely and therefore suspect.

(vi) It is proposed to take water from the river Kharang i.e.1 MLD for washery for which permission is not yet available as the letter at Annexure-V of the EIA documents is only a recommendatory letter to the State Government. As it is proposed to withdraw water from the said river of the order of 1 MLD, and the river is reported to be utilized for irrigation, there is a need of study for carrying out impact of such withdrawal on downstream users. Such study should be conducted through reputed organization.

(vii) The cumulative impact assessment for air quality had not been carried out. While data for the existing industries appeared to have been incorporated in the base line data, however the likely impact of any new industrial activities that may be coming up in that area, were not taken for the purpose of cumulative air impact assessment study.

(viii) Regarding supply of raw coal, the MoU with M/s KSK Mahanadi Power Company Ltd (para 2.5 on page 25 of the EIA report) indicates that while 2.4 MTPA of raw coal would be sourced from M/s KSK Mahanadi, the balance 0.1 MTPA would be obtained through e-auction from SECL or from nearby operating industries. In this regard, the EAC found it necessary that the PP should attach the linkage letter issued by the Ministry of Coal to M/s KSK Mahanadi at least in respect of 2.4 MTPA, since the MoU indicates that M/s KSK would be receiving this coal from SECL. Clearly, without such a linkage, M/s KSK Mahanadi would not be in a position to supply SECL coal to the PP.

(ix) The EAC also enquired about the mode of transportation of both raw coal, as well as washed coal, particularly since in para 2.5 on page 25 of the EIA document contradictory statements have been made. For example while at one place in para 2.5, it is stated that raw coal will be transported by rail/road up to Gataura railway siding, at another place, it is stated that "washed coal from the plant will be transported by road in covered trucks directly to the different customers or by road up to Gataura railway siding and from thereby rail/road". Further, the same para quotes "since most of the coal transport will be through railway wagons, there will not be any significant addition on road for coal transportation from the proposed coal washery".

The different statements clearly make it difficult for the EAC to clearly understand the

proposed transport mode either for raw coal or washed coal. And clearly therefore, the PP has not conducted any studies on the impact of transportation by road wherever the necessity so arises.

(x) In any case, it would be highly inadvisable and incorrect for 2.5 MTPA of coal transport by road either in its raw form or any washed/rejects form. Therefore, if the PP was indeed planning to go ahead, then there should be a clear plan for maximum possible transportation by rail, with the balance being done only through closed conveyor system and wagon loading through silo/pre weigh bin.

(xi) Different issues raised during the public hearing on 28<sup>th</sup> August, 2015 have not been suitably addressed. It simply shows certain lack luster approach towards vital issues raised during public hearing. The same need to be furnished along with the detailed action plan for redressal for the issues raised during PH need to be mentioned depicting budgetary allocation. Out of the CSR capital funds of Rs 2 crores as proposed at item (ix) page 211 of EIA documents against Rs 33 lakhs as proposed by the PP in their presentation at slide No.72

61.2.4 *In the context of different statements/contradictions between the EIA documents circulated prior to the meeting and the presentation circulated/made during the meeting, as well as the inconsistent statements/suspect data etc in both the documents, the EAC rejected the EIA/EMP report, and advised that a revised EIA/EMP report should be submitted rectifying the above and/or any other inconsistencies in the knowledge of the project proponent.*

61.2.5 *The EAC also recommended that in light of such defects in the EIA/EMP reports, the Ministry may consider taking appropriate action into the matter as per the laid down procedure in this regard.*

### **Agenda 61.3**

#### **Coal washery of 2.0 MTPA of M/s Prakruthik Enterprises Pvt Limited in an area of 41.20 ha located in District Angul (Odisha) - For consideration of TOR**

61.3.1 The proposal is for Terms of Reference of Coal washery of 2.0 MTPA of M/s Prakruthik Enterprises Pvt Ltd in an area of 41.20 ha located in District Angul (Odisha)

61.3.2 The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- i. The proposal is for grant of fresh ToR.
- ii. Latitude and longitude for the project site are 21<sup>0</sup>.02' 26 17" to 21<sup>0</sup>.03' 29.94" and 85<sup>0</sup> 08' 47.00" to 85<sup>0</sup> 09' 09.24" E respectively.
- iii. Joint Venture: No Joint Venture
- iv. Coal Linkage: Coal will be transported from nearby mines of Talcher coal field (MCL).
- v. Employment generated / to be generated: 150-200 Nos
- vi. Benefits of the project: Economic growth will be improved; local people will be given employment.
- vii. Washing technology: Heavy media Cyclone wet method.
- viii. There is no R & R involved. There is PAF.
- ix. Cost: Total capital cost of the project is Rs. 104.40 Crores. CSR Cost Rs. 20 lacs/ annum. R&R Cost Nil. Environmental Management Cost Rs. 5.00 Crores.
- x. Water body: No river/nallah flowing adjacent to the area.
- xi. Wildlife issues: There is an elephant corridor existing within 10.0 km of the project site.

- xii. Total forest area involved is 23.90 ha.
- xiii. There are no court cases/violation pending with the project proponent.

61.3.3 The Committee, after detailed deliberations (in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016) noted the following:-

- (i) The PP has indicated that he has already been “allotted 101.81 acres” by IPICOL, which has recommended it to IDCO for allotment. It was pointed out to the PP that this was not yet an allotment, that 101.81 acres was far in excess of the land requirement of similar capacity washeries and such large requirements would not be considered, and that in any case at this stage, it was for the EAC to indicate which out of 3 potential sites identified by the PP can be taken up, rather than for the PP to approach the EAC with only one site. Furthermore, the identified site is having substantial forest area and also is close to an elephant corridor. As such, due to complexity of the area and the statutory clearances required, the site cannot be agreed to.
- (ii) No IEM approval (attached by the PP as a “statutory” clearance), is required for the washery in terms of the EIA Notification, 2006.
- (iii) There is no clarity in respect of clearances required for water withdrawal and the mode of coal transportation.
- (iv) The nearby areas from all the three selected sites are having many surface water bodies and need reconsideration for identification from ecological consideration.
- (v) The pre-feasibility reports submitted along with the Form-I were having many discrepancies, in terms of editing as well as technical inputs.

61.3.4 *The proposal was, therefore, not accepted and the project proponent was asked to identify three potential sites.*

#### **Agenda 61.4**

#### **Expansion of Coal Washery from 0.96 MTPA to 2.4 MTPA of M/s Bhatia Coal washeries Ltd in an Area of 7.2 ha located in Tehsil Rajura, District Chandrapur (Maharashtra) - For consideration of TOR**

61.4.1 The proposal is for Terms of Reference of Expansion of Coal Washery from 0.96 MTPA to 2.4 MTPA of M/s Bhatia Coal washeries Ltd in an Area of 7.2 ha located in Tehsil Rajura, District Chandrapur (Maharashtra)

61.4.2 The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- i. The proposal is for considering fresh TOR.
- ii. Latitude and longitude for the project site are 19° 45' 22.65"N and 79° 17' 8.71"E respectively.
- iii. Joint Venture: There are no JV
- iv. Coal Linkage : There are No coal Linkages
- v. Employment generated / to be generated: Direct Employment 115 person.
- vi. Benefits of the project: Financial & social benefits with special emphasis on the benefits to the local people including tribal population if any in the area. This Coal Washery will provide employment for around 115 people by direct employment which will include Engineers, Executives, Skilled, Semi- skilled and Unskilled labour and indirect employment to more than 150 persons, in contractual works & transport. The project proponent will extend social welfare activities like health, education, infrastructure

- development and environment conservation.
- vii. Washery Technology: - Heavy Media Cyclone- wet process.
- viii. The land usage of the project will be as follows:

Land used details:

S.N.	LANDUSE	Within ML Area (ha)	Outside ML Area (ha)	TOTAL
1.	Agricultural land	Nil	Nil	Nil
2.	Forest land	Nil	Nil	Nil
3.	Wasteland	Nil	Nil	Nil
4.	Grazing land	Nil	Nil	Nil
5.	Surface water bodies	Nil	Nil	Nil
6.	Settlements	Nil	Nil	Nil
7.	Others (Private Land in Industrial use)	-	-	7.2 ha.
<b>TOTAL</b>				7.2 ha

- ix. Rajura is the nearest hamlet that is approximately at a distance of 8 km from project site. The village is having good infrastructure, viz., electricity, post office and telephone facility. The water for drinking would be brought in pots and barrels from the nearby villages. Nearest railway station is Manikgarh that is about 12 km from the project site.
- x. Raw coal shall be transported by railway wagons upto Railway siding and by Tippers to washery unit . Railway siding is about 0.3 km from washery unit.
- xi. Water requirement : Total daily water requirement in the proposed coal washery is about 4460 KLD. Out of this, about 3980 KLD water will be collected as process effluent and will be treated in thickeners. The treated effluent will be reused in the coal washing process. Remaining 280 KLD water will be lost as coal moisture, evaporation losses and process losses. Total Power requirement will be 350 KW which will be sourced from MSEDCL.
- xii. The total make up water required for the proposed plant will be 300 m<sup>3</sup> /day which will be met through tubewells. The water will be recycled and reused within plant premises. Process waste water from coal washing will be collected and treated in thickeners and will be recirculated in coal washing process. The plant will operate on 'Zero Effluent Discharge' Principal.
- xiii. There is no R & R hence no Project Affected Families.
- xiv. Total capital cost of the project is Rs.10.50 Crores. R&R Cost Nil. Environmental Management Cost is Rs.2.0 Crore.
- xv. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xvi. Forestry issues: No forest area involved.

61.4.3 The Committee, after detailed deliberations (in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016) noted the following:-

- (i) The earlier EC for the coal washery of 0.96 MTPA in village Panderputi Tehsil Rajura, District Chandrapur (Maharashtra) was granted by SEIAA in Maharashtra on 11<sup>th</sup> November, 2009 subject to implementation of certain terms and conditions.
- (ii) The PP themselves stated that neither they were uploading the status of compliance of the stipulated EC conditions nor submitting the six monthly reports to the concerned authorities



in MoEF/CPCB/SPCB.

(iii) The proposal being for expansion of the existing capacity of 0.96 MTPA and for which EC is granted by SEIAA, does necessarily require clarification in respect of ground reality on site and the reporting on compliance of the EC conditions as well, and cannot be considered without that.

61.4.4 *The proposal was, therefore, deferred for want of clarifications/inputs on the above lines.*

### **Agenda 61.5**

**Flexibility in production capacity from Underground and Opencast Mine of Gare-Palma IV/4 upto (0.6 MTPA each keeping overall limit upto 1.0 MTPA in an ML area of 701.512 ha) of M/s Hindalco Industries Limited located in, District Raigarh (Chhattisgarh)- Amendment in EC due to change in Mining Sequence.**

61.5.1 The proposal is for amendment in the EC for providing flexibility in production capacity from Underground and Opencast Mine of Gare-Palma IV/4 up to 0.6 MTPA each, keeping overall limit up to 1.0 MTPA in ML area of 701.512 ha of M/s Hindalco Industries Limited located in District Raigarh (Chhattisgarh).

61.5.2 *The EAC noted that the EIA/EMP reports and the related documents had not been received by the members. As such, the Committee was not in a position to consider the case and the proposal was, therefore, deferred.*

### **Agenda 61.6**

**Expansion of Haldibari UG coal mining project from 0.42 MTPA to 0.66 MTPA of M/s South Eastern Coalfields Limited in an area of 390 ha in District Koreya, (Chhattisgarh) - For consideration of EC**

61.6.1 The proposal is for grant of Environmental Clearance under 7 (ii) of the EIA Notification of Expansion of Haldibari UG coal mining project from 0.42 MTPA to 0.66 MTPA of M/s South Eastern Coalfields Limited in an area of 390 ha in District Koreya (Chhattisgarh).

61.6.2 The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- i. The project was earlier accorded EC vide letter No.J-11015/243/2006-IA.II (M) dated 21.03.2006 with the capacity as 0.42 MTPA.
- ii. The instant proposal is for capacity expansion from 0.42 MTPA to 0.66 MTPA under 7 (ii) of the EIA Notification, 2006.
- iii. Latitude and longitude of the project are 23° 12' 47" to 23° 14' 00" N and 82° 08' 09" to 82° 09' 52" E respectively.
- iv. Joint Venture: No Joint Venture.
- v. Coal Linkage : Thermal Power Plants
- vi. Employment generated / to be generated: 756 persons.
- vii. Benefits of the project: Project will considerably improve the socio-economic status of the adjoining areas. This will result improvements in Physical Infrastructure, Social Infrastructure, increase in Employment Potential , Contribution to the Exchequer and Meet energy requirement etc

viii. The land usage of the project will be as follows:

Pre-Mining:

Sl. No	Land use	Within ML Area(ha)	Outside ML Area(ha)	Total (Ha)
1	Agriculture land	54.00	----	54.00
2	Forest land	321.00	0	321.00
3	Waste land	0	0	0
4	Grazing land	0	0	0
5	Surface water bodies	0	0	0
6	Settlements	0	0	0
7	Others(Govt.+Rly)	(12.50+2.50)=15.00	0	(12.50+2.50)=15.00
	Total	390.00	0	390.00

Post- Mining:

S No	Pattern of utilization	Area (ha)
1.	Reclaimed External and Internal dumps	NA
2.	Green belt	1.00*
3.	Final void /Water body	NA
4.	Built up area (Infrastructure, colony, roads, R & R site)	*Infrastructure-3.00 Ha *Approach Road-1.60 Ha
5.	Safety zone: Undisturbed area	385.40
	Total	390.00

\*Included in Infrastructure Area.

Core area: 390.00 ha.

- ix. The total geological reserve is 22.364 MT. The mineable reserve 17.004 MT, extractable reserve is 9.302 MT. The per cent of extraction would be 54.7 %.
- x. The coal grade is Average G3. The average Gradient is Seam 10B- 1in 16 to Seam 4A- 1 in 16. There will be 4 Nos. (Seam14, Seam 13, Seam 10B & Seam 4A (top to bottom) with thickness Seam 10B- 1.2m to 1.85m, Seam 4A- 1.5m to 5.05m.
- xi. The total estimated water requirement is 558m<sup>3</sup>/day. The level of ground water ranges from 0.60 m to 8.60 m.
- xii. The method of mining would be Development- Bord & Pillar, Depillaring- Caving.

- xiii. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xiv. The life of mine is 13 Years.
- xv. Transportation: Coal transportation in pit by through Belt Conveyor from in pit to pit head coal handling plant, Surface to Siding by Tippers to Pre-weigh Bin and loading at siding by Rail.
- xvi. There is no R & R involved. There is no PAF.
- xvii. Cost: Total capital cost of the project is Rs. 47.59 Crores. CSR Cost Rs. 2.00 per tonne of coal production of previous year whichever is higher. Details of expenditure against CSR fund has been shown in EIA/EMP. R&R Cost Nil. Environmental Management Cost Rs 104.14 Lakhs, annual recurring cost Rs. 24.98).
- xviii. Water body: Seasonal Turranullah flows South to North and Bisal Bora.
- xix. Approvals: Ground water clearance applied on 08.01.2007. Board's approval obtained on 15.10.2003. Mining plan has been approved on 27.02.2016. Mine closure plan is an integral part of mining plan.
- xx. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxi. Forestry issues: In CG- 201.00 Ha + In MP-120.00 Ha = 321.00 Ha; Stage II/Final approval of 201.00 Ha (including 4.60 Ha of Surface Right) of Forest; Land in CG obtained vide letter no. F.No.8-63/2006-FC dated 02.05.2008 and Stage II/Final approval of 120.00 Ha of Forest Land in MP obtained vide letter No.F.No.8- 64/2006-FC dated 31.03.2016.
- xxii. There are no court cases/violation pending with the project proponent.
- xxiii. Public Hearing was held on 31.08.2005. The issues raised in the PH includes development of the area, Employment to the local people; Medical facility ; Drinking water facility; Technical training to be given to unemployed youth who are technically qualified; forest and cultivated land; Dam to be constructed for mine discharge; Electricity to be provided Chanwaridand village and Higher secondary school to be opened etc.
- xxiv. The EC compliance report from the Regional Office, MoEFCC at Nagpur, based on the inspection carried out on 7<sup>th</sup> September, 2015, has been submitted vide letter No.3-18/2014(Env)/1175 dated 5<sup>th</sup> October, 2015.

61.6.3 The Committee, after detailed deliberations **(in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016)** noted the following:-

- (i) The proposal for grant of EC has been submitted without the ToR/scoping clearance for the proposed expansion.
- (ii) The earlier public hearing for the project was conducted in May 2005 in Madhya Pradesh, and in August, 2005 in Chattisgarh for its existing approved capacity of 0.42 MTPA (Annex 7 B and 8 B of the background document). The PP has submitted the present proposal for expansion under para 7(ii) of the EIA Notification, 2006 based on the different OMs regarding capacity expansion issued, by the MoEFCC. It has been requested to consider the expansion proposal without fresh public hearing. When asked why the initial request for ToR had not been made, PP submitted that the OMs did not specify any such procedure to be followed, and that this practice had also been followed in the past.
- (iii) It was pointed out to the PP that the various OMs on which reliance has been placed for directly submitting EIA documents is not correct. None of the OMs anywhere indicate that the first stage request for ToR can be avoided. For expansion etc proposals under para 7 (ii) of the

Notification, it is for the EAC to decide on the nature of “due diligence” required in each case. Furthermore, even if the OMs contained an indication that the ToR stage, or any other procedural requirement can be bypassed, it needed to be borne in mind that OMs cannot override Gazette Notifications.

(iv) However, in this case, in view of the small increase proposed in the capacity, the Committee agreed for no fresh public hearing to consider the proposal for expansion. Nevertheless, the PP should issue public notices in the leading local newspapers, Gram Panchayats, website of PP etc. about the proposed expansion, along with the intimation that the public can send its comments if any to the PP and also to the MoEF&CC within 15 days/one month respectively after publication of the public notice.

(v) The compliance report dated 5<sup>th</sup> October, 2015 from the Regional Office at Nagpur indicates non/partial compliance in respect of number of conditions stipulated in the EC issued for the project. The Committee asked for the compliance monitoring report to be of not more than 6 months old.

(vi) Regarding permission for water for the proposed enhanced capacity of 0.66 MTPA, the PP had attached at Annex 5, a letter of 08th Jan 2007 from the Central Ground Water Authority (CGWA). On enquiry, particularly since the letter is of Jan 2007, while the expansion proposal is being made nine years later, it obviously turned out that the CGWA letter was for the existing capacity of 0.42 MTPA. Clearly therefore, the PP does not have the water permission, and has to apply for it. In addition, the CGWA letter of Jan 2007 had stipulated certain conditions to be implemented by the PP. The PP had however not indicated in the documents whether the stipulated conditions had been complied with, and this would need to be done when next the case comes up before the EAC.

61.6.4 *The proposal was, therefore, deferred for action, and inputs/clarification on the above lines.*

## **Agenda 61.7**

### **Kusmunda coal washery project of 25 MTPA of M/s South Eastern Coalfields Limited in area of 41.23 ha in District Korba (Chhattisgarh) - For consideration of EC**

61.7.1 The proposal is for grant of environmental clearance to Kusmunda coal washery project of 25 MTPA of M/s South Eastern Coalfields Limited in area of 41.23 ha in District Korba (Chhattisgarh).

61.7.2 The proposal was earlier considered in 58<sup>th</sup> meeting held on 11-12 May, 2016. During the meeting, the observations of the Committee were as under:-

- i. Project proponent has informed that the said proposal for grant of EC to Kusmunda Washery was uploaded on the MoEFCC website on 29<sup>th</sup> March, 2016 for consideration. The request has been made with the public hearing documents for Kusmunda OC as the washery is proposed to be constructed in the core zone of Kusmunda OCP.
- ii. Meanwhile, it is reported that Public Hearing for Kusmunda Washery has conducted on 11<sup>th</sup> April, 2016, the proceedings of which are awaited from Chhattisgarh Environment Conservation Board (CECB), Raipur. After incorporation of the public hearing proceedings, the final EIA/EMP would be submitted to the Ministry for consideration by the EAC. Taking into consideration the above mentioned facts, the project proponent

expressed their inability to present the case before 55<sup>th</sup> EAC meeting held on 12<sup>th</sup> May, 2016.

- iii. The EAC noted the request made by the project proponent, and deferred the proposal.

61.7.3 The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- i. Kusmunda washery is an integral part of Kusmunda OCP to be commissioned on turnkey basis.
- ii. Raw coal to the proposed washery will be made available at the rate of 25.00 MTY from Kusmunda OCP.
- iii. The project was accorded TOR vide letter No.J-11015/183/2015 -IA-II (M) dated 23.12.2015.
- iv. Latitude and longitude of the project are 22<sup>o</sup> 20' 15" to 22<sup>o</sup> 20' 42" North and 82<sup>o</sup> 40' 06" to 82<sup>o</sup> 40' 43" East respectively.
- v. Joint Venture: There is no Joint Venture
- vi. Coal Linkage: Various thermal power plants
- vii. Employment generated / to be generated: 332 persons.
- viii. Benefits of the project: Increased generation efficiency, mainly due to the less energy loss as inert material passes through the combustion process. Increased plant availability. Reduced investment cost. Reduced operation & maintenance cost due to less wear and reduced cost for fuel and ash handling. Energy conservation in the transportation sector and lower transportation costs. Less impurities and improved coal quality. Reduced load in the air pollution control system. Reduction in the amount of solid waste that has to be disposed off. Reduction in the generation of fly ash quantity at the user point by using washed coal in place of coal. Revenue contribution to government/local bodies and local area development activities
- ix. The land usage of the project will be as follows:

	Activity	Land (in ha)
1.	For washery construction and associated activities	21.56
2.	Reject storage	9.87
3.	For proposed expansion	9.80
	TOTAL	41.23

- x. Total estimated water requirement is 6470 m<sup>3</sup>/day.
- xi. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xii. The life of washery is 17 Years.
- xiii. Transportation: Raw coal by covered belt conveyor. Washed Coal by Covered Belt Conveyor and Rail. Coal rejects by covered belt conveyor and rail.
- xiv. There are no R& R Involved.
- xv. Cost: Total capital cost of the project is Rs.941.17 Crores. According to New CSR policy, the fund for the CSR should be allocated based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs. 2.00 per tonne of coal production of previous year whichever is higher. Environmental Management Cost Rs. 33.32 Crore.
- xvi. Water body: Hasdeo river flows from North to South on the Eastern part of the site.
- xvii. Approvals: Pre-feasibility report (PFR) of Kusmunda coal Washery approved by

competent authority /Board on 05.08.2015.

- xviii. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xix. There are no court cases/violation pending with the project proponent.
- xx. It has been envisaged that 100 mm size raw coal from Kusmunda OCP will be transported by covered belt conveyors to the Kusmunda Washery.
- xxi. Washed coal produced from the washery shall be conveyed by covered belt conveyor to 2 x 30,000 T covered washed coal bunker for onward dispatch to consumer(s) through silo/rail network.
- xxii. Based on the technology selected, the likely quantity of rejects to be produced from the washery is estimated to be 7.5 Mty. Reject produced from the washery will be conveyed by covered belt conveyor to 20,000 T bunker. The rejects shall be sold through e-auction or MoU route for its use in FBC/CFBC boiler and dispatched by railways.
- xxiii. Total quantity of water required during construction as well as operation & maintenance of the proposed washery is about 1.7 MGD, which is proposed to be supplied from mine sump water or from natural sources, namely, Right Bank Canal of Hasdeo Barrage about 1 km away from the proposed washery.
- xxiv. Washing process involves jigging and gravity separation. It has been envisaged to deshale 50-13 mm & 13-3 mm coal in improved type jigs & beneficiation of 3-0.1 mm coal in spiral concentrator to obtain washed coal of desired quality- 33.5±0.5% ash and rejects in a closed washing circuit with zero water discharge.
- xxv. Public hearing was held on 11<sup>th</sup> April, 2016 at Government High School, Sarwamangla Nagar(Village- Durpa), Tehsil: Katghora, District: Korba (Chhattisgarh). The issues raised during the public consultation includes land breaqkup, policy regarding use and disposal of rejects, treatment and recycling of waste water, control of air & water pollution, vehicular traffic, Compensation and employment in respect of land acquired in the villages of Jarhajel and Durpa, facilities for education, health, electricity, water supply in the displaced villages.

61.7.4 The Committee, after detailed deliberations **(in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016)** noted the following:-

(i) Total water requirement is estimated to be 6470 kl/day. A formal request has been made by the project proponent to the Water Resources Department of the State Government of Chhattisgarh to allocate the same from Right Bank Canal of Hasdeo River. The same has not been received.

(ii) Also, there is a need for study of impact of ground water withdrawal.

(iii) As per one of the conditions stipulated in the ToR dated 23<sup>rd</sup> December, 2015 [para 4 (vi)] regarding possibility of using the mine water to minimize the natural water usage, the same has not been explored by the project proponent.

(iv) The details of the public hearing conducted on 11<sup>th</sup> April, 2016 (running into 330 pages) are completely illegible to deliberate on the same. Public Hearing proceedings are an important input while considering EC cases. The EAC found it unusual that the PP had circulated an EIA, with 300 plus pages completely illegible. The project proponent was asked to submit a fair/legible copy of the same along with the detailed action plan proposed for their redressal of the issues raised.

(v) Clarity/details are lacking in respect of issues such as project cost (mentioned as Rs 941.17 cr in the "Basic Information" document, and Rs 731.48 crores in the presentation

circulated today), sale of washed coal and utilization of rejects are required for considering the project. Also, prospective customers for the washed coal need to be firmed up, since Table 2.1 on pg II-1 only refers to prospective customers.

61.7.5 *The proposal was, therefore, deferred for action and inputs/clarification on the above lines.*

## **Agenda 61.8**

### **Expansion of Krishnashila OCP coal mining project from 5 MTPA to 6.25 MTPA of M/s Northern Coalfields Limited in an area of 851.78 ha located in Tehsil Dudhi, District Sonbhadra (UP) - For further consideration of EC**

61.8.1 The proposal is for considering the environmental clearance for expansion of Krishnashila OCP coal mining project from 5 MTPA to 6.25 MTPA of M/s Northern Coalfields Limited in an area of 851.78 ha located in Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) under 7(ii) of EIA Notification, 2006.

61.8.2 The proposal was earlier considered in 53<sup>rd</sup> EAC meeting held in March, 2016 and 58<sup>th</sup> meeting held in May, 2016. During the meeting held in May, 2016, the observations of the Committee were as under:-

(i) The compliance report of the, Regional Office, MoEFCC at Lucknow dated 18<sup>th</sup> July, 2013 was presented during the EAC meeting. The Committee, after detailed deliberations, noted that there was no compliance report for the last EC of 5 MTPA (given in August 2014), which was considered mandatory in terms of this Ministry's OM dated 30<sup>th</sup> May, 2012 for consideration of the instant proposal. The proposal was, therefore, deferred and the project proponent was advised to obtain the latest compliance report from the RO against the present EC of 5 MTPA dated 22<sup>nd</sup> August, 2014.

(ii) In addition, in the 55<sup>th</sup> meeting held on 11-13 May, 2016 in para 55.1.3 (xix), it had been enquired as to whether mining plan approval had been obtained for the enhanced capacity; in para 55.1.3 (xxiii), an ongoing Court case had been referred to.

61.8.3 In response to the observations of EAC, the details submitted by the project proponent and/or as informed during the meeting, are as under: -

(a) The details of compliance status in respect of main conditions of the EC, as per the latest certified compliance report from Regional Office at Lucknow (No. IV/ENV/UP/MINE-39/388/2014/134 dated 10<sup>th</sup> June, 2016), are as under: -

(i) Total forest area needed for project is 720.89 ha for which forest clearance has already been obtained. The details of Forest Clearance are -

(a) 235.99 ha vide letter No.8-64/2004-FC dated 06.07.2006

(b) 258 ha vide letter No.8-5/94-FC dated 23-05-1996

(c) 65.50 ha vide letter No.8-298/87-FC dated 30-07-1990

(d) 161.40 ha vide letter dated 24.01.1975

(ii) It has been found that regular studies of water sample have been done for Hg levels. All the reports showing Hg levels as negligible. National Institute of Occupational Health NIOH,

Ahmedabad has also done a study on occupational health. Interim report showing no Hg contamination. Final report will be received soon.

(iii) It has been found that PAs have transported coal via tubular conveyor system to linked consumer M/s Renusagar (Hindalco) from 4th August, 2015. The dispatch through road has been stopped. Only a coal sale through e-auction is allowed to be transported by road.

(iv) It has been found that the final void depth will be kept less than 40m by PAs. The void area will be converted into water body. They have assured to backfill the void area up to the ground level and covered with about one meter thick top soil and put to use.

(v) As per the report, there is no agricultural field in and around the mine. There is no overflow of OB into the nearby reservoir.

(vi) It has been found that PAs have constructed catch drains and siltation pond of appropriate size. The water so collected is being utilized for watering the mine areas, roads, green belt development etc.

(vii) Reclamation plan has been prepared. The land is being used as per plan and a void of 34.05 ha at a depth of 30-40 m will be left as stipulated in the condition.

(viii) It has been found that PAs have conducted ground water level and quality monitoring by NABL accredited labs of CMPDIL on quarterly basis. The analysis of the data shows that there is no impact of mining on the ground water. The work of installation of piezometer has been completed.

(ix) A detailed Final Mine Closure Plan along with the details of Corpus Fund has been submitted. A total of Rs. 7.2 Crores have already been deposited in January, 2016.

61.8.4 The Committee, after detailed deliberations **(in the 61<sup>st</sup> meeting on 28<sup>th</sup>-29<sup>th</sup> July, 2016)** noted the following:-

(i) The proposal for grant of EC has been submitted without the ToR/scoping clearance for the proposed expansion.

(ii) The earlier public hearing for the project was conducted in October, 2012 for its capacity of 5 MTPA. The present proposal for expansion is for consideration under para 7(ii) of the EIA Notification, 2006, based on the different OMs regarding capacity expansion issued by the MoEFCC. It has been requested to consider the expansion proposal without fresh public hearing. When asked why the initial request for ToR had not been made, PP submitted that the OMs did not specify any such procedure to be followed, and that this practice had also been followed in the past.

(iii) It was pointed out to the PP that the various OMs on which reliance has been placed for directly submitting EIA documents is not correct. None of the OMs anywhere indicate that the first stage request for ToR can be avoided. For expansion etc proposals under para 7 (ii) of the Notification, it is for the EAC to decide on the nature of "due diligence" required in each case. Furthermore, even if the OMs contained an indication that the ToR stage, or any other procedural requirement can be bypassed, it needed to be borne in mind that OMs cannot override Gazette Notifications.



(iv) However, in this case, in view of the small increase proposed in the capacity, the Committee agreed for no fresh public hearing to consider the proposal for expansion. Nevertheless, the PP should issue public notices in the leading local newspapers, Gram Panchayats, website of PP etc. about the proposed expansion, along with the intimation that the public can send its comments if any to the PP and also to the MoEF&CC within 15 days/one month respectively after publication of the public notice.

(v) The compliance report dated 10<sup>th</sup> June, 2016 from the Regional Office at Lucknow indicates non/partial compliance in respect of number of conditions stipulated in the EC issued for the project.

(vi) The NCL Board has approved the Mining Plan for enhanced coal production at 6.25 MTPA (intended capacity) from the Krishnashila OCP in its meeting held on 18<sup>th</sup> May, 2013. The approval date reflected in the minutes of the EAC meeting held on 11-13 May, 2013 (agenda 55.1) stands corrected to that extent.

(vii) The complaint case filed by the RO, UPPCB in the court of CJM Sonebhadra (UP) for earlier violation of EC conditions (EC dated 2<sup>nd</sup> February, 2005 for 4 MTPA) is still sub-judice. It was informed that the said violation refers to the period during which the EC for 4 MTPA was in force. However, the same was settled with the grant of EC for 5 MTPA in August, 2014.

(viii) Out of the total area of 851.78 ha, forest area involved is 720.89 ha. The project proponent has obtained stage-I FC for the entire forest area.

(ix) The construction of CHP, which is already delayed from December, 2014, needs to be expedited. The project proponent informed that date of completion will be March, 2017. The committee advised for expediting the same to eliminate coal transport of 2.7 MTPA by road to Binal siding and wagon loading through pay loaders, causing air pollution.

(x) At the mine closure, all the external OB dumps needs to be re-handled into the mine void, for the final void not to be more than 35 ha of 30-40 m depth.

(xi) The compliance report received from the RO contains inadequacies in respect of observations reported as not-complied or partially complied with. Also, the project proponent has not given any clarifications and detailed action plan along with the firm time lines against those observations. The EAC desired that the project proponent should furnish clarifications and action plan with a request to the RO to furnish their views/observations to the Ministry expeditiously (maximum within three weeks).

(xii) Certain observations have been made by the RO in respect of expenditure on CSR activities. It was, however, informed by the project proponent that they have spent more than what has been shown by RO. They were asked to send a communication in this regard to MoEF&CC.

61.8.5 *The proposal was therefore, deferred for want of inputs, especially in respect of the requirements contained in para (ix) above.*

## **Agenda 61.9**

**Transfer of Environmental Clearance of Barjora (North) Block Coal Mining Project in District Bankura, West Bengal from M/s DVC Emta Coal Mines Ltd to M/s West Bengal**

## **Power Development Corporation Limited**

61.9.1 The proposal is for transfer of Environmental Clearance of Barjora (North) Block Coal Mining Project in District Bankura, West Bengal from M/s DVC Emta Coal Mines Ltd to M/s West Bengal Power Development Corporation Limited.

61.9.2 *The EAC noted that the EIA/EMP reports and the related documents had not been received by the members. As such, the Committee was not in a position to consider the case and the proposal was, therefore, deferred.*

### **Agenda 61.10**

#### **Discussion on any other item**

61.10.1 The EAC had taken certain decisions in its 59<sup>th</sup> meeting on the thermal sector on 14<sup>th</sup>-15<sup>th</sup> July 2016, which were equally applicable to the coal sector. For ease of reference, the said decisions under agenda item 3 of that meeting are reproduced below:-

3.1.1 In this 59<sup>th</sup> meeting on 14 & 15 July, 2016, the EAC noted that it has of late started receiving representations from different quarters, dealing with a variety of issues. For example, some representations have been received asking the EAC to conduct enquiries, conduct studies, issue directions to different Central and State Govt. Authorities to do, or not to do, a particular act, etc. In such cases, the Member Secretary of the EAC has been asked by the EAC to send appropriate responses as approved by it, to the representationists. However, another category of representations/ comments are also being received by the EAC raising grave issues such as alleged faulty conduct of Public Hearings, alleged inadequate handling by the Project Proponents (PPs) of concerns raised during the Public Hearings, alleged shortcomings in the EIA reports, alleged falsification of data in the EIA reports, alleged plagiarism in the EIA reports etc. The Member Secretary informed that such representations were also being received directly in the MoEF&CC. Looking into these representations in greater depth by the EAC has been hampered by the fact that such representations/ comments continue to be received just a day or so before the EAC meeting {in passing, it may be mentioned that the matter of such late receipt coming in the way of a more detailed examination has earlier also been considered and dealt with by the EAC in its 51<sup>st</sup> meeting held on 05<sup>th</sup> February, 2016 - item 51.11 (ii) of the minutes of that meeting are reproduced below for ease of reference}.

3.1.2 The EAC noted that so far the procedure being followed was that the issues raised in the representation(s) were being made available to the PP during discussions on that agenda item, and the PP was asked to respond. In case the item was deferred for further consideration, the PP was asked to respond when his item was next taken up for consideration in the EAC. *The EAC decided in this 59<sup>th</sup> meeting on 14<sup>th</sup> and 15<sup>th</sup> July, 2016 that the issues raised in the representation(s) will continue to be made available, as was being done earlier, to the PP to furnish a response. However, from now onwards, the PP will be asked to send a response to the MoEF&CC in advance of the next consideration of his item, instead of only responding during the next EAC meeting itself. The comments/ observations of the MoEF&CC (in a tabular format) on the PP's response would then be circulated to the EAC Members before that particular agenda item is next scheduled for the EAC's consideration. The EAC stressed that the above procedure is in line with, and in the same spirit of, a procedure already stipulated for the Regulatory*

*Authority (in this case, the MoEF&CC). In this connection, the EAC drew attention to the fact that before consideration by the concerned EAC, pre-examination by the Regulatory Authority (i.e. the MoEF&CC) of the proposals received by it was in fact part of the procedure stipulated in para 2 of Appendix V of the principal EIA Notification dt. 14<sup>th</sup> Sep., 2006.*

61.10.2 *Though the above discussions/decisions have taken place during this 59<sup>th</sup> meeting on 14<sup>th</sup> and 15<sup>th</sup> July, 2016 on thermal projects, they will equally apply to the coal mining projects which also come under this EAC's purview.*

61.10.3 As mentioned in 3.1.1 above, the EAC has asked the Member Secretary to send responses approved by it to the representationists. The EAC has however noted that there has been some delay in actually sending the responses. *The EAC stressed that expeditious action should be taken in such cases, particularly since the responses have already been approved by the EAC, and all that remains to be done is to merely forward it to the representationists. It is also desirable that a formal confirmation is given to the EAC of the action taken in the matter.*

There being no agenda item left, the meeting ended with a vote of thanks to the Chair.

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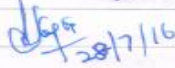
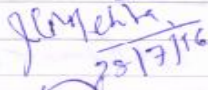

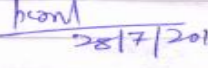
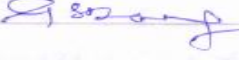
**PARTICIPANTS IN 61<sup>st</sup> EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 28<sup>th</sup> - 29<sup>th</sup> July 2016 ON COAL SECTOR PROJECTS.**

Sl. No.	List Of Participants Expert Appraisal Committee (Coal Mining)	
1.	Shri Anil Kumar	Chairman
2.	Prof C. R. Babu	Member
3.	Shri J. L. Mehta	Member
4.	Shri T. K . Dhar	Member
5.	Shri N. K. Verma	Member
6.	Shri A. K. Bansal	Member
7.	Shri G. S. Dang	Member
8.	Shri S. K. Shrivastva	Member Secretary

61<sup>st</sup> EAC Meeting of Coal Mining Sector

Date:   
 Page No.: 28/07/2016

List of Expert Appraisal Members

S.No.	Name	Design	Sign
1.	Sh. Anil Kumar	Chairman	 28/7/16
2.	Prof. C. R. Babu	Member	C. R. Babu
3.	Sh. J. L. Mehta	Member	 28/7/16
4.	Sh. T. K. Dhar	Member	 28/7/16
5.	Sh. N. K. Verma	Member	N. K. Verma
6.	Sh. A. K. Bansal	Member	 28/7/2016
7.	Sh. G. S. Dang	Member	

61<sup>st</sup> EAC Meeting of Coal Mining Sector

Date:   
 Page No.: 29/07/2016

List of Expert Appraisal Committee Members

S.No.	Name S/SH	Design	Mobile	Sign
1.	Anil Kumar	Chairman		
2.	C. R. Babu	Member		C. R. Babu
3.	N. K. Verma	Member		N. K. Verma
4.	T. K. Dhar	Member		
5.	G. S. Dang	Member		
6.	A. K. Bansal	Member		
7.	J. L. MEHTA	do		 29.7.16

**PARTICIPANTS IN 61<sup>st</sup> EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 28<sup>th</sup> - 29<sup>th</sup> July 2016 ON COAL SECTOR PROJECTS.**

61.1 Marki Mangli - III Opencast of M/s B. S. Ispat Limited.

1. Dr. P K Gandhi
2. Shri Akash Deep
3. Shri I J Talwar
4. Shri B P Misra
5. Shri Devendra Sonane
6. Shri N K Prasad
7. Shri S Puranik
8. Shri V K Goel
9. Shri Rajesh S Shrivastava

61.2 Coal Washery of 2.5 MTPA of M/s. Hind Multi Services Pvt. Limited.

1. Shri Pawan Aggarwal
2. Shri A Mukharjee
3. Shri Shrikant B
4. Dr. D S Ramteke

61.3 Coal washery of 2.0 MTPA of **M/s** Prakruthik Enterprises Pvt. Limited.

1. Shri B K Behel
2. Shri P C Mistri
3. Shri P K Sahoo
4. Dr. K C Sadal
5. Shri Anjan Bose
6. Shri P Karnari

61.4 Expansion of Coal Washery of M/s Bhatia Coal washeries Ltd

1. Shri M A Ansari
2. Shri R R Gandhi
3. Shri Rajesh S Shrivastva

61.5 Flexibility in production capacity of Gare-Palma IV/4 of M/s Hindalco Industries Limited.

1. Shri Abhishek Kumar

61.6 Expansion of Haldibari UG of M/s South Eastern Coalfields Limited.

1. Shri Kuldip Singh
2. Shri Baban Singh

3. Shri U T Kanzarkar
4. Shri Manoj Kumar
5. Shri T D Jain
6. Shri Amit Sarkar
7. Shri D C Kundu
8. Shri Abhijeet Sinha
9. Shri R Sinhal
10. Shri U K Singh

61.7 Kusmunda coal washery project of M/s South Eastern Coalfields Limited

1. Shri Kuldip Singh
2. Shri Baban Singh
3. Shri U T Kanzarkar
4. Shri Manoj Kumar
5. Shri T D Jain
6. Shri Amit Sarkar
7. Shri D C Kundu
8. Shri Abhijeet Sinha
9. Shri R Sinhal
10. Shri U K Singh

61.8 Expansion of Krishnashila OCP coal mining project from 5MTPA to 6.25 MTPA of M/s Northern Coalfields Limited

1. Shri Omveer Singh
2. Shri Prabhu Prasad
3. Shri Rakesh Kumar
4. Shri V N Dupattawala
5. Shri Prem Prakash Kumar
6. Shri Ashok Prasad
7. Shri V K Bajaj
8. Shri B K Sharma
9. Shri J L Singh

61.9 Transfer of Environmental Clearance of Barjora (North) Block Coal Mining Project **from** M/s DVC Emta Coal Mines Ltd **to** M/s West Bengal Power Development Corporation Limited

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### Generic ToR for coal washery

- i. Siting of washery is critical considering to its environmental impacts. Preference should be given to the site located at pit head; in case such a site is not available, the site should be as close to the pit head as possible and coal should be transported from mine to the washery preferably through closed conveyer belt to avoid air pollution.
- ii. The washery shall not be located in eco-sensitive zones areas.
- iii. The washery should have a closed system and zero discharge. The storm drainage should be treated in settling ponds before discharging into rivers/streams/water bodies.
- iv. A thick Green belt of about 50 m width should be developed surrounding the washery.
- v. A brief description of the plant alongwith a layout, the specific technology used and the source of coal should be provided.
- vi. The EIA-EMP Report should cover the impacts and management plan for the project of the capacity for which EC is sought and the impacts of specific activities, including the technology used and coal used, on the environment of the area (within 10km radius), and the environmental quality of air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts for the rated capacity. Cumulative impacts for air and water should be a part of EIA in case coal mine, TPP and other washeries are located within 10km radius. The EIA should also include mitigative measures needed to minimize adverse environmental impacts.
- vii. A Study Area Map of the core zone as well as the 10km area of buffer zone showing major industries/mines and other polluting sources should be submitted. These maps shall also indicate the migratory corridors of fauna, if any and areas of endangered fauna; plants of medicinal and economic importance; any ecologically sensitive areas within the 10 km buffer zone; the shortest distance from the National Park/WL Sanctuary Tiger Reserve, etc. alongwith the comments of the Chief Wildlife Warden of the State Govt.
- viii. Data of one-season (non-monsoon) primary- base-line data on environmental quality of air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub> and NO<sub>x</sub>, noise, water (surface and groundwater), soil be submitted.
- ix. The wet washery should generally utilize mine water only. In case mine water is not available, the option of storage of rain water and its use should be examined. Use of surface water and ground water should be avoided.
- x. Detailed water balance should be provided. The break-up of water requirement as per different activities in the mining operations vis-a-vis washery should be given. If the source of water is from surface water and/or ground water, the same may be justified besides obtaining approval of the Competent Authority for its drawl.
- xi. The entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, if any, and their impacts on air quality should be shown in a flow chart with specific points where fugitive emissions can arise and specific pollution control/mitigative measures proposed to be put in place. The washed coal and rejects should be transport by train as far as possible. Road transport of washed coal and rejects should generally be avoided. In case, the TPP is within 10km radius, it should be through conveyer belt. If transport by rail is not feasible because of the topography of the area, the option for transport by road be examined in detail and its impacts along with the mitigation measures should be clearly brought out in EIA/EMP report.
- xii. Details of various facilities proposed to be provided in terms of parking, rest areas, canteen etc. to the personnel involved in mineral transportation, workshop and effluents/pollution load from these activities should be provided.
- xiii. Impacts of CHP, if any, on air and water quality should also be spelt out alongwith



- Action Plan.
- xiv. O.M. no. J-II0I3/25/2014-IA.I dated 11<sup>th</sup> August, 2014 to be followed with regard to CSR activities.
  - xv. Details of Public Hearing, Notice(s) issued in newspapers, proceedings/minutes of Public Hearing, points raised by the general public and response/commitments made by the proponent along with the Action Plan and budgetary provisions be submitted in tabular form. If the Public Hearing is in the regional language, an authenticated English translation of the same should be provided. Status of any litigations/ court cases filed/pending, if any, against the project should be mentioned in EIA.
  - xvi. Analysis of samples indicating the following be submitted:
    - Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc).
    - Characteristics and quantum of coal after washing.
    - Characteristics and quantum of coal rejects.
  - xvii. Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
  - xviii. Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.
  - xix. Corporate Environment Responsibility:
    - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
    - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
    - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
    - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
  - xx. A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.
  - xxi. Permission of drawl of water shall be pre-requisite for consideration of EC.
  - xxii. Wastewater /effluent should conform to the effluent standards as prescribed under Environment (Protection) Act, 1986
  - xxiii. Details of washed coal, middling and rejects along with the MoU with the end-users should be submitted.

ANNEXURE -4

**GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC**

- (i) An EIA-EMP Report shall be prepared for..... MTPA rated capacity in an ML/project area of.....ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
- (ii) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.
- (iii) A toposheet specifying locations of the State, District and Project site should be provided.
- (iv) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (v) Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
- (vi) Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- (vii) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- (viii) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.
- (ix) In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and flood control Department of the concerned state.
- (x) Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map along with the status of the approval of the competent authority.
- (xi) Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

LANDUSE DETAILS FOR OPENCAST PROJECT should be given as per the following table:

Sl. No.	Landuse	Within ML area (ha)	Outside ML area (ha)	Total
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1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			
	TOTAL			

- (xii) Break-up of lease/project area as per mining plan should be provided.
- (xiii) Impact of changes in the land use due to the project if the land is predominantly agricultural land/forestland/grazing land, should be provided.
- (xiii) One-season (other than monsoon) primary baseline data on environmental quality - air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub> and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xiv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xv) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (xvi) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (xvii) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xviii) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining

operations thereon.

- (xix) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- (xx) Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users in the upstream and downstream of the project site. should be given.
- (xxi) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- (xxii) Impact of blasting, noise and vibrations should be given.
- (xxiii) Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- (xxiv) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xxiv) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xxv) Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28° angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
- (xxvi) Efforts be made for maximising progressive internal dumping of O.B., sequential mining , external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.
- (xxvii) Impact of change in land use due to mining operations and plan for restoration of the mined area to its original land use should be provided.
- (xxviii) Progressive Green belt and ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEFCC given below) and selection of species (native) based on original survey/land-use should be given.

Table 1: Stage-wise Landuse and Reclamation Area (ha)

S.N.	Land use Category	Present (1 <sup>st</sup> Year)	5 <sup>th</sup> Year	10 <sup>th</sup> Year	20 <sup>th</sup> Year	24 <sup>th</sup> Year (end of mine life)*
1.	Backfilled Area(Reclaimed with plantation)					
2.	Excavated Area (not reclaimed)/void					
3.	External OB dump Reclaimed with plantation)					
4.	Reclaimed Top					

	soil dump					
5.	Green Built Area					
6.	Undisturbed area (brought under plantation)					
7.	Roads (avenue plantation)					
8.	Area around buildings and Infrastructure					
	TOTAL					

\* As a representative example

Table 2 : Stage Wise Cumulative Plantation

S.N.	YEAR*	Green Belt	External Dump	Backfilled Area	Others(Undisturbed Area/etc)	TOTAL
1.	1 <sup>st</sup> year					
2.	3 <sup>rd</sup> year					
3.	5 <sup>th</sup> year					
4.	10 <sup>th</sup> year					
5.	15 <sup>th</sup> year					
6.	20 <sup>th</sup> year					
7.	25 <sup>th</sup> year					
8.	30 <sup>th</sup> year					
9.	34 <sup>th</sup> year(end of mine life)					
10.	34- 37 <sup>th</sup> Year (Post-mining)					

\* As a representative example

(xxix) Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.

Table 3: Post-Mining Landuse Pattern of ML/Project Area (ha)

S.N.	Land use during Mining	Land Use (ha)				TOTAL
		Plantation	Water Body	Public Use	Undisturbed	
1.	External OB Dump					
2.	Top soil Dump					
3.	Excavation					
4.	Roads					
5.	Built up area					

6.	Green Belt					
7.	Undisturbed Area					
	TOTAL					110

- (xxx) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be done.
- (xxxii) Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
- (xxxiii) Risk Assessment and Disaster Preparedness and Management Plan should be provided.
- (xxxiiii) Integration of the Env. Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.
- (xxxv) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxxvi) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxxvii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxxviii) Corporate Environment Responsibility:
- The Company must have a well laid down Environment Policy approved by the Board of Directors.
  - The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
  - The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
  - To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- (xxxix) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- (xl) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
- (xli) Status of any litigations/ court cases filed/pending on the project should be provided.
- (xlii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- (xliii) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever

applicable.

FOREST CLEARANCE: Details on the Forest Clearance should be given as per the format given:

TOTAL ML/PROJECT AREA (ha)	TOTAL FORESTLAND (ha)	Date of FC	Extent of forestland	Balance area for which FC is yet to be obtained	Status of appl for. diversion of forestland
		If more than , provide details of each FC			

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### GENERIC TORs FOR AN UNDERGROUND COALMINE PROJECT

- (i) An EIA-EMP Report shall be prepared for..... MTPA rated capacity in an ML/project area of.....ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
- (ii) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.
- (iii) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (iv) Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- (v) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- (vi) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.
- (vii) Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area should be provided as per the tables given below. Impacts of project, if any on the land use, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations should be analyzed. Extent of area under surface rights and under mining rights should be specified.

S.N	ML/Project Land use	Area under Surface Rights(ha)	Area Under Mining Rights (ha)	Area under Both (ha)
1.	Agricultural land			
2.	Forest Land			
3.	Grazing Land			
4.	Settlements			
5.	Others (specify)			



### Area under Surface Rights

S.N.	Details	Area (ha)
1.	Buildings	
2.	Infrastructure	
3.	Roads	
4.	Others (specify)	
	TOTAL	

- (viii) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (ix) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (x) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xi) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xii) One-season (other than monsoon) primary baseline data on environmental quality - air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub> and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xiii) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xiv) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and

measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.

- (xv) Study on subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
- (xvi) Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
- (xvii) Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
- (xviii) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xix) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xx) Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
- (xxi) The number and efficiency of mobile/static water sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
- (xxii) Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
- (xxiii) Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
- (xxiv) Greenbelt development should be undertaken particularly around the transport route and CHP. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
- (xxv) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxvi) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxvii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxviii) Corporate Environment Responsibility:

- a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
- b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
- d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

(xxix) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

(xxx) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.

(xxxi) Status of any litigations/ court cases filed/pending on the project should be provided.

(xxxii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.

(xxxiii) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

Details on the Forest Clearance should be given as per the format given:

Total ML /Project Area (ha)	Total Forest Land (ha)	Date of FC	Extent of Forest Land	Balance area for which FC is yet to be obtained	Status of appl. For diversion of forest land
		If more than one provide details of each FC			

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**GENERIC TORs FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT**

- (i) An EIA-EMP Report would be prepared for a combined peak capacity of .....MTPA for OC-cum-UG project which consists of .... MTPA in an ML/project area of ..... ha for OC and .... MTPA for UG in an ML/project area of ..... ha based on the generic structure specified in Appendix III of the EIA Notification 2006.
- (ii) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.
- (iii) The ToRs prescribed for both opencast and underground mining are applicable for opencast – cum-underground mining.

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05/08/2016

[https://mail.gov.in/iwc\\_static/layout/shell.html?lang=en&3.0.1.2.0\\_15121607](https://mail.gov.in/iwc_static/layout/shell.html?lang=en&3.0.1.2.0_15121607)

Subject: **approved minutes**

To: SK Srivastava EAC <sksmree@yahoo.co.in>, Srivastava Additional Director <sk.smree66@nic.in>, Purushottam Ramdas Sakhare <sakhare.pr@nic.in>  
Cc: "N. K. Verma" <nawalkishor.verma11@gmail.com>, Gurbax Singh Dang <gurbax49@gmail.com>, Prof CR Babu EAC <crbabu26@gmail.com>, "J.L Mehta" <jlmehta06@gmail.com>, Crb26 <crb26@hotmail.com>, Arun Bansal <bansalka@yahoo.in>, "DHAR T. K." <arnil2001@yahoo.co.in>

Date: 08/05/16 12:04 AM

From: Anil Kumar <anilk1953@yahoo.com>

Reply-To: Anil Kumar <anilk1953@yahoo.com>

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2016, 28-29 July my mail aprd MOM 61st EAC, 04.8.1... (114kB)

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for member secretary

approved minutes are attached

Anil Kumar

**61<sup>st</sup> EAC (THERMAL & COAL MINING PROJECTS) MEETING  
SCHEDULED FOR 28<sup>th</sup> – 29<sup>th</sup> July, 2016.**

**AGENDA**

**Venue: Indus Conference Hall, Ground Floor, Jal Wing, Indira Paryavaran Bhawan,  
Jorbagh, New Delhi-110003.**

**PI. check the MoEF website: <http://environmentclearance.nic.in/Report/Default3.aspx>**

**Important Note:**

- i. Please send the information as per Annexure 1 by E-mail in word format and also a signed & scanned copy, to the Member-Secretary at [sk.smree66@nic.in](mailto:sk.smree66@nic.in) at least one week prior to the EAC meeting.**
- ii. Please send hard copies of the documents indicating agenda items to all the EAC members, at least one week prior to the meeting and ensure the receipt of same.**
- iii. Non receipt of the project will lead to deferment of the project.**
- iv. Without this information, EAC has discretion to invite the proponent for the meeting.**
- v. Please also provide a hard copy of presentation to the EAC Members during the meeting.**
- vi. No consultant is permitted into the meeting who has no accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) as per the MoEF OM dated 2nd December, 2009.**

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**COAL MINING PROJECTS**

**Thursday 28<sup>th</sup> July , 2016**

- 61.1** Marki Mangli - III Opencast Coal Mining Project 0.21 MTPA of M/s B. S. Ispat Limited in an ML area of 275 ha located in District Yavatmal (Maharashtra) - **For consideration of EC**
- 61.2** Coal Washery of 2.5 MTPA of M/s. Hind Multi Services Pvt. Ltd in an area of 10.11 Ha located in District Bilaspur (Chhattisgarh) - **For consideration of EC**
- 61.3** Coal washery of 2.0 MTPA of **M/s** Prakruthik Enterprises Pvt. Limited. in an area of 41.20 ha located in District Angul (Odisha) - **For consideration of TOR**
- 61.4** Expansion of Coal Washery from 0.96 MTPA to 2.4 MTPA of M/s Bhatia Coal washeries Ltd in an Area of 7.2 ha located in Tehsil Rajura, District Chandrapur (Maharashtra) - **For consideration of TOR**
- 61.5** Flexibility in production capacity from Underground and Opencast Mine of Gare-Palma

IV/4 upto (0.6 MTPA each keeping overall limit upto 1.0 MTPA in an ML area of 701.512 ha) of M/s Hindalco Industries Limited located in, District Raigarh (Chhattisgarh)- (EC transferred on 16.04.2015) – **Change in Mining Sequence.**

**Friday 29<sup>th</sup> July, 2016**

**61.6** Expansion of Haldibari UG coal mining project from 0.42 MTPA to 0.66 MTPA of M/s South Eastern Coalfields Limited in an area of 390 ha in District Koreya, (Chhattisgarh) - **For consideration of EC**

**61.7** Kusmunda coal washery project of 25 MTPA of M/s South Eastern Coalfields Limited in area of 41.23 ha in District Korba (Chhattisgarh) - (EC based on TOR granted on 23.12.2015) -**For consideration of EC**

**61.8** Expansion of Krishnashila OCP coal mining project from 5MTPA to 6.25 MTPA of M/s Northern Coalfields Limited in an area of 851.78 ha located in Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) -**For further consideration of EC**

**61.9** Transfer of Environmental Clearance of Barjora (North) Block Coal Mining Project in District Bankura, West Bengal **from** M/s DVC Emta Coal Mines Ltd. **to** M/s West Bengal Power Development Corporation Limited. **(EC letter dated 13.03.2006)**

**61.10** Discussion under any other item:

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