

## **41<sup>st</sup> meeting of EAC for Thermal & Coal Mining Sector held on 13-14 December, 2018**

### **Minutes of the 41<sup>st</sup> meeting of the Expert Appraisal Committee (EAC) held during 13-14 December, 2018 for appraisal of coal mining projects at Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, New Delhi-3**

The 41<sup>st</sup> meeting of the Expert Appraisal Committee (EAC) for Coal mining projects was held during 13-14 December, 2018 in the Ministry of Environment, Forest & Climate Change at Indus Meeting Hall, Jal Wing, Ground Floor, Indira Paryavaran Bhawan, JorBagh Road, New Delhi to consider the proposals relating to coal mining sector. The following members were present:

|    |                         |   |                                |
|----|-------------------------|---|--------------------------------|
| 1. | Dr. Navin Chandra       | - | Chairman                       |
| 2. | Dr. N. P. Shukla        |   | Member                         |
| 3. | Dr. Sharachchandra Lele |   | Member                         |
| 4. | Dr. G.P. Kundargi       | - | Member                         |
| 5. | Shri N. Mohan Karnat    | - | Member                         |
| 6. | Dr. Jai Krishna Pandey  | - | Member                         |
| 7. | Shri N. S. Mondal       | - | Member (Representative of CEA) |
| 8. | Dr. R. K. Giri          | - | Member (Representative of IMD) |
| 9. | Shri S. K. Srivastava   | - | Member Secretary               |

#### **Confirmation of minutes**

There being no comments from any of the members of the Committee, minutes of the 40<sup>th</sup> meeting of the EAC held on 26<sup>th</sup> October, 2018 were confirmed in the presence of the members who had been present in the 40<sup>th</sup> meeting.

Details of the proposals considered during the meeting, deliberations made and the recommendations of the Committee, are explained in the respective agenda items as under:-

#### **Agenda No.41.1**

**Expansion of Penganga Opencast Coal Mining Project from 4.50 MTPA to 6.3 MTPA capacity in an area of 763.06 ha of M/s Western Coalfields Ltd located in village Wirur, Tehsil Korpana, District Chandrapur (Maharashtra) - For Environmental Clearance**

**[IA/MH/CMIN/86684/2018; F. No. J-11015/46/2009-IA-II(M)]**

**41.1.1** The proposal is for environmental clearance for expansion of Penganga Opencast Coal Mining Project from 4.50 MTPA to 6.30 MTPA capacity in an area of 763.06 ha of M/s Western Coalfields Ltd located in village Wirur, Tehsil Korpana, District Chandrapur (Maharashtra).

**41.1.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No 56M/1 and is bounded by the geographical coordinates ranging from 19°50'24" to 19°52'02" N and longitudes 79°06'56" E and 79°09'16"E.
- (ii) Coal linkage of the project is proposed for MahaGenco use and for various Consumers
- (iii) Joint venture cartel has not been formed.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation: Employment to total 670 nos. (Permanent Manpower- 460 nos., Contractual Manpower- 210 nos) persons will be provided from the project.

(vi) The project is reported to be beneficial in terms of bridging the gap (to the extent of the peak production capacity of the project) between demand and supply of non-coking coal for the power houses and other bulk consumers of western as well as southern part of the country.

(vii) Earlier, the environment clearance to the project was obtained under EIA Notification, 2006 vide Ministry's letter No. J-11015/46/2009 dated 31.01.2013 for 4.5 MTPA in mine lease area of 781.0 ha.

(viii) Total mining lease area is 763.06 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the WCL Board on Vide letter no WCL/BD/SECTT/BM-303/2018/429 dated 03-09-2018.

(ix) The land details during pre and post mining operations will be as under:

#### Pre mining

| S. No | Land Particulars                                   | Within mine lease area (ha) | Outside mine lease area (ha) | Total (ha)    |
|-------|--|-----------------------------|------------------------------|---------------|
| 1     | Tenancy/ Agricultural land                         | 596.95                      |                              | 596.95        |
| 2     | Govt. Land including Gaothan land of Wirur village | 100.84                      |                              | 100.84        |
| 3     | Forest land  | 46.04                       |                              | 46.04         |
| 4     | Land for resettlement of Wirur Village             |                             | 15.0                         | 15.0          |
| 5     | Tenancy land for construction of bridge            |                             | 4.23                         | 4.23          |
|       | <b>Total</b>                                       | <b>743.83</b>               | <b>19.23</b>                 | <b>763.06</b> |

#### During Mining

| S. No. | Particulars                 | Present Land use as on 01.04.18 (in ha) | Proposed Land use during mining (ha) |
|--------|-----------------------------|---|--------------------------------------|
| 1      | Total Excavation area       | 55.06                                   | 240.10                               |
| 2      | External OB Dump            | 34.04                                   | 253.60                               |
| 3      | Infrastructure & Bridge     | 8.30                                    | 26.23                                |
| 4      | Village rehabilitation      | -                                       | 15.00                                |
| 5      | Approach roads / Embankment | 46.80                                   | 95.30                                |
| 6      | Undisturbed Area            | 618.86                                  | 132.83                               |
|        | <b>Total</b>                | <b>763.06</b>                           | <b>763.06</b>                        |

#### Post mining

| S. No | Particulars                              | Plantation   | Void         | Public Use   | Undisturbed  | Total         |
|-------|--|--------------|--------------|--------------|--------------|---------------|
| 1     | External OB Dump                         | 253.60       | -            | -            | -            | 253.60        |
| 2     | Excavation                               | 53.00        | 187.10       | -            | -            | 240.10        |
| 3     | Embankment/ Approach Road                | 30.0         | -            | 65.30        | -            | 95.30         |
| 4     | Infrastructure                           | 12.0         | -            | 10.0         | -            | 22.00         |
| 4     | Bridge                                   | -            | -            | 4.23         | -            | 4.23          |
| 5     | Blasting Zone/Rationalisation Area       | 100.0        | -            | -            | 32.83        | 132.83        |
| 6     | Village Rehabilitation (Outside ML area) | -            | -            | 15.0         | -            | 15.00         |
|       | <b>Total</b>                             | <b>448.6</b> | <b>187.1</b> | <b>94.53</b> | <b>32.83</b> | <b>763.06</b> |

(x) Total geological reserve reported in the mine lease area is 54.898 MT with 48.95 MT mineable reserve. Out of total mineable reserve of 48.95 MT, 44.06 MT are available for extraction. Percent of extraction is 90.0 %.

(xi) One composite seam with thickness ranging from 17.50-20.50 m are workable. Grade of coal is G-10, stripping ratio 1:3.67, while gradient is 1 in 7.5 to 1 in 14.

(xii) Method of mining operations envisages by Opencast with Surface miner for coal production and shovel dumper Combination for overburden removal.

(xiii) Life of mine is 7 Years (remaining from 2018-19).

(xiv) The project has two nos. external OB dumps in an area of 253.60 ha with 90 m height and 110.50 Mm<sup>3</sup> of OB. The OB from the current mining operations shall be backfilled from 1st year onwards. One no. internal OB in an area of 53.0 ha with 53.27 Mm<sup>3</sup> of OB is envisaged in the project.

(xv) Total quarry area is 240.10 ha out of which backfilling will be done in 53.0 ha while final mine void will be created in an area of 187.10 ha with a depth of 170.0 m. Backfilled quarry area of 53.0 ha shall be reclaimed with plantation. Final mine void will be converted into water body.

(xvi) Transportation of coal has been proposed by dumpers in mine pit head, from surface to siding by tippers/dumpers and at sidings by pay loaders.

(xvii) Reclamation Plan/afforestation plan in an area of 448.60 ha, comprising of 253.60 ha of external dump, 53.0 ha of internal dump and 142.0 ha of green belt.

(xviii) Total 46.04 ha of forest land has been reported to be involved in the project for which stage-I forest clearance has been obtained vide Ministry's letter dated 18<sup>th</sup> May, 2018. However in accordance to the directions of FAC, delineation of entire forest land has been initiated to confirm the actual forest area involved.

(xix) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.

(xx) The ground water level has been reported to be varying between 2.60 m to 15.70 m during pre-monsoon and between 2.95 m to 9.85 m during post-monsoon (core zone). Total water requirement for the project is 1430 KLD.

(xxi) Application for obtaining the approval of the Central Ground Water Authority for withdrawal of groundwater from CGWA has been applied vide 21-4/320/MH/MIN/2016 on 22/04/2016.

(xxii) Public hearing for the project of 4.50 MTPA capacity in an area of 781.0 ha was conducted on 3<sup>rd</sup> March, 2012 at Swami Vivekananda Vidyalyaya, Village Gadeganon (Wirur), Tahsil Korpana, District Chandrapur. Major issues raised in the public hearing include:

- (a) Rate of Land acquired
- (b) Employment of PAPs or their nominees
- (c) Rehabilitation of Wirur Village
- (d) Work contract to co-operative societies of local persons
- (e) Pollution in nearby villages due to coal mine
- (f) Nuisance caused by transportation activities
- (g) Tree plantation and control of pollution
- (h) Training to be provided to villagers under skill up gradation programme.
- (i) Impact on crops due to pollution

All the issues have been duly addressed and the compliance report has been presented before the committee.

(xxiii) Consent to Operate for the existing capacity was obtained from the MPCB and valid till 31<sup>st</sup> March, 2022.

(xxiv) Penganga River is flowing along the boundary of Penganga OC mine in North-west. A seasonal nallah flowing through the ML area of Penganga OC is proposed to be diverted along the mine boundary for 4.80 km of length. Necessary approval from CDO Nasik has been obtained.

(xxv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to MPCB and also to MoEF&CC along with half yearly EC

compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits.

(xxvi) No court cases, violation cases are pending against the project of the PP pertaining to environment.

(xxvii) The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the year 2015-16 onwards. No excess production of coal from the sanctioned capacity has been realized. The coal production, realized from the project is as under:

| <b>Year</b> | <b>EC sanctioned capacity (MTPA)</b> | <b>Actual production (MTPA)</b> | <b>Excess production beyond the EC sanctioned capacity</b> |
|-------------|--------------------------------------|---------------------------------|--|
| 2015-16     | 4.50                                 | 1.05                            | Nil  |
| 2016-17     | 4.50                                 | 2.70                            | Nil  |
| 2017-18     | 4.50                                 | 3.70                            | Nil  |

(xxviii) The project involves 404 project affected families. R&R of the PAPs will be done as per extent R&R policies.

(xxix) Total cost of the project is Rs. 441.82 crore (capital). Cost of production is Rs.934.45 /- per tonne., CSR cost is Rs 2 per tonne, R&R cost is Rs 41.887 crores. Environment Management Cost is Rs. 69.16 lakhs.

(xxx) Consent to operate (CTO) was obtained from the Maharashtra Pollution Control Board and is valid till 31.03.2022.

#### **41.1.3 During deliberations, the EAC noted the following:**

The proposal is for environmental clearance to the expansion of Penganga Opencast Coal Mining Project from 4.50 MTPA to 6.30 MTPA capacity of M/s Western Coalfields Ltd in an area of 763.06 ha located in village Wirur, Tehsil Korpana, District Chandrapur (Maharashtra).

Project involves 46.04 ha of forest land. Stage-I forest clearance for diversion of forest land for non-forestry use has been obtained vide MoEF&CC's letter dated 18<sup>th</sup> May, 2018.

Mining Plan for the project, including Progressive Mine Closure Plan, has been approved by the WCL Board on 3<sup>rd</sup> September, 2018.

Earlier, the project for its capacity of 4.5 MTPA in an area of 781 ha was granted environment clearance by the Ministry vide letter dated 31<sup>st</sup> January, 2013 based on public hearing conducted by the State Pollution Control Board on 3<sup>rd</sup> March, 2012.

The Regional Office of the Ministry at Nagpur has conducted site inspection on 25<sup>th</sup> September, 2018 to monitor the status of compliance of conditions stipulated in the environmental clearance dated 31<sup>st</sup> January, 2013 and forwarded their report vide letter dated 26<sup>th</sup> November, 2018. The same was found to be satisfactory.

The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations.

Consent to Operate for the existing capacity has been obtained from the Maharashtra State Pollution Control Board vide their letter dated 7<sup>th</sup> April, 2018 and the same is valid till 31<sup>st</sup> March, 2022.

**41.1.4** *The Committee, after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of environmental clearance to the expansion of Penganga Opencast Coal Mining Project from 4.50 MTPA to 6.30 MTPA capacity of M/s Western Coalfields Ltd in an area of 763.06 ha located in village Wirur, Tehsil Korpana, District Chandrapur (Maharashtra) for a period of one year, subject to compliance of terms and conditions as applicable, and the additional conditions as under:-*

- The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31<sup>st</sup> December, 2019.*
- The project proponent shall obtain Consent to establish from the State Pollution Control Boards of Chhattisgarh for the proposed peak capacity of 6.30 MTPA prior to commencement of the increased production.*
- Transportation of coal from face to coal heap shall be carried out by tippers. Further, the coal transportation from coal heap to Coal Handling Plant shall be carried out through covered trucks.*
- To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.*
- Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.*
- The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 6.30 MTPA.*
- Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- Persons of nearby villages shall be given training on livelihood and skill development to make them employable.*
- To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.*
- Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.*
- Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.*
- A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.*
- In case of additional forest land, if any, after reconciliation/delineation, approval under the Forest (Conservation) Act, 1980 for its diversion for non-forestry use shall be obtained.*

#### **Agenda No.41.2**

**Umrer OC Expansion from 3.50 MTPA to 4.90 MTPA in an ML area of 944.65 ha. of M/s Western Coalfields Limited, located in Village Kanwa, Tehsil Umrer, District Nagpur (Maharashtra) - For Environmental Clearance**

**[IA/MH/CMIN/75384/2018; F.No.J-11015/151/2014-IA.II(M)]**

**41.2.1** The proposal is for grant of environmental clearance to the project for expansion of Umrer OC Coal Mine for 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Ltd located in village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra).

**41.2.2** Facts of the proposal, as ascertained from the proposal documents and revealed from the discussions held during the meeting are given as under:

(i) The proposal is for grant of environment clearance for expansion of Umrer OC Project from 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Limited, located in Village Kanwa, Tehsil Umrer, District Nagpur (Maharashtra).

(ii) Earlier, Umrer OC expansion project was accorded environment clearance by the Ministry vide letter dated 20<sup>th</sup> May, 2005 for production capacity of 3.50 MTPA within mine lease area of 944.65 ha. Now, the PP has proposed to increase production by 40 % i.e. 1.4 MTPA applied from 3.5 MTPA to 4.9 MTPA.

(iii) The project area is covered in Survey of India Topo Sheet No.55 P/05 with geographical coordinates ranging from 20°50'56" - 20°52'58"N and 79°15'55"-79°18'9" E. Mine falls in Umrer block of Umrer Coalfields in Nagpur district. The mine is situated at 45 K.M. South–East of Nagpur and easily approachable by all Maharashtra State Highway No. 9. Mine is connected by a broad gauge railway siding to Butibori Railway Station in Nagpur- Wardha Section of Central Railway.

(iv) Coal linkage of the Umrer OC Project mainly lies with Thermal Power Plants of MAHAGENCO. In addition to this, coal from the mine will be provided to other miscellaneous consumers.

(v) No joint venture cartel has been formed to operate the mine. Umrer OC Expansion Mine Project has been proposed to be operated solely by the M/s WCL.

(vi) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.

(vii) With regards to employment generation, it is mentioned that existing manpower engaged in the project is reported to be 1,036 persons.

(viii) The project is reported to be beneficial to bridge the gap between demand and supply of non-coking coal for the power houses and other bulk consumers of western region as well as southern part of the country.

(ix) Land use details during pre and post mining operations will be as under:

**Pre mining**

| S. No | Particulars                              | Existing land use as on 1 <sup>st</sup> April,2018 (ha) | Land use during mining (ha) |
|-------|--|---|-----------------------------|
| 1     | Quarry area                              | 319.60  | 362.00                      |
| 2     | External OB Dump                         | 139.52*   | 139.52*                     |
| 3     | Infrastructure including road and colony | 227.69  | 227.69                      |
| 4     | Blasting Zone and Rationalization        | 257.84  | 215.44                      |
|       | Total                                    | 944.65  | 944.65                      |

\*The area includes 32.88 ha External Dump of Makardhokra-II OC also as recorded in EC granted to Makardhokra-II OC dated 10<sup>th</sup> February, 2009.

**Post mining:**

| S. No. | Particulars of activities | Land use (ha) |            |            |             |        |
|--------|---------------------------|---------------|------------|------------|-------------|--------|
|        |                           | Plantation    | Water Body | Public use | Undisturbed | Total  |
| 1      | External OB Dump          | 139.52        | -          | -          | -           | 139.52 |
| 2      | Top soil dump             | -             | -          | -          | -           | -      |
| 3      | Excavation                | 150.0         | 95.52      | -          | 116.48*     | 362.00 |

|   |   |        |       |   |        |        |
|---|---|--------|-------|---|--------|--------|
| 4 | Built up area including Road & Township | 20.0   | -     | - | 207.69 | 227.69 |
| 5 | Green Belt                              | -      | -     | - | -      | -      |
| 6 | Undisturbed Area                        | 88.36  | -     | - | 127.08 | 215.44 |
|   | Total                                   | 397.88 | 95.52 | - | 451.25 | 944.65 |

116.48\* land will be technically reclaimed and stabilized.

(x) Total geological reserve reported in the mine lease area is 11.68 MT and entire geological reserve available in the mine lease is extractable. Therefore, extraction percentage is 100%.

(xi) Mining Plan for a production capacity of 4.90 MTPA within the existing mine lease area of 944.65 ha has been approved by WCL Board in its 300<sup>th</sup> meeting held on 24<sup>th</sup> May, 2018.

(xii) Application for obtaining the approval of the Central Ground Water Authority for dewatering of groundwater has been submitted on 13th June, 2016. Updated status of the same has not been provided by the PP.

(xiii) Amb river flow through the project area. It has been diverted from southern part of the quarry to northern part of quarry for a length of 2.4 km. Availability of ground water has been reported to be varying between 2.2 m – 10.4 m during pre-monsoon season and between 3.35 m to 10.2 m during post-monsoon season. Total water requirement for the project has been reported to be 1126 m per day.

(xiv) Geo-mining parameters of the mine are given as under:

| S. No | Particulars                                   | Total quarry      |
|-------|---|-------------------|
| 1     | Area of the Quarry                            |                   |
|       | a) On floor (ha)                              | 211.83            |
|       | b) On surface (ha)                            | 319.6             |
| 2     | Depth (m)                                     |                   |
|       | a) Initial                                    | 26                |
|       | b) Final                                      | 145               |
| 3     | Average gradient of Seam                      | 1 in 2 to 1 in 12 |
| 4     | Average thickness of seam (m)                 |                   |
|       | Seam II & I                                   | 17                |
|       | Seam III                                      | 5.5               |
|       | Seam IV                                       | 7.5               |
| 5     | Average Strike length (m)                     | 2800              |
| 6     | Width on surface (m) (Dip Rise)               | 1600              |
| 7     | Width on floor (m) (Dip Rise)                 | 600               |
| 8     | Coal Quality                                  | G-8 / G-9         |
| 9     | Balance Mineable reserves (Mt) as on 1.4.2018 | 11.68             |
| 10    | Balance OB (Cum) as on 1.4.2018               | 16.97             |
| 11    | Average S.R. m <sup>3</sup> /t.               | 1.453             |

(xv) Method of mining envisages opencast with shovel-dumper combination.

(xvi) Life of mine is 2 years at normative capacity of 4.9 MTPA.

(xvii) The project has 5 external OB dumps in an area of 106.64 ha with 60 m height and 42.213 Mm<sup>3</sup> of OB. Additional area of 32.88 ha from Makardhokra-II OC also included in the Umrer OC, thereby total no of external OBs increased to 6 with area of 139.52 ha. One internal OB in an area of 266.48 ha with 165.97 Mm<sup>3</sup> of OB. The PP has mentioned that out of 266.48 ha, 150 ha will be biologically reclaimed and remaining 116.48 ha will be technically reclaimed.

(xviii) Total quarry area is 362.0 ha, out of which, 266.48 ha would be backfilled while final mine void will be created in an area of 95.52 ha with 145 m depth which will be converted into a water body.

(xix) No forest land is reported to be involved in the project.

(xx) Afforestation plan over a total area of 397.88 ha has been proposed to be implemented by the end of mining operations with density of 2500 plants per ha.

(xxi) Transportation of coal in mine pit head has been proposed by dumpers, surface to sidings by tippers at siding by Pay loader.

(xxii) The project does not involve project affected families.

(xxiii) Total cost of the project is Rs. 186.65 crores, cost of production is Rs. 1065.48 per tonne, CSR cost is Rs. 2 per tonne, Environment Management Cost is Rs. 2.76 crores. The PP has reported no court cases, violation cases are pending against the project of the PP.

(xxiv) Public hearing was conducted on 23<sup>rd</sup> September, 2004 for 944.65 ha land. The issues raised during the Public Hearing have been duly addressed. Present status of compliance against issues raised during public hearing held on 23<sup>rd</sup> September, 2004 has been submitted.

(xxv) The Regional Office (WCZ), Nagpur conducted site inspection of the area in February, 2018 to assess the status of compliance of conditions, stipulated in the environment clearance dated 20<sup>th</sup> May, 2005. The Regional Office, vide letter no. 3-16/2015/3202 dated 7<sup>th</sup> February, 2018 submitted inspection report along with their observations. The action taken report has been submitted by the PP to RO, MoEF& CC, Nagpur on 2<sup>nd</sup> July, 2018

**41.2.3** Earlier, the proposal for re-validation of existing environmental clearance dated 20<sup>th</sup> May, 2005 in terms of the Ministry's Notification dated 6<sup>th</sup> April, 2018, was considered by the EAC in its meetings held on 24<sup>th</sup> July, 2018 & 31<sup>st</sup> August, 2018. During the meetings, the EAC desired/insisted for the information as under:-

(i) Public notice to be issued in leading newspapers (one national and two local) for information of the stakeholders about commencement of the project and present coal mining operations of capacity 3.50 MTPA in mine lease area of 944.65 ha, inviting comments and their redressal.

(ii) Valid Mining Plan and the Mine Closure Plan duly approved by the competent authority,

(iii) Compliance status of the conditions stipulated in the environmental clearance dated 20<sup>th</sup> May, 2005 from the Regional Office at Nagpur,

(iv) Consent to operate from the State Pollution Control Board for the present mining operations,

(v) Redressal of issues raised during the last public hearing conducted by the SPCB on 23<sup>rd</sup> September, 2004, along with the R&R details duly certified by the State Government,

(vi) Details of court cases and the compliance status

Subsequently, after receipt of the information from the project proponent, as desired by the EAC, the proposal was considered by the EAC in its meeting held on 26<sup>th</sup> October 2018 and the EAC recommended for submission of proposal for ToR after revalidation of the earlier EC by the Ministry.

**41.2.4** During deliberations, the EAC noted the following:

The proposal is for revalidation of the environmental clearance dated 20<sup>th</sup> May, 2005 as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018, and grant of environmental clearance to the project for expansion of Umrer Opencast Coal Mine from 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Ltd located in village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra) under the provisions contained in para 7(ii) of the EIA Notification, 2006, without any fresh ToR and exemption from public hearing in terms of the Ministry's OM dated 15<sup>th</sup> September, 2017.

There is no forest land involved in the project.

Mining Plan for the increased coal production capacity of 4.90 MTPA within the lease area of 944.65 ha was approved by the Board of M/s Western Coalfields Ltd in its meeting held on 24<sup>th</sup> May, 2018. Mine Closure Plan is an integral part of the approved Mining Plan.

Earlier, the Environmental Clearance to Umrer OC coal mine for its expansion up to 3.5 MTPA in a total area of 944.65 ha, was accorded by the Ministry vide letter dated 20<sup>th</sup> May, 2005 based on public hearing conducted on 23<sup>rd</sup> September, 2004. The Regional Office (WCZ) of the Ministry at Nagpur has carried out site inspection in February, 2018 and submitted its report on updated status of compliance of EC conditions vide letter dated 7<sup>th</sup> February, 2018. The action taken report has been submitted by the PP to the Ministry's Regional Office at Nagpur on 2<sup>nd</sup> July, 2018.

The proposal for re-validation of environmental clearance in accordance with the Ministry's Notification dated 6<sup>th</sup> April, 2018 was considered by the EAC in its meetings held on 24<sup>th</sup> July, 2018, 31<sup>st</sup> August, 2018 & 26<sup>th</sup> October, 2018. As per observations of the EAC, public Notice for information of the stakeholders about present coal mining operations of capacity 3.50 MTPA in mine lease area of 944.65 ha, was issued on 7<sup>th</sup> August, 2018 inviting comments within one month. As informed, no comments/suggestions were received within the prescribed time frame. Also, all other requirements insisted by the EAC for revalidation of the EC were observed to be complied with.

The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations.

Renewal of Consent to operate for the existing capacity of 3.50 MTPA has been obtained from the SPCB and is valid up to 31<sup>st</sup> March, 2021.

**41.2.5** *The EAC, after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of environmental clearance to the expansion of Umrer Opencast Coal Mining Project from 3.50 to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Limited located at village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra) for a period of one year, subject to revalidation of the existing environmental clearance dated 20<sup>th</sup> May, 2005 and further subject to compliance of terms and conditions as applicable, and the additional conditions as under:-*

- *The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31<sup>st</sup> December, 2019.*
- *The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 4.90 MTPA prior to commencement of the increased production.*
- *Transportation of coal from face to Coal heap shall be carried out by truck. Further, the coal transportation from Coal heap to Coal Handling Plant shall be carried out through covered trucks.*
- *To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.*
- *Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging*

*arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.*

- *The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 4.90 MTPA.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *Persons of nearby villages shall be given training on livelihood and skill development to make them employable.*
- *To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.*
- *Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.*
- *Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.*
- *A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.*

### **Agenda No.41.3**

**Expansion of Bina Extension Opencast Coal Mining Project from 7.5 MTPA to 10.5 MTPA in an area of 1798 ha of M/s Northern Coalfields Limited located in Districts Singrauli (Madhya Pradesh) and Sonbhadra (Uttar Pradesh) - For Environmental Clearance**

**[IA/UP/CMIN/81600/2018; F. No. J-11015/49/2011-IA.II(M)]**

**41.3.1** The proposal is for grant of EC to the expansion of Bina Extension Opencast Coal Mining Project from 7.50 MTPA to 10.50 MTPA in an area of 1798 ha of M/s Northern Coalfields Limited located in Tehsil Dudhi, District Sonbhadra (Uttar Pradesh).

**41.3.2** 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 project area is covered under Survey of India Topo Sheet No.63-L/12 and is bound by the geographical coordinates ranging from latitude 24°07'56.24" N – 24°10' 28.10" N and longitude 82°43' 16.72" E - 82°46' 57.49" E.
- (ii) Coal Linkage: Linkage of coal is with Anpara TPS (1630MW) &Obra TPS.
- (iii) Joint Venture: There is no joint venture.
- (iv) (1550MW) of M/s UPRVUNL, Renusagar BPC of M/s Hindalco Industries Ltd, etc . It also serves as a Basket Linkage mine to meet the overall demand on NCL.
- (v) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (vi) Employment generated / to be generated (Nos): 2011
- (vii) The project is reported to be beneficial in terms of supplying planned quantity of coal to pit head power stations of UPRVUNL in Singrauli Coalfields and power stations in Northern India through their own MGR system and other consumers by Public Railway system thus meeting the energy needs of the country. To meet the growing demand of coal, especially in power and steel sectors, the Ministry of Coal has given target to NCL for the year 2018-19 as 100.00 Mt which will increase to 110.00 Mt by the terminal year of XIII<sup>th</sup> Plan ( 1.0 BT plan) period i.e. in year 2019-20.
- (viii) Further, development of Bina (Extension) OCP has considerably improved the socio-economic status viz. physical infrastructure, social infrastructure, employment, contribution to ex-chequer, energy requirement, and green cover of the adjoining areas.

(ix) Earlier, the environmental clearance to the project was accorded vide letter no. J-11015/49/2011-IA.II (M) dated 6<sup>th</sup> August, 2014 for expansion of project from 6 MTPA to 7.50 MTPA in a total area of 1798 ha.

(x) The total project area is 1798 ha. Mining lease area as per approved Mining Plan is 1798 ha.

(xi) The land use detail during pre and post mining operations will be as under:

**Pre mining**

| S. No. | Land Use                  | Within ML area (Ha) | Outside ML area (Ha) | Total    |
|--------|---------------------------|---------------------|----------------------|----------|
| 1.     | Tenancy Land(Agricultural | 513.00              | NIL                  | 513.00   |
| 2.     | Forest Land               | 1087.825            | NIL                  | 1087.825 |
| 3.     | Wasteland                 | -                   | NIL                  | -        |
| 4.     | Grazing land              | -                   | NIL                  | -        |
| 5.     | Surface water bodies      | -                   | NIL                  | -        |
| 6.     | Settlements               | -                   | NIL                  | -        |
| 7.     | Others (Government land)  | 197.175             | NIL                  | 197.175  |
| Total  |                           | 1798.00             | NIL                  | 1798.00  |

**Post mining**

| S. No.       | Land Use   | Plantation (ha)   | Water body (ha) | Public Use (ha) | Undisturbed Land (ha) | Total Land (ha) |
|--------------|--|---|-----------------|-----------------|-----------------------|-----------------|
| 1            | External OB dump   | 50.40   | -               | -               | -                     | 50.40           |
| 2            | Top Soil Dump  | Top soil will be utilized for biological reclamation of OB dumps. |                 |                 |                       | Nil             |
| 3            | Excavation Area (backfilled and void)                                    | 663.00  | 151.00          | --              | -                     | 814.00          |
| 4            | Roads  | --  | --              | 20.00           | --                    | 20.00           |
| 5            | Build-up area (CHP, ETP, Workshop, Railway, colony, mineral storage etc) | 163.00  | --              | 267.00          | -                     | 430.00          |
| 6            | Green Belt   | 187.63  | -               | -               | -                     | 187.63          |
| 7            | Undisturbed Area   | -   | -               | -               | 295.97                | 295.97          |
| <b>Total</b> |  | <b>1064.03</b>  | <b>151.00</b>   | <b>287.00</b>   | <b>295.97</b>         | <b>1798.00</b>  |

(xii) The total geological reserve is 131.24 MT. The mineable reserve 123.94 MT, extractable reserve is 114.0248 MT. The percent of extraction would be 92.00 %.

(xiii) There are three coal seams with thickness ranging up to 22.25 m are workable. The average coal grade is G-10. The stripping ratio is 6.92 cum/tonne. The average Gradient is 2 to 3 degree.

(xiv) The Method of mining would be Opencast.

(xv) The balance life of mine is 6 Years from 2018-19.

(xvi) There is seven external OB dump with Quantity of 8.0 Mm<sup>3</sup> in an area of 50.4 ha with height of 60 meter above the surface level and two internal dumps with Quantity of 625.04 Mm<sup>3</sup> (Total estimated for the entire mine life) Mm<sup>3</sup> in an area of 663.00 Ha (Proposed for total mine life).

- (xvii) Total quarry area is 814 ha. Backfilled quarry area of 663 ha shall be reclaimed with plantation. A void of 151 ha with depth varying from 30 to 40 m will be created which is proposed to be converted into a water body
- (xviii) Transportation of coal has been proposed by rear dumpers in pit and from surface to siding by conveyor belt of Coal Handling Plant/Tippers and from siding to loading by automatic loading system through Silo.
- (xix) Reclamation Plan will be implemented in mine lease area, comprising of 50.40 ha of external dump, 814 ha of excavated area/backfilled area and 187.63 ha of green belt.
- (xx) The project involves 1087.825 ha of forest land, which includes 378.935 ha in the State of MP and 708.890 ha in UP. Stage-II forest clearance for total forest area of 400.545 ha (378.935 ha in MP and 21.610 ha in UP) has been obtained under the Forest (Conservation) Act, 1980 for diversion for non-forestry purposes. It has been informed that the remaining forest land of 687.280 ha was already acquired before the inception of the Forest (Conservation) Act, 1980, and thus not requiring any clearance for the same.
- (xxi) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xxii) The total estimated water requirement is 6890 m<sup>3</sup>/day. The level of ground water ranges from 5.6 m to 6.05 m (during pre-monsoon) and 3.9 m to 5.1 m (Post Monsoon) below ground level .
- (xxiii) The Last public hearing was held on 24<sup>th</sup> September, 2012 for UP side and on 18<sup>th</sup> September, 2012 for MP side. The issues raised during the public hearing included employment, compensation, controlled blasting, and general R&R issues etc.
- (xxiv) Consent to Operate for the Bina Extension Opencast Coal Mining Project with its production capacity of 7.50 MTPA has been obtained from the Uttar Pradesh Pollution Control Board vide letter nos: F98526 and F98527 dated 21<sup>st</sup> March, 2017 and from MP State Pollution Control Board, Bhopal vide letter dated 13<sup>th</sup> December, 2018 which is valid till 29<sup>th</sup> October 2019.
- (xxv) There is no river/nallah flowing adjacent to the proposed mine site.
- (xxvi) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to State Pollution Control Board and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling.
- (xxvii) Case No. 1798/2014 is pending at CJM court Sonbhadra - Relief from Allahabad High Court under section 482 to quash the proceedings was applied and order was passed to apply the objection/ discharge petition in the District Court, Sonbhadra vide order dated 26<sup>th</sup> August, 2014. A Discharge petition was filed on 20<sup>th</sup> September, 2014 at CJM Sonbhadra Court. The final decision is pending.
- (xxix) There is no R & R involved. There are no PAFs.
- (xxx) Total cost of the project is Rs, 535.96 crores. CSR cost is 2% of the average net profit of the company for the three immediate preceding financial years, R&R cost is NIL. Environment Management Cost is Rs. 23.0084 crores.
- (xxxi) Mining plan has been approved by the Board of M/s Northern Coalfields Limited on 31<sup>st</sup> August, 2018. Mine closure plan is an integral part of mining plan.
- (xxii) Total afforestation plan shall be implemented covering an area of 1064.03 ha at the end of mining. Green Belt over an area of 187.63 ha. Density of tree plantation 2500 trees/ ha of plants.
- (xxxiii) The Regional Office of the Ministry at Lucknow, vide their letter dated 5<sup>th</sup> January, 2018 has forwarded the monitoring report on compliance status of the conditions stipulated in the last EC dated 6<sup>th</sup> August, 2014. All conditions were found to be complied with and/or agreed to comply with.

**41.3.3** During deliberations, the EAC noted the following:

The proposal is for grant of EC to the expansion of Bina Extension Opencast Coal Mining Project from 7.5 MTPA to 10.5 MTPA in an area of 1798 ha of M/s Northern Coalfields Limited located in Districts Singrauli (Madhya Pradesh) and Sonbhadra (Uttar Pradesh).

The project involves 1087.825 ha of forest land, which includes 378.935 ha in the State of MP and 708.890 ha in UP. Stage-II forest clearance for total forest area of 400.545 ha (378.935 ha in MP and 21.610 ha in UP) has been obtained under the Forest (Conservation) Act, 1980 for diversion for non-forestry purposes. It has been informed that the remaining forest land of 687.280 ha was already acquired before the inception of the Forest (Conservation) Act, 1980, and thus not requiring any clearance for the same.

Mining Plan has been approved by the Board of M/s Northern Coalfields Limited on 31<sup>st</sup> August, 2018. Mine closure plan is an integral part of mining plan.

Earlier, the environmental clearance to the project was granted by the Ministry vide letter dated 6<sup>th</sup> August, 2014 for 7.50 MTPA in an area of 1798 ha based on public hearing conducted by the UP State Pollution Control Boards on 24<sup>th</sup> September, 2012 and by MP Pollution Control Board on 18<sup>th</sup> September, 2012.

The Regional Office of the Ministry at Lucknow, vide their letter dated 5<sup>th</sup> January, 2018, has forwarded the updated compliance status of the conditions stipulated in the last environment clearance dated 06<sup>th</sup> August 2014 and the same found to be satisfactory.

The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations.

Consent to Operate for the Bina Extension Opencast Coal Mining Project with its production capacity of 7.50 MTPA has been obtained from the Uttar Pradesh Pollution Control Board vide letter nos: F98526 and F98527 dated 21<sup>st</sup> March, 2017 and from MP State Pollution Control Board, Bhopal vide letter dated 13<sup>th</sup> December, 2018 which is valid till 29<sup>th</sup> October 2019.

**41.3.4** *The EAC, after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of environmental clearance to the expansion of Bina Extension Opencast Coal Mining Project from 7.5 to 9 MTPA of M/s Northern Coalfields Limited in an area of 1798 ha located in Districts Singrauli (Madhya Pradesh) and Sonbhadra (Uttar Pradesh) for a period of one year, under the provisions of the EIA Notification, 2006, subject to clarification regarding applicability of the Forest (Conservation) Act, 1980 for the forest land of 687.280 ha (reported to be acquired before 1980), and further subject to compliance of the terms & conditions and environmental safeguards mentioned below:*

- *The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31<sup>st</sup> December, 2019.*
- *The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed capacity of 9 MTPA prior to commencement of the increased production.*
- *Transportation of coal from face to Coal heap shall be carried out by truck. Further, the coal transportation from Coal heap to Coal Handling Plant shall be carried out through covered trucks.*
- *To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.*

- *Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.*
- *The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 9 MTPA.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *Persons of nearby villages shall be given training on livelihood and skill development to make them employable.*
- *To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.*
- *Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.*
- *Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.*
- *A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.*

#### **Agenda No.41.4**

**Kapurdi Lignite Coal Mining Project of 3.75 MTPA to 4.50 MTPA capacity in an area of 3223.511 ha of M/s Barmer Lignite Mining Company Limited located in villages Kapurdi, Rohili, Ishwarpura & Bothia, Tehsil & District Barmer (Rajasthan) - For amendment in Environmental clearance**

**[IA/RJ/CMIN/21183/2014; J-11015/17/2014-IA-II(M)]**

**41.4.1** The proposal is for amendment in environmental clearance dated 22<sup>nd</sup> September, 2014 granted by the Ministry for expansion of Kapurdi Lignite Coal Mining Project from 3.75 MTPA to 4.50 MTPA capacity in an area of 3223.511 ha of M/s Barmer Lignite Mining Company Limited located in villages Kapurdi, Rohili, Ishwarpura & Bothia, Tehsil & District Barmer (Rajasthan).

**41.4.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No 40-O/5 and is bounded by the geographical coordinates ranging from 25°54'30.6" to 25°58'42.6" N and longitudes 71°19'15.2" E to 71°22' 21" E.
- (ii) Coal linkage of the project is proposed for Exclusive use of Power generation in 1080 MW pit head power plant of Raj west Power Limited.
- (iii) Joint venture cartel has been formed – BLMCL is JV of RSMML (a Govt. of Rajasthan enterprise) and RWPL wherein RSMML hold 51% equity.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation, - Present man power is 1667. Project was already working with higher capacity of 7 MTPA up to March,2018. Same man power is continued as on date also therefore, proposed modification for 4.5 MTPA will not generate any additional employment.
- (vi) The project is reported to be beneficial in terms of development of various facilities such as medical, education, infrastructure etc and has created employment opportunities in direct

and indirect categories. It will also help to sustain the coal production till the end of life of proposed linked thermal power station.

(vii) Earlier, the environment clearance to the project was obtained under EIA Notification 2006 vide Ministry's letter No- J-11015/17/2014-IA.II(M) dated 22.09.2014 for 7.0 MTPA (for 4 years) in mine lease area of 3223.511 ha.

(viii) Total mining lease area as per block allotment is 3223.511ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MOC on 29.01.2014.

(ix) The land use detail during pre and post mining operations will be as under:

**Pre mining**

| S. No. | Land Use                  | Within ML Area (ha) | Outside ML Area (ha) | Total (ha)      |
|--------|---------------------------|---------------------|----------------------|-----------------|
| 1      | Agricultural Land         | 2804.2508           | 0                    | 2804.2508       |
| 2      | Forest Land               | 0                   | 0                    | 0               |
| 3      | Non Forest Govt. Land     | 399.6277            | 0                    | 399.6277        |
|        | <b>Total Project Area</b> | <b>3223.511</b>     | <b>0</b>             | <b>3223.511</b> |

**Post mining (ha)**

| S. No. | Description of Area                | Plantation     | Water Body    | Public Use  | Undisturbed   | Total          |
|--------|------------------------------------|----------------|---------------|-------------|---------------|----------------|
| 1      | Excavation                         | 1640.08        | 541.27        | 0.00        | 0.00          | 2181.35        |
| 2      | External Dump                      | 703.01         | 0.00          | 0.00        | 0.00          | 703.01         |
| 3      | Top soil Dump                      | 0.00           | 0.00          | 0.00        | 0.00          | 0.00           |
| 4      | Facilities including lignite stack | 0.00           | 0.00          | 5.00        | 0.00          | 5.00           |
| 5      | Road                               | 2.00           | 0.00          | 3.00        | 0.00          | 5.00           |
| 6      | LHP and conveyor                   | 10.00          | 0.00          | 0.00        | 0.00          | 10.00          |
| 7      | Settling pond / reservoir          | 10.00          | 0.00          | 0.00        | 0.00          | 10.00          |
| 8      | green belt                         | 96.66          | 0.00          | 0.00        | 0.00          | 96.66          |
| 9      | Undisturbed                        | 0.00           | 0.00          | 0.00        | 212.49        | 212.49         |
|        | <b>Total</b>                       | <b>2461.75</b> | <b>541.27</b> | <b>8.00</b> | <b>212.49</b> | <b>3223.51</b> |

(x) Total geological reserve reported in the mine lease area is 150.40 MT with 134.61 MT mineable reserves. Out of total mineable reserve of 134.61 MT, 129.79 MT are available for extraction. Percent of extraction is 86.3 %.

(xi) Three Lignite horizon with thickness ranging from 0.30 m to 6.0 m are workable. Grade of coal is 2692 Av. GCV, stripping ratio 12.48, while gradient is almost flat .

(xii) Method of mining operations envisaged by Open cast method

(xiii) Life of mine is 34 years.

(xiv) The project has 4 external OB dumps in an area of 703.01 ha with 60 m height and 319.061 Mm<sup>3</sup> of OB. Internal OB in an area of 1640.08 ha with 1289.82 Mm<sup>3</sup> of OB is envisaged in the project.

(xv) Total quarry area is 2181.35 ha out of which backfilling will be done in 1640.08 ha while final mine void will be created in an area of 541.27 ha with a depth of 70 m. Backfilled quarry area of 1640.08 ha shall be reclaimed with plantation. Final mine void will be converted in to pond.

(xvi) Transportation of coal has been proposed by dumper in mine. From pit head to power plant by covered conveyor belt.

(xvii) Reclamation Plan in an area of 2439.75 ha, comprising of 703.01 ha of external dump, 1640.08 ha of internal dump and 96.66 ha of green belt.

(xviii) No forest land is involved in the project.

- (xix) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xx) The ground water level has been reported to be varying between 80 m to 100 m during pre-monsoon and between 75 m to 100 m during post-monsoon. Total water requirement for the project is 2738 KLD.
- (xxi) NOC for Ground water withdrawal is obtained from CGWA vide Letter no. 21-4(450)/WR/CGWA/2010-201 & corrigendum no. 21-4(450)/WR/CGWA/ 2010-463.
- (xxii) Public hearing for the project of 3.75 to 7 MTPA capacity in an area of 3223.51 ha was conducted on 06.06.2014 at Shiv temple in Mairathonki Dhani village. Major issues raised in the public hearing have already been addressed.
- (xxiii) Renewed Consent to Operate for the existing capacity was obtained from the State PCB on 03.10.2017 and is valid till 02.10.2022.
- (xxiv) No River/nalla is flowing near the lease area.
- (xxv) Regular monitoring of ambient air quality is being carried out on weekly basis. The report is regularly being submitted to RSPCb, CPCB and MoEF&CC along with half yearly EC compliance report. The results of ambient air quality monitoring data were found within prescribed limits.
- (xxvi) No court cases, violation cases are pending against the project of the PP.
- (xxvii) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. The coal production from the mine was started from the year 2011 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations.
- (xxviii) Present proposal does not have any project affected families and accordingly, no R & R is involved in the project.
- (xxix) Total cost of the project is Rs 527 crores. Cost of production is Rs. 1112.35/- per tonne., Total CSR cost is Rs. 568.85 lacs till October except project under execution. AS PER ORDER OF Govt. of Rajasthan land cost paid was inclusive of R & R. Environment Management Cost is Rs. 938.7 lacs for 2017-18 and Rs. 6167.07 lacs since inception of the project.
- (xxx) Consent to operate (CTO) was obtained from the State Pollution Control Board on 3.10.2017 and is valid till 02.10.2022.

#### **41.4.3** During deliberations, the EAC noted the following:

The proposal is for amendment in environmental clearance dated 22<sup>nd</sup> September, 2014 granted by the Ministry to the project for expansion of Kapurdi Lignite Coal Mining Project from 3.75 MTPA to 7 MTPA capacity of M/s Barmer Lignite Mining Company Limited (BLMCL) for a period of 4 years (as per calendar programme), in an area of 3223.511 ha located in villages Kapurdi, Rohili, Ishwarpura & Bothia, Tehsil & District Barmer (Rajasthan). No forest land is involved in the project.

The amendment has been sought for capacity enhancement up to 4.5 MTPA beyond a period of 4 years, commensurate with the production from Jalipa OCP, to meet the total requirement of lignite 9 MTPA from both the OCPs for the thermal power plant.

Mining Plan, including Progressive Mine Closure Plan, for the project has been approved by the Ministry of Coal vide their letter dated 29<sup>th</sup> January, 2014.

The environment clearance to the project was granted by the Ministry for a period of 4 years (as per calendar programme) in view of the expected parallel production from Jalipa OCP of 6 MTPA (EC accorded on 29<sup>th</sup> April, 2010) to meet the total requirement of coal of 9 MTPA for Raj West Power Limited power plant of 1080 MW.

The project does not involve violation of the EIA Notification, 2006 and amendment issued thereto. The coal production from the mine was started from the year 2011 onwards. No excess production of coal from the mine has been reported.

Consent to Operate for the existing capacity of the project has been obtained from the State Pollution Control Board vide letter dated 3<sup>rd</sup> October, 2017, which is valid till 2<sup>nd</sup> October, 2022.

**41.4.4** *The EAC, after deliberations and in view of the calendar programme of excavation of Kapurdi Coal Mine, recommended for the proposed amendment in environment clearance dated 22<sup>nd</sup> September, 2014 for increase in lignite production capacity up to 4.5 MTPA for a period of 9 years, beyond 22<sup>nd</sup> September, 2018 (expiry of 4 years), subject to the terms and conditions remaining the same.*

**Agenda No.41.5**

**Expansion of Khairaha Underground Mine Project form 0.585 MTPA to 0.819 MTPA in an ML area 513.50 ha of M/s South Eastern Coalfields Limited located in District Shahdol (Madhya Pradesh) - For EC**

**[IA/MP/CMIN/75469/2018; F. No. J-11015/76/2016- IA.II(M)]**

**41.5.1** The proposal is for grant of EC to the expansion of Khairaha Underground Mine Project form 0.585 MTPA to 0.819 MTPA in an ML area of 472.065 ha of M/s South Eastern Coalfields Limited located in District Shahdol (Madhya Pradesh)

**41.5.2** 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 last EC issued for production capacity of 0.558 MTPA vide letter no. J-11015/72/2004-IA.II(M) dated. 28<sup>th</sup>, July 2005.
- (ii) The Latitude and Longitude of the project site are 23°08'08" to 23°10'23" North
- (iii) Longitude 81°26'48" to 81°28'16" East respectively. GSI Topo-sheet Number:64 E/8.
- (iv) Joint Venture: No Joint Venture
- (v) Coal Linkage : Thermal Power Stations
- (vi) Employment generated / to be generated: 529 No.
- (vii) Benefits of the project: This coal Mine will go a long way in fulfilling the demand nation's electricity and other coal based industries, apart from earning revenue for the government. Opportunity of employment for the project affected villagers and allied industries.
- (viii) The land usage of the project will be as follows:

**Present land use**

| S.N. | Land use                                  | Area(ha)       |
|------|---|----------------|
| 1.   | Agricultural Land                         | 424.785        |
| 2.   | Forest Land                               | 0              |
| 3.   | Waste Land                                | 25.699         |
| 4.   | Grazing Land                              | 0              |
| 5.   | Surface water bodies                      | 1.295          |
| 6.   | Settlements(Infra.& Road)                 | 10.239         |
| 7    | Settlements(Infra.& Road) outside ML area | 1.193          |
| 8    | Others (Govt. Land)                       | 8.854          |
|      | <b>TOTAL</b>                              | <b>472.065</b> |

**Pre mining**

| S.N. | LANDUSE | Within ML Area (ha) | Outside ML Area (ha) | TOTAL (ha) |
|------|---------|---------------------|----------------------|------------|
|------|---------|---------------------|----------------------|------------|

|    |                                    |                |              |                |
|----|------------------------------------|----------------|--------------|----------------|
| 1. | Agricultural Land                  | 424.785        | --           | 424.785        |
| 2. | Forest Land                        | --             | --           | --             |
| 3. | Waste Land                         | 25.699         | --           | 25.699         |
| 4. | Grazing Land                       | --             | --           | --             |
| 5. | Surface water bodies               | 1.295          | --           | 1.295          |
| 6. | Settlements(Infra.& approach road) | 10.239         | 1.193        | 11.432         |
| 7. | Others (Govt. Land)                | 8.854          | --           | 8.854          |
|    | <b>TOTAL</b>                       | <b>470.872</b> | <b>1.193</b> | <b>472.065</b> |

### Post mining

| S. No.       | Particulars        | UG Quarry Area (ha) | Safety zone (ha) | Infrastructure (ha) | R&R site (ha) | Land for Nala diversion (ha) | Total (ha)     |
|--------------|--------------------|---------------------|------------------|---------------------|---------------|------------------------------|----------------|
| 1.           | Afforested Area    | --                  | 6.000            | 2.000               | --            | --                           | 8.000          |
| 2.           | Cultivable Land    | 453.338             | --               | --                  | --            | --                           | 453.338        |
| 3.           | Water body         | --                  | --               | --                  | --            | --                           | --             |
| 4.           | Other Void area    | --                  | --               | --                  | --            | --                           | --             |
| 5.           | Other water bodies | 1.295               | --               | --                  | --            | --                           | 1.295          |
| 6.           | Built-Up Area      | --                  | --               | 9.432               | --            | --                           | 9.432          |
| <b>Total</b> |                    | <b>454.633</b>      | <b>6.000</b>     | <b>11.432</b>       | <b>--</b>     | <b>--</b>                    | <b>472.065</b> |

(ix) Total geological reserve is 44.235 MT. The mineable reserve 35.189 MT, extractable reserve is 14.745 MT. The per cent of extraction would be 42 %.

(x) The coal grade is G-6 & G-7. The average Gradient is 1 in 23. There will be 3 seams with thickness ranging upto 4.72 m but 2 No of seams are workable.

(xi) Total estimated water requirement is 989 KL/day. The level of ground water ranges from 0.08 m to 10.90 m.

(xii) The method of mining is Mechanised Board & Pillar method with SDL & Continuous Miner. There are 2 No of seams workable out of 3 seams.

(xiii) Category of gassiness Degree- I

(xiv) The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.

(xv) The life of mine is 17 Years as on 1.4.2018.

(xvi) Transportation: Coal transportation in pit through Belt Conveyor, Surface to Siding by covered Tippers and loading at siding to consumers by railway and to local consumers by Trucks.

(xvii) There is R & R involved. There are 524 PAFs.

(xviii) Cost: Total capital cost of the project is Rs. 8833.03 Lakhs. CSR Cost: 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. R&R Cost Rs.376 Lakhs. Environmental Management Cost Rs.75.16 lakh.

(xix) Baisaha and Sarphanalla is located in east & west side beyond 100 mtr. from mine boundary and 2 nos. seasonal ponds exist within the project boundary

(xx) Approvals: Mine Plan including the Mine Closure Plan for the project for 0.585 MTPA was approved on 25<sup>th</sup> Sep, 2003 by CIL Board with an initial capital outlay of Rs. 88.3303 Crores. A revised mining plan for 0.819 MTPA has been prepared and approved by SECL Board on 25<sup>th</sup> November, 2017.

(xxi) Subsidence: Caving is proposed as method of extraction for Khairaha Underground Mine. The subsidence prediction report was prepared by CMPDI in March, 2018. The surface

topography of the mine is mostly flat in nature. The depth of coal seams of the mine varies from 52 meter to 107 meter for seam VII and 77 meter to 137 meter for seam VI bottom.

(xxii) Applied as per Application No.21-4/592/NP/MIN/2017, Date-28.12.2017 to Central Ground Water Authority.

(xxiii) Wildlife issues: No wildlife sanctuary is there within 10Kms radius from the mine boundary

(xxiv) Forestry issues: No forest area involved.

(xxv) Total afforestation plan shall be implemented covering an area of mining lease. Density of tree plantation 2500 trees/ ha.

(xxvi) There are no court cases/violation pending with the project

(xxvii) Public Hearing for the last EC for 0.585MTPA for an area of 513.5ha was held on 30<sup>th</sup> October, 2003.

(xxviii) In an underground mine plantation is taken up in areas which are under All Right or under Surface Right. The area thus available is very small and considering all features within this small area, a very little space is made available for plantation. Moreover, the anticipated level of pollution is also significantly less since except for surface transport of coal, no other mining activity is made on surface. As such requirement of plantation for arresting the air and noise pollution is also significantly less.

**41.5.3** Earlier, the proposal for re-validation of existing environmental clearance dated 28<sup>th</sup> July, 2005 in terms of the Ministry's Notification dated 6<sup>th</sup> April, 2018, was considered by the EAC in its meeting held on 31<sup>st</sup> August, 2018.

During the meeting, the EAC desired/insisted for the information as under:-

- (i) Public notice to be issued in leading newspapers (one national and two local) for information of the stakeholders about commencement of the project and present coal mining operations, inviting comments and their redressal.
- (ii) Valid Mining Plan and the Mine Closure Plan duly approved by the competent authority,
- (iii) Compliance status of the conditions stipulated in the environmental clearance dated 28<sup>th</sup> July, 2005 from the Regional Office at Nagpur,
- (iv) Consent to operate from the State Pollution Control Board for the present mining operations,
- (v) Redressal of issues raised during the last public hearing conducted by the SPCB on 30<sup>th</sup> October, 2003, along with the R&R details duly certified by the State Government,
- (vi) Details of court cases and the compliance status

**41.5.4** During deliberations on the proposal, the Committee noted the following:-

The proposal is for revalidation of environmental clearance dated 28<sup>th</sup> July, 2005 as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018, and grant of environmental clearance to the project for expansion of Khairaha Underground Coal Mining Project from 0.585 MTPA to 0.819 MTPA in mine lease area of 472.065 ha of M/s South Eastern Coalfields Limited located in tehsil Burhar, District Shahdol (Madhya Pradesh) under the provisions contained in para 7(ii) of the EIA Notification, 2006, without any fresh ToR for the project and exemption from public hearing in terms of the Ministry's OM dated 15<sup>th</sup> September, 2017.

No forest land is involved in the project.

Mining Plan, including the Progressive Mine Closure Plan for the project of capacity 0.585 MTPA was approved by CIL Board on 25<sup>th</sup> September, 2003 with an initial capital outlay of Rs. 88.3303 Crores. Revised Mining Plan for the project for expansion from 0.585 MTPA to 0.819 MTPA has been approved by SECL Board on 25<sup>th</sup> November, 2017.

Earlier, environmental clearance was granted by the Ministry vide letter dated 28<sup>th</sup> July, 2005 based on public hearing conducted by the State Pollution Control Board on 30<sup>th</sup> October, 2003 for production capacity of 0.585 MTPA in mine lease area of 513.50 ha. The revised mining plan for the proposed expansion project involves an area of 472.065 ha, as per the notification under the Coal Bearing Act, 1957 for the actual land of 478.89 ha and after excluding revenue forest land of 6.825 ha

Consent to Operate for the existing production capacity has been obtained from the Madhya Pradesh State Pollution Control Board on 15<sup>th</sup> April, 201, which is valid up to 31<sup>st</sup> March, 2019.

The proposal for re-validation of environmental clearance in accordance with the Ministry's Notification dated 6<sup>th</sup> April, 2018 was considered by the EAC in its meetings held on 31<sup>st</sup> August, 2018. As per observations of the EAC, public Notice for information of the stakeholders about present coal mining operations of capacity 0.585 MTPA in mine lease area of 513.5 ha, was issued on 21<sup>st</sup> September, 2018 inviting comments within one month. As informed, no comments/suggestions were received within the prescribed time frame. Also, all other requirements insisted by the EAC for revalidation of the EC were observed to be complied with.

**41.5.5** *The EAC, after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of environmental clearance to the expansion of Khairaha Underground Coal Mining Project from 0.585 MTPA to 0.819 MTPA in mine lease area of 472.065 ha of M/s South Eastern Coalfields Limited located in tehsil Burhar, District Shahdol (Madhya Pradesh) for a period of one year, subject to revalidation of the existing environmental clearance dated 28<sup>th</sup> July, 2005 and further subject to compliance of the terms & conditions and environmental safeguards mentioned below:*

- *The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31<sup>st</sup> December, 2019.*
- *The project proponent shall obtain Consent to establish from the State Pollution Control Board for capacity of 0.819 MTPA prior to commencement of the increased production.*
- *Transportation of coal from face to coal heap shall be carried out by belt conveyor. Further, the coal transportation from coal heap to Coal Handling Plant shall be carried out through covered trucks.*
- *Mitigating measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.*
- *Sufficient coal pillars shall be left un-extracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.*
- *Solid barrier shall be left below the roads falling within the block to avoid any damage to the roads and no depillaring operation shall be carried out below the township/colony.*
- *Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.*
- *Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and materials. Cracks should be effectively plugged with ballast and clay soil/suitable materials.*
- *Garland Surface drains (Size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rain fall and maximum discharge in the area adjoining the mine sites. Sump capacity should also provide adequate retention period to*

*allow proper settling of silt material. Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rain fall.*

- *Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rain fall.*
- *The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 0.819 MTPA.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.*

### **Agenda No.41.6**

**Expansion of Shantikhani Extension Underground Coal Mining Project (Shantikhani Longwall Project) from 1.67 MTPA to 1.80 MTPA in an area of 1697.70 ha of M/s The Singareni Collieries Company Limited in Districts East Medinipur (West Bengal) and Adilabad (Telangana) - For ToR**

**[IA/TG/CMIN/77115/2004; F. No. J-11015/97/2004 -IA.II(M)**

**41.6.1** The proposal is for grant of terms of reference to Shantikhani Extension Block (Shantikhani Longwall) Underground Coal Mining Project of 1.80 MTPA (Peak-2.36 MTPA) capacity in the mine lease area of 1697.70 ha of M/s The Singareni Collieries Company Limited located in village Akenapalli, Tehsil Bellampalli, District Mancherial.

**41.6.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Toposheet No 56 M/12 and is bounded by the geographical coordinates ranging from latitudes 19°00'59.57" to 19°05'05.77"N and longitudes 79°30'29.76" to 79°33'29.78"E.
- (ii) Coal linkage of the project is with various thermal power plants of Telangana State and Southern India.
- (iii) No Joint venture. The proposed mine is to be operated solely by M/s the SCCL.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation-permanent employment to 1008 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of environmental and socio economic.
- (vii) Earlier, the environment clearance to the project was obtained under EIA Notification, 1994 vide Ministry's letter No J-11015/97/2004-IA.II(M), dated 24<sup>th</sup> January, 2006 for 1.167 MTPA in mine lease area of 681.23 ha.
- (viii) Total mining lease area is 1697.70 ha. Revised Mining Plan & Mine Closure Plan (2<sup>nd</sup> revision) was submitted to Ministry of Coal for approval vide Lr.No.CRP/PP/D/394/796, dated 30<sup>th</sup> October, 2017
- (ix) The land use details during pre and post mining operations will be as under:

#### **Pre mining**

| <b>S. No.</b> | <b>Land Use</b>   | <b>Within ML Area (ha)</b> | <b>Outside ML Area (ha)</b> | <b>Total (ha)</b> |
|---------------|-------------------|----------------------------|-----------------------------|-------------------|
| 1             | Agricultural Land | 662.607                    | -                           | 662.607           |

|    |                        |                |          |                |
|----|------------------------|----------------|----------|----------------|
| 2  | Forest Land            | 960.503        | -        | 960.503        |
| 3  | Surface Water Bodies   | 24.85          | -        | 24.85          |
| 4  | Dwellings              | 7.23           | -        | 7.23           |
| 5  | Roads                  | 4.50           | -        | 4.50           |
| 6  | Rail                   | 3.19           | -        | 3.19           |
| 7  | Township               | 4.00           | -        | 4.00           |
| 8  | Old Mine Infra         | 2.29           | -        | 2.29           |
| 9  | Green Belt /Plantation | 28.53          | -        | 28.53          |
| 10 | Wasteland              | -              | -        | -              |
| 11 | Grazing Land           | -              | -        | -              |
| 12 | Settlements            | -              | -        | -              |
| 13 | Balance Area           | -              | -        | -              |
|    | <b>Total</b>           | <b>1697.70</b> | <b>-</b> | <b>1697.70</b> |

### Post mining

| Post Closure /<br>Mine Closure<br>/Reclamation<br>(Ha)                        | Agriculture   | Public Use/<br>Company<br>Use | Undistu<br>rbed | Forest<br>Land<br>Returned | Water<br>Bodies | Total<br>Area<br>(Ha) |
|---|---------------|-------------------------------|-----------------|----------------------------|-----------------|-----------------------|
| <b>A. Infrastruct<br/>ure</b>   |               |                               |                 |                            |                 | 0                     |
| Old mine<br>infrastructure  | 2.29          |                               |                 |                            |                 | 2.29                  |
| Infrastructure for<br>new shaft in FL   |               |                               |                 | 2.57                       |                 | 2.57                  |
| Old infrastructure<br>& roads in FL   |               |                               |                 | 3.41                       |                 | 3.41                  |
| Roads   | 0.09          |                               |                 |                            |                 | 0.09                  |
| Approach road to<br>Return Shaft &<br>Fan house                               |               |                               |                 | 2.88                       |                 | 2.88                  |
| <i>Sub-Total</i>  | <i>2.38</i>   | <i>0</i>                      | <i>0</i>        | <i>8.86</i>                | <i>0</i>        | <b>11.24</b>          |
| <b>B. Others</b>  |               |                               |                 |                            |                 | 0                     |
| Rail  |               | 3.19                          |                 |                            |                 | 3.19                  |
| Township  |               | 4                             |                 |                            |                 | 4                     |
| <i>Sub-Total</i>  | <i>0</i>      | <i>7.19</i>                   | <i>0</i>        | <i>0</i>                   | <i>0</i>        | <b>7.19</b>           |
| <b>C. Green Belt</b>  | 28.54         |                               |                 | 43.47                      |                 | <b>72.01</b>          |
| <b>D. Undisturb<br/>ed /<br/>Mining<br/>Rights for<br/>UG (FL)</b>            |               |                               |                 | 908.163                    |                 | <b>908.163</b>        |
| <b>E. Undisturb<br/>ed / Not<br/>required<br/>for<br/>acquiring<br/>(NFL)</b> | 662.607       | 11.64                         |                 |                            | 24.85           | <b>699.097</b>        |
| <b>Total land</b>   | <b>693.52</b> | <b>18.83</b>                  |                 | <b>960.49</b>              | <b>24.85</b>    | <b>1697.70</b>        |

(x) Total geological reserve reported in the mine lease area is 175.65 MT with 88.76 MT mineable reserves. Out of total mineable reserve of 88.76 MT, 41.26 MT are available for extraction. Percent of extraction is 46.48%.

(xi) Two seams with thickness ranging from 2.0 m to 7.12 m are workable. Grade of coal is G-9, stripping ratio (Not applicable), while gradient is 1 in 3.5 to 1 in 5.

(xii) Method of mining operations envisages by Mechanised Longwall and Continuous miner with caving method.

(xiii) Life of mine is 25 years (from 2017-18).

(xiv) Transportation of coal has been proposed by Belt Conveyors in mine pit head, from surface to siding by Surface gantry and pre-weigh bin bunkers and at sidings by Trucks.

(xv) 72.01 ha has been proposed for green belt development.

(xvi) 960.503ha of forest land is involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 285.89ha of forest land for non-forestry purposes has been obtained vide MoEF&CC letter No. 8-87/2001-FC dated 20<sup>th</sup> December, 2005. Approval of Stage-1 FC for the remaining forest land is under process.

(xvii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported within 10 km boundary of the project.

(xviii) The ground water level has been reported to be varying between 7.11m to 9.23 m during pre-monsoon and between 2.10m to 6.74m during post-monsoon. Total water requirement for the project is 11,665 KLD.

(xix) Approval of the Central Ground Water Authority obtained vide 2898/Hg.III(1)/2004, dated 6<sup>th</sup> April, 2005.

(xx) Public hearing for the project of 1.167 MTPA capacity in an area of 681.23ha was conducted on 31<sup>st</sup> July, 2004 at Gram panchayat office, Batwanpalli village, Bellampallimandal, Mancherial district, TS. Major issues raised in the public hearing include diversion of mine pumped out water to nearby tanks, laying of BT roads between villages, opening of new mines for employment, provision of bore wells for drinking water and de-silting of tanks. Appropriate action to address the issues raised in the Public Hearing have already been taken/proposed to be taken are as under:

(a) Mine discharge water of 1360 KLD from is being diverted to Lingapur tank for agriculture purpose. 5450 KLD for drinking water for colony and Bellampallitownship. Remaining 1360 KLD discharge water is also diverted to nallah No. 2 for agriculture purpose by near villages.

(b) Twenty two bore wells were provided for drinking water to nearby villages.

(c) 3.10 KM BT road laid from Akenepalli to Mandamarri for use of SCCL employees and

(d) others to reach their work places.

(e) SCCL is planning for opening of new mines viz. Kasipeta -2 Incline and KK-6 mine.

(f) De-silting of Thala Gurajala Tank was done in 2016.

(xxi) Consent to Operate for the existing capacity was obtained from the State Pollution Control Board on 22<sup>nd</sup> November, 2017 and is valid till 30<sup>th</sup> September, 2018. Application was submitted for renewal of CFO on 7<sup>th</sup> September, 2018.

(xxii) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to TSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits.

(xxiii) No court cases, violation cases are pending against the project of the PP.

(xxiv) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. The coal production from the mine was started from the year 1954 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations. The coal production, realized from the project, from 1993-94 onwards, is as under:

| Year | EC | Actual | Year | EC | Actual |
|------|----|--------|------|----|--------|
|------|----|--------|------|----|--------|

|           | Capacity (MTPA) | Production (MTPA) |         | Capacity (MTPA) | Production (MTPA) |
|-----------|-----------------|-------------------|---------|-----------------|-------------------|
| 1990-91   | 0.08            | 0.045             | 2006-07 | 1.167           | 0.048             |
| 1991-92   |                 | 0.072             | 2007-08 |                 | 0.048             |
| 1992-93   |                 | 0.060             | 2008-09 |                 | 0.050             |
| 1993-94   |                 | 0.060             | 2009-10 |                 | 0.013             |
| 1994-95   |                 | 0.071             | 2010-11 |                 | 0.041             |
| 1995-96   |                 | 0.062             | 2011-12 |                 | 0.068             |
| 1996-97   |                 | 0.071             | 2012-13 |                 | 0.064             |
| 1997-98   |                 | 0.061             | 2013-14 |                 | 0.062             |
| 1998-99   |                 | 0.071             | 2014-15 |                 | 0.084             |
| 1999-2000 |                 | 0.080             | 2015-16 |                 | 0.100             |
| 2000-01   |                 | 0.077             | 2016-17 |                 | 0.043             |
| 2001-02   |                 | 0.080             | 2017-18 |                 | 0.110             |
| 2002-03   |                 | 0.077             |         |                 |                   |
| 2003-04   |                 | 0.080             |         |                 |                   |
| 2004-05   |                 | 0.066             |         |                 |                   |
| 2005-06   |                 | 0.048             |         |                 |                   |

(xxv) Total cost of the project is Rs.44,886 lakhs. Cost of production is Rs.2,393.98/- per tonne. CSR cost is 2% of average annual net profit calculated in accordance with the provisions of Section 198 of the Act made during three immediately preceding financial years in pursuance of its CSR policy, Environment Management Cost is Rs.7.72 crores.

**41.6.3** During deliberations, the EAC noted the following:

The proposal is for revalidation of the environmental clearance dated 24<sup>th</sup> January, 2006 as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018, and grant of terms of reference to the project for expansion of Shantikhani Extension Block (Shanthikhani Longwall Project) UG Coal Mine from 1.167 MTPA to 1.80 MTPA (normative)/2.36 MTPA (peak) in an area of 1697.7 ha of M/s The Singareni Collieries Company Ltd located in village Akenapalli, Mandal Bellampalli, District Mancherial (Telangana).

Project involves 960.503 ha of forest land. Approval under the Forest (Conservation) Act, 1980 for diversion of 285.89 ha of forest land for non-forestry use has been obtained vide letter dated 20<sup>th</sup> December, 2005. Renewal of forest clearance for diversion of forest land of 496.37 ha and stage-I forest clearance for 178.243 ha is under process.

Revised Mining Plan & Mine Closure Plan (2<sup>nd</sup> revision) was submitted to Ministry of Coal for approval vide letter dated 30<sup>th</sup> October, 2017. Approval of MoC is yet to be obtained.

Earlier, the environment clearance to the project for its capacity of 1.167 MTPA was granted by the Ministry vide letter dated 24<sup>th</sup> January, 2006 in mine lease area of 681.23 ha based on public hearing conducted by the State Pollution Control Board on 31<sup>st</sup> July, 2004.

Consent to Operate for the existing capacity was obtained from the State PCB on 22.11.2017 and was valid till 30<sup>th</sup> September, 2018. Application for renewal of the same was submitted on 7<sup>th</sup> September, 2018.

Project does not involve violation of the EIA Notification, 2006 and amendment issued thereto. The coal production from the mine was started from the year 1954 onwards. No excess production of coal from the mine has been reported since the commencement of mining operations

**41.6.4** *The Committee, after detailed deliberations, observed that in compliance of this Ministry's Notification dated 6<sup>th</sup> April, 2018, the project proponent needs to obtain the environmental clearance under the EIA Notification, 2006 for considering the present proposal for expansion. Accordingly, and based on its earlier recommendations in similar proposals, the Committee desired for the fresh EIA/EMP report based on one season baseline data along with the details in respect of the following:-*

- *Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,*
- *Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,*
- *Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.*
- *Consent to operate from the State Pollution Control Board for the present mining operations.*
- *Redressal of issues raised during the last public hearing conducted by the SPCB.*
- *Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.*
- *Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.*
- *Details of court cases and the compliance status.*

*The Committee further recommended that after receipt of the above information, revalidation of earlier environmental clearance and the proposal for ToR for the proposed expansion of the project shall be considered.*

#### **Agenda No.41.7**

**Madanpur South Coal Mining Project of 5.4 MTPA of M/s The Andhra Pradesh Mineral Development Corporation Limited in mine lease area of 712.072 ha in HasdeoArand Coalfields, Tehsil Katghora, Distict Korba (Chhattisgarh) - For amendment in ToR**

**[IA/CG/CMIN/67366/2017; F. No. IA-J-11015/77/2017-IA-II(M)]**

**41.7.1** *The proposal is for amendment in the ToR granted by the Ministry vide letter dated 29<sup>th</sup> September, 2017 for Madanpur South Coal Mining Project of 5.4 MTPA of M/s The Andhra Pradesh Mineral Development Corporation Limited in mine lease area of 713.952 ha in Hasdeo Arand Coalfields, Tehsil Katghora, Distict Korba (Chhattisgarh).*

Differential GPS survey of the block, allotted by the Nominated authority in the Ministry of Coal vide vesting order dated 29<sup>th</sup> September, 2016, revealed shifting in the block boundary as the same was falling outside the coordinates mentioned in the vesting order. Shifting in the boundary was informed to Nominated Authority in the MoC. Subsequently, CMPDIL issued the revised block boundary coordinates and Nominated authority (MoC) has issued an amendment to the allotment order vide Corrigendum 1 dated 30<sup>th</sup> May, 2018 with revised block boundary coordinates.

For the demarcation of the forest and non-forest land involved in the lease, a joint survey of the

area was carried out by the State Forest Department, Katghora and Revenue Department, Poudi-Uroda. Joint survey revealed reduction in the forest area by 11.659 ha from 660.260 ha to 648.601 ha.

From the joint survey and Differential GPS survey, the change matrix in respect of various project parameters is as under:

| Description              | Detail as per ToR dated  |                        | Amendment Proposed   |                  |
|--------------------------|--|------------------------|--|------------------|
| <b>ML Area</b>           | 713.952 ha   |                        | 712.072 ha   |                  |
| Geographical Coordinates | <u>Latitude:</u> 22°45'19"N to 22°47'09"N<br><u>Longitude:</u> 82°38'02" E to 82°42'42"E |                        | Lat : 22°45'21.39" to 22°47'07.38"N<br>Long :82°37'53.51" to 82°40'11.98"E |                  |
| Forest Area              | 660.260 ha   |                        | 648.601 ha   |                  |
| Land use (Core Zone)     | <b>Type of land</b>  | <b>Area (ha)</b>       | <b>Type of land</b>  | <b>Area (ha)</b> |
|                          | Protected Forest   | 490.902                | Govt. Land   | 0.546            |
|                          | Revenue Forest   | 169.338                | Private Land   | 62.925           |
|                          | <b>Forest Land</b>   | <b>660.260</b>         | Revenue Forest   | 133.204          |
|                          | Agricultural Land  | 53.408                 | <i>Van adhikar patta</i> given by revenue department in revenue forest     | 12.538           |
|                          | Community land   | 0.284                  | <i>Van adhikar patta</i> given by revenue department in Protected Forest   | 6.473            |
|                          | Non Forest Land  | 53.692                 | <i>Van adhikar patta</i> given by forest department in Protected Forest    | 6.688            |
|                          | <b>Total</b>   | <b>713.932</b>         | Protected Forest   | 476.113          |
|                          |  |                        | Orange Area  | 13.585           |
|                          |  |                        | <b>Forest Land</b>   | <b>648.601</b>   |
|                          |  | <b>Non Forest Land</b> | <b>63.471</b>  |                  |
|                          |  | <b>Total</b>           | <b>712.072</b>   |                  |
| <b>Water Requirement</b> | 4680 KLD   |                        | 4665 KLD   |                  |
| <b>Tehsil Name</b>       | Katghora   |                        | Poudi Uroda  |                  |

**41.7.3** *The Committee, after deliberations and taking note of changes in block boundary (Cardinal points, mine lease area and land use), as revealed by the joint survey and Differential GPS survey, recommended the proposal for amendment in the ToR dated 29<sup>th</sup> September, 2017 granted by the Ministry, as stated in para 41.7.2 above, with the terms and conditions stipulated therein remain unchanged.*

#### **Agenda No.41.8**

**Kistaram Opencast Coal Mining Project of 2 MTPA in ML area of 435.68 ha of M/s The Singareni Collieries Company Limited, located at District Khammam (Telangana) - For Environmental Clearance**

**[IA/CMIN/TG/23509/2014; F. No. J-11015/212/2014-IA-II(M)]**

**41.8.1** The proposal is for grant of environmental clearance to Kistaram Opencast Project of 2 MTPA capacity in mine lease area of 435.68 ha of M/s Singareni Collieries Company Limited located in village Kistaram, Tehsil Sathupalli, District Khammam (Telangana).

**41.8.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No 65C/16 and is bounded by the geographical coordinates ranging from 17<sup>0</sup>13'14" to 17<sup>0</sup>13'57" N and longitudes 80<sup>0</sup>46'55" and 80<sup>0</sup>47'28" E.
- (ii) Coal linkage of the project is proposed for power generation use for various thermal plants.
- (iii) No Joint venture.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation, Permanent-370 and Contractual-400 will be provided from the project.
- (vi) The project is reported to be beneficial in terms of generation of employment, improvement in social infrastructure, etc.
- (vii) Total mining lease area is 435.68 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MoC on 21.03.2014.
- (viii) The land usage pattern of the project is as follows:

**Pre mining land use details**

| S. No. | LandUse              | Within ML Area (ha) | Outside ML Area (ha) | TOTAL (ha)    |
|--------|----------------------|---------------------|----------------------|---------------|
| 1.     | Agricultural land    |                     |                      |               |
|        | a) Single Crop land  | 59.22               | --                   | 59.22         |
|        | b) Fallow Land       | 38.20               | --                   | 38.20         |
|        | c) Plantation        | 26.59               | --                   | 26.59         |
|        | <i>Sub Total</i>     | <i>124.01</i>       | --                   | <i>124.01</i> |
| 2.     | Forest land          | 285.44              | --                   | 285.44        |
| 3.     | Wasteland            | 13.38               | --                   | 13.38         |
| 4.     | Grazing land         | 0                   | --                   | 0             |
| 5.     | Surface water bodies | 10.65               | --                   | 10.65         |
| 6.     | Settlements          | 2.20                | --                   | 2.20          |
| 7.     | Others (specify)     | 0                   | --                   | 0             |
|        | <b>TOTAL</b>         | <b>435.68</b>       |                      | <b>435.68</b> |

**Post Mining**

| S. No. | Description                    | Land Use (ha) |               |              |             | Total         |
|--------|--------------------------------|---------------|---------------|--------------|-------------|---------------|
|        |                                | Plantation    | Water Body    | Other use    | Undisturbed |               |
| 1.     | External OB dump               | 142.76        | 0.00          | 9.22         | --          | 151.98        |
| 2.     | Top Soil dump area             | 12.94         | 0.00          | 1.82         | --          | 14.76         |
| 3.     | Excavation                     |               |               |              |             |               |
|        | a) Quarry (Backfilled area)    | 89.95         | 0.00          | 7.56         | --          | 97.51         |
|        | b) Quarry (Void area)          | 0.00          | 130.51        | 0.00         | --          | 130.51        |
| 4.     | Roads                          | --            | --            | --           | --          | --            |
| 5.     | Built up area / Infrastructure | 2.35          | 0.00          | 2.01         | --          | 4.36          |
| 6.     | CHP& Coal stock yard.          | 7.45          | 0.00          | 1.20         | --          | 8.65          |
| 7.     | Safety zone                    | 24.02         | 3.03          | 0.86         | --          | 27.91         |
|        | <b>GRAND TOTAL</b>             | <b>279.47</b> | <b>133.54</b> | <b>22.67</b> | <b>--</b>   | <b>435.68</b> |

(ix) Total geological reserve reported in the mine lease area is 24.05 MT with 21.61 MT mineable reserves. Out of total mineable reserve of 21.61 MT, 21.61 MT are available for extraction. Percent of extraction is 100%.

- (x) 7 seams with thickness ranging from 0.29 m – 8.72 m are workable. Grade of coal is G7, G11, stripping ratio is 6 Cu.m. of OB per tonne of coal, while gradient is 1 in 3.9 to 1 in 12.
- (xi) Method of mining operations envisaged by Opencast method
- (xii) Life of mine is 13 years.
- (xiii) The project has one external OB dump in an area of 131.14 ha with 120 m height and 74.32 Mm<sup>3</sup> of OB. Existing OB Dumps shall be re-handled and backfilled in 14<sup>th</sup> year. The OB from the current mining operations shall be backfilled from 3<sup>rd</sup> year onwards. One internal OB dump in an area of 97.51 ha with 55.26 Mm<sup>3</sup> of OB is envisaged in the project.
- (xiv) Total quarry area is 228.02 ha out of which backfilling will be done in 89.95 ha while final mine void will be created in an area of 130.51 ha with a depth of 35 m. Backfilled quarry area of 89.95 ha shall be reclaimed with plantation. Final mine void will be converted into water body.
- (xv) Transportation of coal has been proposed by dumpers in mine pit head, from surface to siding by belt conveyors and at sidings by trucks.
- (xvi) Reclamation Plan in an area of 279.47 ha, comprising of 142.76 ha of external dump, 89.95 ha of internal dump and 12.91 ha of green belt. In addition to this, an area of 24.02 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- (xvii) 285.44 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 285.44 ha of forest land for non-forestry purposes has been obtained vide MoEF&CC letter No. 8-55/2014-FC dated 11<sup>th</sup> September, 2018.
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 3.10 m to 11.40 m during pre-monsoon and between 2.00 m to 12.20 m during post-monsoon. Total water requirement for the project is 8000 KLD.
- (xx) Approval of the Central Ground Water Authority was obtained on 17<sup>th</sup> August, 2015.
- (xxi) Public hearing for the project of 2.00 MTPA capacity in an area of 435.68 ha was conducted on 19.11.2015 near Mandal Parishad Primary School, Jagannadhapuram Village, Sathupalli Mandal. Major issues raised in the public hearing include proper compensation for land losers, mitigation measures for pollution, employment to land losers, de-siltation of tanks, proper R&R. Appropriate action to address the issues raised in the Public Hearing have already been proposed to be taken are as under:
- Compensation to the land losers will be paid as per the LARR Act, 2013 and Govt. directions.
  - All pollution control measures will be taken up as per the guidelines issued from CPCB and MoEF&CC from time to time.
  - Assured that the de-silting of the tanks at Kistaram and Jagannadhapuram villages will be taken up.
  - Clarified that R&R site will be provided at a single location subject to the availability and willingness of the villagers.
- (xxii) Consent to Operate for the existing capacity has to be obtained from the State PCB.
- (xxiii) No court cases, violation cases are pending against the project of the PP.
- (xxiv) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under.
- (xxv) The project involves project affected families. R&R of the PAPs will be done as per LARR Act, 2013 and as per the directions of the Govt.
- (xxvi) Total cost of the project is Rs.24,229 lakhs. Cost of production is Rs.1037.99 per tonne. CSR cost is 2% of average annual net profit calculated in accordance with the provisions of Section 198 of the Act made during three immediately preceding financial years in pursuance of its CSR policy, R&R cost is Rs.19.525 crores. Environment Management Cost is Rs.1.42 crores.

**41.8.3** The proposal was earlier considered by the EAC in its meeting held during 30-31 January, 2017, wherein the Committee desired that proposal to be submitted after receipt of Stage-I approval under the Forest (Conservation) Act, 1980 in respect of forest land involved in the project.

**41.8.4** During deliberations, the EAC noted the following:

The proposal is for grant of environmental clearance to Kistaram Opencast Coal Mining Project of capacity 2 MTPA in mine lease area of 435.68 ha of M/s Singareni Collieries Company Limited located in village Kistaram, Mandal Sathupalli, District Khammam (Telangana).

Project involves 285.44 ha of forest land. Stage-I forest clearance for diversions of the same for non-forestry use has been obtained vide MoEF&CC letter No.8-55/2014-FC dated 11<sup>th</sup> September, 2018.

Mining Plan for the project of 2 MTPA in mine lease area of 435.68 ha, including Progressive Mine Closure Plan, was approved by the Ministry of Coal vide their letter dated 21<sup>st</sup> March, 2014.

Public hearing for the project of 2 MTPA capacity in an area of 435.68 ha was conducted by the State Pollution Control Board on 19<sup>th</sup> November, 2015. Major issues raised in the public hearing included compensation for project affecter people, mitigation measures for pollution control, employment to land losers, de-siltation of tanks, R&R. The project proponent has proposed an action plan to comply with the commitments made in the public hearing and the same found to be satisfactory.

In response to the observations of the EAC in its meeting held on 30-31 January, 2017, the project proponent has submitted Stage-I forest clearance dated 11<sup>th</sup> September, 2018 for diversion of forest land of 285.44 ha. The detailed information in respect of assessment of fluoride, year wise expenditure incurred on CSR activities has also been submitted, which were found to be in order.

The in-principle/stage-I approval granted by the Ministry vide letter dated 11<sup>th</sup> September, 2018 for diversion of 285.44 ha of forest land, is inter-alia subject to the condition '*The environmental conditions in and around Sathupalli town may be appraised by the EC Appraisal Committee separately*'. No information in compliance to the said observations was made available.

**41.8.4** *The EAC, after deliberations and in view of non-compliance of the condition stipulated in the stage-I forest clearance dated 11<sup>th</sup> September, 2018, was not inclined to recommend the proposal for the present.*

*The proposal was, therefore, deferred for the needful on the above lines.*

#### **Agenda No.41.9**

**Kusmunda Coal Washery project of 25 MTPA capacity in an area of 41.23 ha of M/s South Eastern Coalfields Limited located in village Durpa & Jarhajel, Tahsil Katghora, District Korba (Chhattisgarh) - For Environmental Clearance**

**[IA/CG/CMIN/29936/2015; F. No. J-11015/183/2015-IA-II(M)]**

**41.9.1** 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).

**41.9.2** 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) 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<sup>rd</sup> December, 2015.
- (iv) Latitude and longitude of the project are 220 20' 15" to 220 20' 42" North and 820 40' 06" to 820 40' 43" E respectively.
- (v) Joint Venture: There is no Joint Venture
- (vi) Coal Linkage: Linkages is with the NTPC and other 43 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:

| S. No. | 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) No forest land is involved in the project.
- (xvi) Cost: Total capital cost of the project is Rs.941.17 crores. As per 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.
- (xviii) Water body: Hasdeo River flows from North to South on the Eastern part of the site.
- (xix) Approvals: Pre-feasibility report (PFR) of Kusmunda coal Washery was approved by competent authority /Board on 5<sup>th</sup> August, 2015.
- (xx) Wildlife issues: There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves located within 10 km buffer zone.
- (xxi) No court cases/violation pending against the project .
- (xxii) It has been envisaged that 100 mm size raw coal from Kusmunda OCP will be transported by covered belt conveyors to the Kusmunda washery.
- (xxiii) 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.

(xxiv) Based on the technology selected, the likely quantity of rejects to be produced from the Washery is estimated to be 7.8 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.

(xxv) 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. Fresh water of 110 litre will be required per tonne of raw coal.

(xxvi) Washing process involves jigging and gravity separation. It has been envisaged to de-shale 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.

(xxvii) Public hearing was held on 11th April, 2016 at Government High School, Sarwamangla Nagar(Village- Durpa), Tehsil: Katghora, District Korba (Chhattisgarh). The issues raised during the public consultation includes land breaqukup, 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.

**41.9.3** The proposal was earlier considered by the EAC in its meetings held on 11-12 May, 2016 & 28-29 July, 2016. During the meeting, the Committee desired additional information on status of approval obtained from the Water Resource Department for water allocation, impact of ground water withdrawal, possibility of using mine water and legible copy of public hearing.

**41.9.4** In response to the observations of the EAC, parawise reply submitted by the project proponent during presentation before the Committee, are as under:-

| S. No. | Observations of the Committee  | Status of compliance   |
|--------|--|--|
| (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 | As proposed in the EMP of Kusmunda Washery (25 MTY), water demand of the project will be completely met from Right Bank Canal of Hasdeo Barrage or Hasdeo River situated about 1.5 KM away from the proposed washery.<br>Application for obtaining the permission for withdrawl of surface water has been made vides our letter no. SECL/GM/KSA/Washery/15-16/260 dated. 11 <sup>th</sup> December, 2015 to the Water Resources Department, Government of Chhattisgarh<br>Application has been recommended by Supdt. Engineer and forwarded to Chief Engineer, Minimata (Hasdeo) Bango Project, Water Resources Department, Bilaspur vide his letter no. 3985 dtd. 12/09/2016. |
| (ii)   | Also, there is a need for study of impact of ground water withdrawal.  | CMPDIL, RI-V, Bilaspur has studied the impact of ground water withdrawal. Details enclosed as Annexure 2 Page no. 12-15  |
| (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  | Presently in Kusmunda OC, the total water generation in mine is around 7200 KL/day during lean period which is totally consumend for various industrial purposes such as   |

|      |   |  |
|------|---|--|
|      | mine water to minimize the natural water usage, the same has not been explored by the project proponent.  | washing in workshop, dust suppression in CHP and mine premises and firefighting etc. As projected in the EIA/EMP of Kasmunda OC Expansion (50.00 MTPA), the maximum mine water generation from groundwater will be around 13,438KL/day, which is almost completely (13,370KL/day) going to be used for various industrial purposes i.e. workshop, dust suppression, CHP, green belt development and firefighting. Therefore, excess mine water is not available in the Kasmunda OC to meet the water demand of Kasmunda Washery. |
| (iv) | The details of the public hearing conducted on 11th 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. | Legible copy of public hearing documents and PH proceedings, enclosed as annexures-3, Page 16-327  |
| (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.   | Project cost: Rs. 731.48 Crores<br>Reject MoU: NTPC is interested to purchase Washery rejects. Expression of Interest alongwith draft MoU is enclosed as annexure-4, Page 328-336 (Attached).<br>Prospective customers for the washed coal/sale of washed coal: enclosed as annexure-5, Page 337-339 (Attached)  |

#### 41.9.5 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to Kasmunda coal washery project of 25 MTPA of M/s South Eastern Coalfields Limited in area of 41.23 ha in District Korba (Chhattisgarh). There is no forest land involved.

Details of different products are proposed as under-

| Product           | Weight (%) | Ash (%)   | Use   |
|-------------------|------------|-----------|---|
| Washed/clean coal | 68.8       | 33.5 +0.5 | For thermal power plants and other industries |

|         |      |      |                                 |
|---------|------|------|---------------------------------|
| Rejects | 31.2 | 64.2 | Power plants using CFBC boilers |
|---------|------|------|---------------------------------|

The washery will be based on wet process using heavy media separation with raw coal linkage from Kusmunda Opencast coal mining project (10 MTPA).

ToR for the project was granted by the Ministry on 23<sup>rd</sup> December, 2015. Public hearing was conducted by the State Pollution Control Board on 11<sup>th</sup> April, 2016. Main issues raised during public hearing include land breakup, policy regarding use and disposal of rejects, treatment and recycling of waste water, control of air and 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.

Total fresh water requirement is estimated to be 3185 kl/day (0.042 cum/tonne of raw coal), which is proposed to be supplied from mine sump water or from natural sources namely, Right Bank Canal of Hasdeo Barrage at 1 km from the proposed washery.

In response to the observations of the EAC in its meeting held on 11-12 May, 2016 and 28-29 July, 2016, the project proponent has submitted information on water allocation, impact of ground water withdrawal, possibility of using the mine water to minimize the natural water usage, legible documents of public hearing, which were found to be in order.

Transportation of raw coal from the mine pit head to washery shall be undertaken by conveyor belt. Washed coal produced from the washery shall be transported by covered belt conveyor to 2 x 30,000 T covered washed coal bunker for onward dispatch to consumer(s) through silo/rail network.

Rejects 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.

**41.9.6** *The Committee, after deliberations, recommended grant of environment clearance to the Coal Washery project of 25 MTPA in an area of 41.23 ha of M/s South Eastern Coalfields Limited in area of 41.23 ha in District Korba (Chhattisgarh) under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions and environmental safeguards mentioned below:*

- *Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.*
- *Total fresh water requirement shall not exceed 3185 cum/day, proposed to be met from mine sump water or from Right Bank Canal of Hasdeo Barrage.*
- *Study shall be carried for sustenance of water supply to cater to projected demand of the proposed washery from the abandoned mine(s) throughout planned life of the washery.*
- *Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted.*
- *Ash content below 34% should be maintained in washed coal to be transported beyond 500 km for use in thermal power plants.*
- *The washing technology so chosen should conform to 'Zero Liquid Discharge'.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *More locations (4-5 nos) to be identified in downwind areas in the buffer zone for ambient air quality monitoring in consultation with the State Pollution Control Board.*

- Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.
- Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.

**Agenda No.41.10**

**Expansion of Topa-reorganization Opencast Coal Mining Project from 1.2 MTPA to 1.68 MTPA in an area of 276.66 ha of M/s Central Coalfields Limited located in villages Mangadaha, Banwar and Ravidostala, Tehsil Mandu, District Ramgarh (Jharkhand) - For Environmental Clearance**

**[IA/JH/CMIN/9359/2007; F. No.J-11015/632/2007-IA.II.(M)]**

**41.10.1** The proposal is for grant of environmental clearance to the project for expansion of Topa-reorganization Open Cast Coal Mining Project from 1.2 MTPA to 1.68 MTPA in an area of 276.66 ha of M/s Central Coalfields Limited located in located at District, Hazaribagh, Jharkhand Topa RO OCP Project of 1.68 MTPA capacity in an area of 276.66 ha of M/s Central Coalfields Limited located in village Mangardaha, Banwar and Ravidostala of Topa Tehsil Mandu, District Ramgarh (Jharkhand).

**41.10.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No 73E/6 and is bounded by the geographical coordinates ranging from 23°43'31" N to 23°44'50" N N and longitudes 85°28'10" E and 85°29'31" E.
- (ii) No Joint venture cartel has been formed for Topa Reorganisation OCP
- (iii) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (iv) Employment generation: Total Employment proposed is 306 of which employment for 205 was already generated.
- (v) People will be benefitted due to direct and indirect employment opportunities. This will continue throughout the life of the project. Activities will lead to overall socio economic growth of the area. Socio- economic benefits of the projects will accrue to local population also.
- (vi) Earlier, the environment clearance to the project was obtained under EIA Notification, 2006 Ministry's letter No J-11015/632/237-IA-II (M) dated 31<sup>st</sup> July, 2008 for 1.2 MTPA in an area of 577 ha.
- (vii) Total area as per block allotment is 356 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the CCL Board on 18<sup>th</sup> September, 2018.
- (viii) The land usage pattern of the project is as follows:

|               | <b>During Mining</b> |                        | <b>Post mining</b>              |                  |
|---------------|----------------------|------------------------|---------------------------------|------------------|
| <b>S. No.</b> | <b>Particulars</b>   | <b>Total Area (ha)</b> | <b>Particulars</b>              | <b>Area (ha)</b> |
| <b>1</b>      | Quarry               | 92.13                  | Plantation on backfilled Quarry | 49.85            |
|               |                      |                        | Mine void filled with water     | 42.28            |
| <b>2</b>      | External OB          | 51.28                  | Plantation on External Dump     | 51.28            |
| <b>3</b>      | Infrastructure       | 9.21                   | Infrastructure for future use   | 9.21             |
| <b>4</b>      | Rehabilitation site  | 10.79                  | Colony for CCL Use              | 51.29            |
| <b>5</b>      | Existing colony      | 40.50                  |                                 |                  |

|   |                         |        |   |        |
|---|-------------------------|--------|---|--------|
| 6 | Safety Zone             | 40.30  | Plantation on safety Zone and vacant Land | 72.75  |
| 7 | Vacant land/ Green Belt | 32.45  |   |        |
|   | Total                   | 276.66 | Total                                     | 276.66 |

(ix) Total geological reserve reported in the mine lease area is 119.92 MT with 10.20 MT mineable reserve. Out of total mineable reserve of 10.20 MT, 10.20 MT are available for extraction. Percent of extraction is 100%.

(x) 7 seams with thickness ranging from 0.55 m – 13.45 m are workable. Grade of coal is W-III & W-IV, stripping ratio 1.73 Cum/Tonne, while gradient is 5° to 14°.

(xi) Method of mining operations envisages by Shovel Dumper combination method

(xii) Life of mine is 7 years.

(xiii) The total volume of OB to be removed from Topa OCP is estimated as 17.60 Mcum. It is proposed to dump OB externally and internally both in an area of 51.28 ha and 49.85 ha respectively.

(xiv) Total quarry area is 92.13.ha out of which backfilling will be done in 49.85 ha while final mine void will be created in an area of 42.28 ha. Backfilled quarry area of 49.85 ha shall be reclaimed with plantation. Final mine void will be filled with water.

(xv) Transportation of coal has been proposed by dumper in mine pit head, from surface to siding by tipping trucks.

(xvi) Reclamation Plan in an area comprising of 51.28 ha of external dump, 49.85 ha of internal dump and 72.75 ha of green belt/safety zone/vacant land.

(xvii) 94.60 ha of forest land is reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 77.30 ha of forest land for non-forestry purposes has been obtained vide MoEF&CC letter No 8-77/2003-FC.dated 30<sup>th</sup> July, 2008 and 17.30 ha of forest land for non-forestry purposes has been obtained vide MoEF&CC letter No 8-82/90-FC.dated 27<sup>th</sup> March, 1997.

(xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported within 10 km boundary of the project.

(xix) The ground water level has been reported to be varying between 6.7 m to 10.4 m during pre-monsoon and between 3.65 m to 7.22 m during post-monsoon. Total water requirement for the project –Potable water demand -197.26 KLD and Industrial Water demand- 246.50 KLD.

(xx) Application for obtaining the approval of the Central Ground Water Authority is under preparation.

(xxi) Public hearing for the project of 1.2 MTPA capacity in an area of 577 ha was conducted on 16.03.2007 at Topa Project Office.

(xxii) Consent to Operate for the existing capacity was obtained from the State PCB on 18<sup>th</sup> March, 2018 and is valid till 31<sup>st</sup> December, 2022.

(xxiii) Topa nalla is flowing at a distance of 1 km in the north of boundary and no diversion is required.

(xxiv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits.

(xxv) No court cases, violation cases are pending against the project of the PP.

(xxvi) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. The coal production, realized from the project is as under-

| Year    | Production in MT |
|---------|------------------|
| 2008-09 | 0.58             |
| 2009-10 | 0.70             |
| 2010-11 | 0.63             |
| 2011-12 | 0.67             |
| 2012-13 | 0.41             |

|         |      |
|---------|------|
| 2013-14 | 1.03 |
| 2014-15 | 1.11 |
| 2015-16 | 0.88 |
| 2016-17 | 0.79 |
| 2017-18 | 1.12 |

(xxvii) The project involves 234 project affected families. R&R of the PAPs will be done as per R & R policy of CIL.

(xxviii) Total cost of the project is Rs.58.4 Crores. Cost of production is Rs. 1297.30./- per tonne at 100 % production level and 1448.74. per tonne at 85 % production level, CSR cost is as per CSR Policy & Companies Act,2013, R&R cost is as per R & R policy of CIL.

(xxix) The monitoring report on compliance status of existing EC conditions have been forwarded by the Regional Office, MoEFCC at Bhopal vide letter dated 11<sup>th</sup> August, 2017.

**41.10.3** During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of Topa-reorganization Opencast Coal Mining Project from 1.2 MTPA to 1.68 MTPA in an area of 276.66 ha of M/s Central Coalfields Limited located in villages Mangadaha, Banwar and Ravidostala, Tehsil Mandu, District Ramgarh (Jharkhand).

The project involves 69.18 ha of forest land. Approval under the Forest (Conservation) Act, 1980 for diversion of forest land of 94.60 ha (out of 123.58 ha of forest land in earlier mine lease area of 577 ha) for non-forestry use has been obtained vide letter dated 30<sup>th</sup> July, 2008 (77.30 ha) and letter dated 27<sup>th</sup> March, 1997 for (17.30 ha).

Mining Plan (Including Progressive Mine Closure Plan) for project of 1.68 MTPA capacity in an area of 277.66 ha has been approved by the CCL Board on 18<sup>th</sup> September, 2018.

Earlier, environmental clearance for the project involving expansion from 0.33 MTPA to 1.20 MTPA in an area of 577 ha (including forest land of 123.58 ha) was granted by the Ministry on 31<sup>st</sup> July, 2008 based on public hearing conducted by the State Pollution Control Board on 16<sup>th</sup> March, 2007.

The Regional Office, Ranchi has conducted site inspection of the area on 30<sup>th</sup> November, 2018 to monitor the status of compliance of conditions stipulated in the environment clearance dated 31<sup>st</sup> July, 2007, and submitted report vide their letter dated 12<sup>th</sup> December, 2018. The said report finds mention many of the specific and general conditions partially complied.

The project does not involve violation of the EIA Notification, 2006 and amendment issued thereto. The coal production from the mine was started from the year 2008-09 onwards. No excess production of coal from the mine has been reported.

Consent to Operate for the existing capacity was obtained from the State Pollution Control Board on 18<sup>th</sup> March, 2018 which is valid up to 31<sup>st</sup> December, 2022.

Data on monitoring and modeling of the air quality, presented by the project proponent, was observed to be irregular and inconsistent, and not found satisfactory.

**41.10.4** *The Committee, after deliberations and in view of the observations of Regional Office in their monitoring report dated 12<sup>th</sup> December, 2018, desired for action taken report duly endorsed by the Regional Office. The Committee also desired that air quality data and the modeling exercise, needs to be revisited by the project proponent to ensure consistency.*

The proposal was deferred for the needful as above.

### **Agenda No.41.11**

**Proposal for Kasnau Matasukh Lignite Mining project Project of 1 MTPA in mine lease area 1063.35 ha of M/s Rajasthan State Mines and Minerals Limited located in villages Kasnau, Igiar, Matasukh, Arwar, Tehsil Jayal, District Nagaur (Rajasthan) – For ToR.**

**[IA/RJ/CMIN/79923/2018; F. No. J-11015/21/99-IA.II(M)]**

**41.11.1** The proposal is for ToR for re-validation of environmental clearance Kasnau-Matasukh Lignite Mines Project of 1 MTPA capacity in mine lease area of 1063.35 ha of M/s Rajasthan State Mines and Minerals Limited (A Govt. of Rajasthan Enterprise) located in village Kasnau-Matasukh, Tehsil-Jayal, District Nagaur (Rajasthan).

**41.11.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No. 45 I/4 and is bounded by the geographical coordinates ranging from LatitudeN 27°03'40.7" to 27°06'46.10" and longitudes E 74°03'18.00" to 74°04'51.00".
- (ii) Coal linkage of the project is proposed for mercantile usage for various industries.
- (iii) Joint venture cartel has been formed – N/A
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation - direct and in-direct employment to 1100 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of financial and social benefits with special emphasis on the benefit to the local people including tribal population.
- (vii) Earlier, the environment clearance to the project was obtained under EIA Notification, 1994 vide Ministry's letter No. J-11015/21/99-IA.II(M) dated 19<sup>th</sup> July, 2000 for 1 MTPA in mine lease area of 1063.35 ha.
- (viii) Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MoC on 9<sup>th</sup> January, 1998.
- (ix) The land use details during pre and post mining operations is as under:

#### **Pre mining**

| S.No. | Land use             | Within ML area (ha) | Outside ML area (ha) | Total (ha)      |
|-------|----------------------|---------------------|----------------------|-----------------|
| 1.    | Agriculture land     | 914.924             | 300.663              | 1215.587        |
| 2.    | Forest land          | Nil                 | -                    | Nil             |
| 3.    | Waste land           | 43.494              | -                    | 43.494          |
| 4.    | Grazing land         | 104.932             | -                    | 104.932         |
| 5.    | Surface water bodies | -                   | -                    | -               |
| 6.    | Settlements          | -                   | -                    | -               |
| 7.    | Others (specify)     | -                   | -                    | -               |
|       | <b>TOTAL</b>         | <b>1063.35</b>      | <b>300.663</b>       | <b>1364.013</b> |

#### **Post Mining**

| S.No. | Land use during Mining | Plantation | Water body | Public Use | Undisturbed/ Agriculture Land | Total (ha) |
|-------|------------------------|------------|------------|------------|-------------------------------|------------|
|       |                        |            |            |            |                               |            |

|    |                  |        |        |       |        |         |
|----|------------------|--------|--------|-------|--------|---------|
| 1. | External OB Dump | 0      | 0      | 0     | 109.39 | 109.39  |
| 2. | Top Soil Dump    | 0      | 0      | 0     | 11.25  | 11.25   |
| 3. | Excavation       | 0      | 30.00  | 0     | 401.00 | 431.00  |
| 4. | Roads            | 0      | 0      | 3.89  | 0      | 16.39   |
| 5. | Built up area    |        |        | 12.50 |        |         |
| 6. | Greenbelt        | 184.00 | 0      | 0     | 0      | 184.00  |
| 7. | Undisturbed Area | 0      | 90.00  | 59.00 | 162.32 | 311.32  |
|    | Total            | 184.00 | 120.00 | 75.39 | 683.96 | 1063.35 |

(x) Total geological reserve reported in the mine lease area is 33.80 MT with 19.21 MT mineable reserve. Out of total mineable reserve of 19.21 MT, 17.29 MT are available for extraction. Percent of extraction is 90%.

(xi) 1 to 4 seams with thickness ranging from 1.10 m–7.70 m are workable. Grade of coal is 2800-3200 k.cal/kg stripping ratio 1:10.23, while gradient is 0<sup>0</sup>to3.0<sup>0</sup>.

(xii) Method of mining operations envisages by open cast mining method.

(xiii) Life of mine is 20 years as per approved Mining Plan, 15 years from 3<sup>rd</sup> August, 2018 (As per balance reserves).

(xiv) The project has 2 (two sub-blocks) external OB dumps in an area of 78.4 ha with 30 m height and 71.99 Mm<sup>3</sup> of OB. Existing OB Dumps shall be re-handled and backfilled in 17<sup>th</sup>, 18<sup>th</sup> and 20<sup>th</sup> year. The OB from the current mining operations shall be backfilled from 3<sup>rd</sup> year onwards. 2 (two sub-blocks) internal OB in an area of 401 ha with 180.27 Mm<sup>3</sup> of OB are envisaged in the project.

(xv) Total quarry area is 431 ha out of which backfilling will be done in 401 ha while final mine void will be created in an area of 30 ha with a depth of 10 m. Backfilled quarry area of 401 ha shall be reclaimed with plantation. Final mine void will be converted into water body.

(xvi) Transportation of coal has been proposed by dumper in mine pit head, from surface to siding by dumper/truck and at sidings by dumper/truck.

(xvii) Reclamation Plan will be implemented in an area of 694.39 ha, comprising of 109.39 ha of external dump, 401.00 ha of internal dump and 184.00 ha of green belt.

(xviii) No forest land is involved in the mining Lease.

(xix) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.

(xx) General water level is 23-25 m below ground level (First Aquifer) and 48 - 52 m below ground water level (Second Aquifer). Total water requirement for the project is 964.5 KLD.

(xxi) Renewal of NOC issued from CGWA for ground water withdrawal obtained vide letter No. 21-4(483)/WR/2011-463 dated 28<sup>th</sup> March, 2016, which is valid for 3 year.

(xxii) Public hearing for the project of 1 MTPA capacity in an area of 1062.00 ha (1063.35 ha as per Mine Plan) was conducted on 25.01.1999.

(xxiii) Consent to Operate for the existing capacity was obtained from the State PCB on 1<sup>st</sup> December, 2016 and was valid till 31<sup>st</sup> August, 2017. Renewal applied on dated 27<sup>th</sup> April, 2017 and the same is pending consideration with the RSPCB.

(xxiv) No River/nalla is flowing boundary of lease.

(xxv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to Lucknow, MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling.

(xxvi) No court cases, violation cases are pending against the project of the PP.

(xxvii) The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the year 2003-2004 onwards. No excess production of coal from the sanctioned capacity has been realized since

the commencement of mining operations. The coal production, realized from the project, from 2003-2004 onwards, is as under:

| Year    | EC Sanctioned capacity (MTPA) | Actual production (MTPA) | Excess production beyond the EC sanctioned capacity |
|---------|-------------------------------|--------------------------|---|
| 2003-04 | 1.0                           | 0.110                    | Nil   |
| 2004-05 | 1.0                           | 0.000                    | Nil   |
| 2005-06 | 1.0                           | 0.100                    | Nil   |
| 2006-07 | 1.0                           | 0.161                    | Nil   |
| 2007-08 | 1.0                           | 0.079                    | Nil   |
| 2008-09 | 1.0                           | 0.00                     | Nil   |
| 2009-10 | 1.0                           | 0.206                    | Nil   |
| 2010-11 | 1.0                           | 0.00                     | Nil   |
| 2011-12 | 1.0                           | 0.095                    | Nil   |
| 2012-13 | 1.0                           | 0.278                    | Nil   |
| 2013-14 | 1.0                           | 0.213                    | Nil   |
| 2014-15 | 1.0                           | 0.305                    | Nil   |
| 2015-16 | 1.0                           | 0.107                    | Nil   |
| 2016-17 | 1.0                           | 0.126                    | Nil   |
| 2017-18 | 1.0                           | 0.426                    | Nil   |

(xxvii) The project involves 334 project affected families. R&R of the PAPs done as per Rs.17,18,16,973/- (including land cost).

(xxviii) Total cost of the project is Rs. 210.50 lakhs. Cost of production is Rs. 1115.47 / tonne., CSR cost is Rs.75 Lac up to 2017-2018, R&R cost is Rs.17,18,16,973/- (including land cost). Environment Management Cost is Rs. 5.00 crores.

(xxix) Consent to Operate for the existing capacity was obtained from the State Pollution Control Board 1<sup>st</sup> December, 2016 and was valid till 31<sup>st</sup> August, 2017. Application for the renewal of the CTO has been applied on dated 27<sup>th</sup> April, 2017 and the same is under consideration with the RSPCB.

**41.11.3** During deliberations, the noted the following:

The proposal is for revalidation of environmental clearance dated 19<sup>th</sup> July, 2000 granted by the Ministry for Kasnau-Matasukh Lignite Mining Project of 1 MTPA capacity in mine lease area 1062 ha of M/s Rajasthan State Mines and Minerals Limited (A Government of Rajasthan Enterprise) located in village Kasnau Matasukh, Tehsil Jayal, District Nagaur (Rajasthan) in pursuance to Ministry's Notification dated 6<sup>th</sup> April, 2018.

No forest land is involved in the project.

Public hearing for the project of 1 MTPA capacity in an area of 1062 ha was conducted on 25<sup>th</sup> January, 1999.

Consent to Operate for the existing capacity was obtained from the State Pollution Control Board 1<sup>st</sup> December, 2016 and was valid till 31<sup>st</sup> August, 2017. Application for the renewal of the CTO has been applied on dated 27<sup>th</sup> April, 2017 and the same is under consideration with the RSPCB.

As per the present pre-mining land use details, total project area involved is 1364.013 ha with mine lease area of 1063.35 ha.

**41.11.4** The Committee, after deliberations, desired for the EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.
- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

#### **Agenda No.41.12**

**Setting up Coal Washery of 1.25 MTPA in an area of 11.53 ha of M/s Bhatia Energy & Coal Benefication Private Limited located in village Lokhandi, Tehsil Takhatpur, District Bilaspur (Chhattisgarh) - For ToR**

**[IA/CG/CMIN/76054/2018; F. No J-11015/79/2018-IA-II(M)]**

**41.12.1** During deliberations, the EAC noted the following:

The proposal is for terms of reference to the project for setting up Coal washery of 1.25 MTPA capacity in an area of 11.53 ha of M/s Bhatia Energy & Coal Benefication Private Limited located in village Lokhandi, Tehsil Takhatpur, District Bilaspur (Chhattisgarh).

Different products from the washery and their disposal are proposed as under-

| Product           | Weight (%) | Use   |
|-------------------|------------|---|
| Washed/clean coal | 75         | For thermal power plants and other industries |
| Rejects           | 25         | Power plants using CFBC boilers               |

The new washery will be based on wet process using heavy media separation and floatation technology with raw coal linkage from the nearby mines of M/s SECL, Bilaspur and Korba Region. Transportation of raw coal is proposed through existing Uslapur railway siding located at 2.5 km from the project site.

Total fresh water requirement is estimated to be 516 cum/day, proposed to be met from ground water. The required permission for ground water withdrawal from the concerned regulatory authority is yet to be obtained.

**41.12.2** *The Committee, after deliberations and especially in view of no proposal submitted to the concerned regulatory authority (CGWA) for ground water withdrawal of 516 cum/day, was not inclined to recommend the proposal.*

*The proposal was therefore deferred for needful on the above lines.*

#### **Agenda No.41.13**

**Nowrozabad West Colliery Coal Mining Project of 0.45 MTPA in an area of 1272.163 ha of M/s South Eastern Coalfields Ltd located in villages Kudri, Bahirden, Pinoura, Pipradi, Khodargawan & Devgawan Kala, Tehsil Nowrozabad, District Umaria (MP) - For ToR**

**[IA/MP/CMIN/81996/2018;F. No. J-11015/144/2018-IA-II(M)]**

**41.13.1** The proposal is for ToR to Nowrozabad West Colliery Coal Mining (Underground) Project of 0.45 MTPA capacity in mine lease area of 1272.163 ha of M/s South Eastern Coalfields Ltd located in villages Kudri, Bahirden, Pinoura, Pipradi, Khodargawan & Devgawankala, Tehsil Nowrozabad, District Umaria (MP).

Project involves 404.019 ha of forest land. No proposal for forest clearance for diversion of the said forest land as mandated under the Forest (Conservation) Act, 1980 has been submitted.

The scheme for the project was approved in the meeting of FDs held on 1/2<sup>nd</sup> September, 2015. Progressive Mine Closure Plan was approved by the SECL Board on 27<sup>th</sup> January, 2014.

The project was set up prior to inception of the EIA Notification, 1994, and has been in operation with the consent to operate issued/renewed by SPCB from time to time

**41.13.2** *The Committee, after deliberations and especially taking note of the fact that no proposal for forest clearance for diversion of the forest land involved in the project has been submitted, was not inclined to take the proposal forward.*

*The proposal was deferred for the needful on the above lines.*

#### **Agenda No.41.14**

**North-West (NW) Quarry of Pakri Barwadih Coal Mine of 3 MTPA capacity of M/s NTPC Limited located in villages Bariatu, Basaria, Beltu, Jabra, Kandaber, Nawadih, Sirma and Urub, Tehsil Keredari, District Hazaribagh (Jharkhand) - For ToR**

**[IA/JH/CMIN/82224/2018; F. No. J-11015/38/2007-IA-II(M)]**

**41.14.1** The proposal is for ToR to the project for North West (NW) Quarry of Pakri Barwadih Coal Mine of 3 MTPA capacity in mine lease area of 485.159 ha of M/s NTPC Limited located in villages Bariatu, Basaria, Beltu, Jabra, Kandaber, Nawadih, Sirma and Urub, Tehsil Keredari, District Hazaribagh (Jharkhand).

Project involves 327.224 ha of forest land. No proposal for forest clearance for diversion of the said forest land as mandated under the Forest (Conservation) Act, 1980 has been submitted.

**41.14.2** The Committee, after deliberations and especially taking note of the fact that no proposal for forest clearance for diversion of the forest land involved in the project has been submitted, was not inclined to take the proposal forward.

The proposal was deferred for the needful on the above lines.

#### **Agenda No.41.15**

**New Kathara Coking coal Washery of 3 MTPA capacity in an area of 11.30 ha by M/s Central Coalfields Limited located in village Bandh, Tehsil Gomia, District Bokaro (Jharkhand) - For ToR**

**[IA/JH/CMIN/77799/2018; F. No. IA-J-11015/98/2018-IA-II(M)]**

**41.15.1** The proposal is for ToR for New Kathara Coking Coal Washery of 3 MTPA capacity in project area of 11.33 ha of M/s Central Coalfields Limited located in village: Bandh, Tehsil: Gomia, District Bokaro (Jharkhand).

**41.15.2** Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No: 73E/13 and is bounded by the geographical coordinates ranging from 23° 45' 03.89"N to 23° 45' 18.98"N and longitude 85° 52' 05.57" E to 85° 52' 26.44"E.
- (ii) Coal linkage of the project is proposed with Govindpur Ph II and Kathara Colliery.
- (iii) No Joint venture cartel has been formed for New Kathara Coking Coal Washery.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation: The project will create employment opportunities both for skilled and semi- skilled persons in the area.
- (vi) The project is reported to be beneficial in terms of providing direct and indirect employment opportunities. Socio- economic benefits of the projects will accrue to local population also. It will also helps to provide clean coal produced to be used by steel industry, middling to be used by power sector.
- (vii) Total project area is 11.33 ha. No forest land is involved in the project.
- (viii) The land usage pattern of the project is as follows:

#### **Land use details**

| <b>S. No.</b> | <b>Land Use</b>             | <b>Area</b> |
|---------------|-----------------------------|-------------|
| 1             | Forest                      | 0.0         |
| 2             | Non Forest (tenancy nature) | 11.33       |
|               | Total Project Area          | 11.33       |

- (ix) Life of project is 18 years.
- (x) Transportation of coal has been proposed by conveyor belt from Washery to siding.
- (xi) No forest land is involved in the project
- (xii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xiii) Water for the proposed washery will be sourced from the nearby abandoned mines that contain approximately 10 Million m<sup>3</sup> of water.
- (xiv) Ground water level details will be dealt in EIA EMP study.
- (xv) Application for obtaining the approval of the Central Ground Water Authority is under preparation.

- (xvi) Public hearing will be done after the grant of ToR.
- (xvii) Damodar River is flowing at a safe distance of approx. 100 m from project boundary.
- (xviii) It is proposed to develop green belt all along the project boundary, infrastructure sites and service building area besides avenue plantation on both sides of the roads.
- (xix) Regular monitoring of ambient air quality is being carried out twice on fortnightly basis.
- (xx) No court cases, violation cases are pending against the project of the PP.
- (xxi) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under.
- (xxii) The project involves no PAFs.
- (xxiii) Total cost of the project is Rs. 270 Crores. Environment Management Cost is Rs. 170 Lakhs.
- (xxiv) The CTO of existing Kathara Washery has been obtained from the State Pollution Control Board on 15/02/2018 and is valid upto 31/12/2020.

**41.15.3** During deliberations, the EAC noted the following:

The proposal is for terms of reference (ToR) to New Kathara Coking Coal washery of 3 MTPA capacity in an area of 11.33 ha of M/s Central Coalfields Limited located in village Bandh, Tehsil Gomia, District Bokaro (Jharkhand). No forest land is involved in the project

Details of different products are proposed as under-

| Product             | Weight (%) | Ash (%) |
|---------------------|------------|---------|
| Washed/clean coal   | 60.6       | 18.0    |
| Washed coal (Power) | 6.8        | 34.0    |
| Rejects             | 32.6       | 52.2    |

Kathara coking coal washery of 3 MTPA in an area of 11.33 ha has been in operation since 1969. The same is proposed to be dismantled for setting up new Washery of the same capacity within the existing premises. The new washery will be based on wet process using heavy media separation and floatation technology with raw coal linkage from Govindpur Phase-II coal mining project and Kathara Colliery.

Transportation of washed coal is proposed through existing railway siding of Kathara washery, adjacent to proposed washery site. The rejects shall be utilized in the existing FBC plant(s) and will also be sold to other consumers.

Total fresh water requirement is estimated to be 1869 cum/day (peak), which is proposed to be met from mine water of abandoned quarry of nearby Kathara OC mine. No surface or ground water shall be used to meet water demand for the proposed industrial operations.

Consent to Operate for the existing Kathara Washery has been obtained from the State Pollution Control Board on 15<sup>th</sup> February, 2018, which is valid up to 31<sup>st</sup> December, 2020.

**41.15.4** *The Committee, after deliberations, recommended for grant of terms of references to New Kathara Coking Coal washery of 3 MTPA capacity in an area of 11.33 ha of M/s Central Coalfields Limited located in village Bandh, Tehsil Gomia, District Bokaro (Jharkhand), for preparation of EIA/EMP reports along with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable, along with the additional conditions as under:-*

- *Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.*
- *Total fresh water requirement shall not exceed 1869 cum/day, proposed to be met from*

*mine sump water of abandoned quarry of Kathara OC mine. No surface or ground water shall be used in coal washery operation.*

- *Study shall be carried for sustenance of water supply to cater to projected demand of the proposed washery from the abandoned mine(s) throughout planned life of the washery.*
- *Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted.*
- *Ash content below 34% should be maintained in washed coal to be transported beyond 500 km for use in thermal power plants.*
- *The washing technology so chosen should conform to 'Zero Liquid Discharge'.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *For proper baseline air quality assessment, adequate monitoring stations in the downwind areas based on wind rose pattern of the area, shall be set up for collection of air quality data and air quality modeling.*
- *Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.*
- *Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.*

#### **Agenda No.41.16**

#### **Basundhara Coal Washery of 10 MTPA of M/s Mahanadi Coalfields Ltd, located in District Sundergarh (Odisha) - For Environment Clearance**

**[IA/OR/CMIN/20520/2013; F. No. J-11015/435/2013-IA-II(M)]**

**41.16.1** The proposal is for grant of environment clearance to Basundhara Washery of 10 MTPA capacity in an area of 43.90 ha of M/s Mahanadi Coalfields Limited located in village Balinga, Bankibahal & Kusharain Tehsil Himgir District Sundargarh (Odisha).

**41.16.2** The proposal was earlier considered in the 1<sup>st</sup> EAC meeting held on 27<sup>th</sup> December, 2016, wherein the proposal was deferred for want of inputs in respect of following:

- (i) Mine closure activities already undertaken in respect of Basundhara (East) Coal mine has to be in conformity with the approved mining plan, conditions stipulated in EC in this regard, if any, and the other relevant statutory provisions.
- (ii) Basundhara (East) coal mine is reported to be abandoned and the total process water requirement of 2222 cum/day for coal beneficiation has been proposed to be utilized from the abandoned mine through 3.5 km long pipeline. Detailed study regarding sustenance of water availability throughout life of the washery has not been substantiated by the project proponent.
- (iii) Firm schedule for obtaining stage-I forest clearance for 29.41 ha of forest land.

The proposal was further considered by the EAC in its meeting held on 27- 28 February, 2016. It was observed that the project proponent shall be required to formulate an action plan for implementation of activities of mine closure status report, which would essentially take care of restoration/reclamation of the abandoned mine and thus the management of mine water also. The EAC, after deliberations, decided not to recommend the proposal, but to wait for the firm action plan to be submitted adequately addressing the requirements contained in the mine closure status report.

**41.16.3** In response to the observations of EAC, the details submitted by the project proponent during the meeting, are as under:-

- (i) The Mine Closure Status Report has been approved by the Company Board in its 205<sup>th</sup> meeting held on 23<sup>rd</sup> October 2018.
- (ii) A copy of the approved Mine Closure Status Report has been submitted to MoEF&CC.
- (iii) The time line for implementation of the action plan for incomplete/ partially complete requirements as contained in the Mine Closure Status Report has been prepared and is under implementation as given below:

| Sl.No | Work / Activity                 | Timeline For Completion   |
|-------|---------------------------------|---|
| i     | Reclamation of mined out area   | Total Reclaimed Area : 21.09 Ha<br>Plantation already done : 8.68 Ha<br>Plantation proposed : 11.29 Ha<br>(To be taken up in 2019-20)   |
| ii    | Restoration of external OB dump | Total area of External Dump: 11 Ha<br>Plantation already done : 7.78 Ha<br>Plantation proposed : 3.28 Ha<br>(To be taken up in 2019-20) |
| iii   | Restoration of road             | Concreting of road<br>Total length : 4050m<br>Work completed : 3700m<br>Balance : 350m (to be completed by 31.03.2019)                  |
| iv    | Fencing of mine                 | Total length : 3560 m<br>Fencing already done : 400 m<br>Proposed fencing : 3160 m<br>(to be completed by 31.12.2019)                   |

- (iv) The forest diversion proposal for 29.41 ha is in advance stage for grant of Stage-I forest clearance. Three point compliance sought by MoEF&CC, New Delhi has been submitted on 15.11.2018 vide letter no.244458 dated 12.11.2018.

**41.16.4** During deliberations, the EAC noted the following:

The proposal is for environmental clearance to Basundhara Washery of 10 MTPA capacity in an area of 43.90 ha of M/s Mahanadi Coalfields Limited located in village Balinga, Bankibahal & Kushara in Tehsil Himgir District Sundargarh (Odisha).

Project involves 29.41 ha of forest land. Proposal for diversion of said forest land for non-forestry use has been submitted.

ToR for the project was granted on 30<sup>th</sup> September, 2014, followed by amendment therein vide letter dated 29<sup>th</sup> February, 2016 due to change in layout. Public hearing was conducted by the SPCB on 27<sup>th</sup> July, 2016.

The Mine Closure Status Report has been approved by the Company Board in its 205<sup>th</sup> meeting held on 23<sup>rd</sup> October 2018 which specifies timelines for implementation of the action plan for carrying out incomplete/partially complete activities for mine closure of Basundhara (East) coal mine. The action plan is under implementation.

Of the total raw coal input of 10 MTPA at 43.8 ± 4% ash content, the details of different products proposed from the washery, would be as under-

| Product | Weight (MT) | Ash (%) |
|---------|-------------|---------|
|---------|-------------|---------|

|                   |       |      |
|-------------------|-------|------|
| Washed/clean coal | 7.456 | 33.5 |
| Rejects           | 2.544 | <65  |

The washery will be based on wet process using heavy media separation with raw coal linkage from Kulda Opencast coal mining project (10 MTPA).

Transportation of washed coal is proposed by rail (Rapid loading system with Silo). The rejects from the washery is proposed to be disposed off in FBC power plants, E-auction of coal or MoU Route and backfilling in mine void.

Total fresh water requirement is estimated to be 2222 cum/day, which is proposed to be met from mine water of abandoned quarry of nearby Basundhara (East) OC mine. No surface or ground water shall be used to meet water demand for the proposed industrial operations.

**41.16.5** *The Committee, after deliberations, recommended the project for grant of environment clearance to Basundhara Washery of 10 MTPA capacity in an area of 43.90 ha of M/s Mahanadi Coalfields Limited located in villages Balinga, Bankibahal & Kusharain, Tehsil Himgir District Sundargarh (Odisha), subject to submission of stage-I forest clearance for 29.41 ha of forest land and certain other conditions, in addition to the standard conditions for coal washery as specified at Annexure-XVII of this Ministry's OM No. 22-34/2018-IA.III dated 9<sup>th</sup> August, 2018, as under:-*

- *Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.*
- *Total fresh water requirement shall not exceed 2222 cum/day, proposed to be met from mine sump water of abandoned quarry of Basundhara (East) OC mine. No surface or ground water shall be used in coal washery operation.*
- *Study shall be carried for sustenance of water supply to cater to projected demand of the proposed washery from the abandoned mine(s) throughout planned life of the washery.*
- *Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted.*
- *Ash content below 34% should be maintained in washed coal to be transported beyond 500 km for use in thermal power plants.*
- *The washing technology so chosen should conform to 'Zero Liquid Discharge'.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *The project proponent shall reduce the time line for implementation of the action plan for carrying out incomplete/partially complete activities contained in mine closure of Basundhara (East) coal mine.*
- *For proper baseline air quality assessment, adequate monitoring stations in the downwind areas based on wind rose pattern of the area, shall be set up for collection of air quality data and air quality modeling.*
- *Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.*
- *Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.*

## **DISCUSSION ON ANY OTHER ITEM**

### **Agenda No.41.17**

**Expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Tehsil Waidhan District Singrauli (MP) and Tehsil Dudhi, District Sonebhadra (UP) - For Environmental Clearance**

**[IA/MP/CMIN/80585/2018; F No.J-11015/22/1996- IA.II(M)]**

**41.17.1** The proposal is for environment clearance to the expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in an area of 1752 ha of M/s Northern Coalfields Limited located in Tehsil Waidhan, District Singrauli (Madhya Pradesh) and Tehsil Dudhi, District Sonebhadra (Uttar Pradesh).

**41.17.2** Facts of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

(i) The project was earlier granted environmental clearance vide letter No.J-11015/381/2008-IA.II (M) dated 28<sup>th</sup> February, 2008 for 12.5 MTPA capacity in project area of 1752 ha. Subsequently, environmental clearance for the expansion of the project from 12.5 MTPA to 15.5 MTPA within the same project area was granted by the Ministry vide letter dated 10<sup>th</sup> December, 2008.

(ii) The PP had earlier submitted a proposal for grant of ToR to the project for expansion of Dudhichua Opencast Coal Mine Project from 15.5 MTPA to 25 MTPA by M/s Northern Coalfields Limited in an area of 2390.722 ha located in Tehsil Waidhan, District Singrauli (Madhya Pradesh) and Tehsil Dudhi, District Sonebhadra (UP). ToR for the same was granted by the Ministry vide letter No. J-11015/381/2008-IA.II (M) dated 1<sup>st</sup> February, 2018

(iii) The latitude and longitude of the project are 24<sup>0</sup>7'15.54"N to 24<sup>0</sup>10'56"N and 82<sup>0</sup>39'49.18"E to 82<sup>0</sup>43'19.75"E respectively.

(iv) Joint Venture: No

(v) Coal Linkage: Basket linkage mine for pit head power station of NTPC, UPRVUNL in Singrauli Coalfields and Power station in Western/ Northern India through their own MGR system and other consumers by Public Railway.

(vi) Employment generated / to be generated: 3350 (Sanctioned manpower as per EPR)

(vii) Benefits of the project: The project will be able to supply planned quantity of coal to pit head power stations of NTPC, UPRVUNL in Singrauli Coalfields and power stations in western/ Northern India through their own MGR system and other consumers by public railway system thus meeting the energy needs of the country

(viii) The total area of the extant project is 1752 ha. Mining lease area as per approved Mining Plan is 2390.722 ha. The land usage of the project will be as follows:

| S. No. | Particulars of land | Area (ha) |
|--------|---------------------|-----------|
| 1.     | Tenancy land        | 636       |
| 2.     | Government land     | 366       |
| 3.     | Forest land         | 750       |
|        | Total               | 1752      |

**Pre-Mining**

| S. No. | Land use                         | Within ML Area (ha) | Outside ML area (ha) | Total (ha) |
|--------|----------------------------------|---------------------|----------------------|------------|
| 1.     | Tenancy Land (Agricultural land) | 636.00              | NIL                  | 636.00     |
| 2.     | Forest Land                      | 749.78              | NIL                  | 749.78     |
| 3.     | Wasteland                        | -                   | NIL                  | -          |

|    |                          |         |     |         |
|----|--------------------------|---------|-----|---------|
| 4. | Grazing land             | -       | NIL | -       |
| 5. | Surface water bodies     | -       | NIL | -       |
| 6. | Settlements              | -       | NIL | -       |
| 7. | Others (Government land) | 366.22  | NIL | 366.22  |
|    | Total                    | 1752.00 | NIL | 1752.00 |

#### Post-Mining

| S. No. | Land Use Pattern   | Plantation (ha)   | Water body (ha) | Public use (ha) | Undisturbed land (ha) | Total land (ha) |
|--------|--|---|-----------------|-----------------|-----------------------|-----------------|
| 1.     | External OB dump   | 152.00  | -               | -               | -                     | 152.00          |
| 2.     | Top Soil Dump  | Top Soil will be utilized for biological reclamation of OB dumps. |                 |                 |                       | Nil             |
| 3.     | Excavation Area (backfilled and void)                                    | 805.00  | 63.00           | --              | -                     | 868.00          |
| 4.     | Roads  | --  | --              | 10.00           | --                    | 10.00           |
| 5.     | Build-up area (CHP, ETP, Workshop, Railway, colony, mineral storage etc) | 155.00  | --              | 198.00          | -                     | 353.00          |
| 6.     | Green Belt   | 160.00  | -               | -               | -                     | 160.00          |
| 7.     | Undisturbed Area   | -   |                 |                 |                       |                 |
|        | Total  | 1272.00   | 63.00           | 208.00          | 209.00                | 1752.00         |

(ix) Total geological reserve is 361.34 MT (Balance as on 31.03.2016). The mineable reserve 320.01 MT (as on 31.03.2017), extractable reserve is 320.01 MT. The per cent of extraction would be 92.49%

(x) The coal grade is G-8, G-11 & (Avg.-G-10). The stripping ratio is 4.61 M<sup>3</sup>/t. The average Gradient is 2<sup>0</sup>-3<sup>0</sup>. There will be three seams with thickness ranging upto 25.75 m.

(xi) The total estimated water requirement is 2.60 MGD. The level of ground water ranges from 0.20 m to 20.85 m below ground level.

(xii) The Method of mining would be Opencast (Combined system of Mining deploying Dragline and Shovel- Dumper)

(xiii) There is one external OB dump with Quantity of 134 Mm<sup>3</sup> in an area of 152 ha (Old external dump already reclaimed. There is no external dumping in the proposed expansion project) with height of 90 meter above the surface level and two internal dump with Quantity of 1603.78 Mm<sup>3</sup> in an area of 1316 ha.

(xiv) The final mine void would be in 324 ha with depth varying from 30 m to 40 m. and the total quarry area is 1640 ha. Backfilled quarry area of 1316.00 ha shall be reclaimed with plantation. A void of 324 ha with depth varying from 30 to 40m which is proposed to be converted into a water body

(xv) Ambient Air quality Baseline data monitoring has been carried out during 15<sup>th</sup> March, 2016 to 15<sup>th</sup> June, 2016 (Pre-monsoon season) and well documented. The results are found to be within permissible limits.

(xvi) The life of mine is 18 years (as on 01.04.2017).

(xvii) Transportation: From mine pit to crusher by rear dumpers, surface to siding by Coal Handling Plant and siding at loading by Automatic loading system through Silo.

(xviii) There is R & R involved. There are 502 PAFs for this expansion of project.

(xix) Cost: Total capital cost of the project is Rs. 2718.37 Crores. CSR Cost: As per CIL CSR policy of June 2014, 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 year or Rs 2/- per tone of coal production of previous year, whichever is higher. R&R Cost: 17.82 Crore. Environmental Management Cost :161.5278 Crore

(xx) Water body: There is no river/Nallha flowing near or adjacent to the proposed mine area.

(xxi) Approvals: Ground water clearance from CGWA obtained vide letter No. 21-4 (13)/NCR/CGWA/2007-626 dated 20.08.2007 for existing capacity. Board's approval obtained on 25.11.2017. Mining plan has been approved on 25.11.2017. Mine closure plan is an integral part of mining plan.

(xxii) Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.

(xxiii) Forestry issues: Total forest land area involved is 1217.809 ha. FC granted for 750.00 Ha and for balance 467.809 Ha has to be acquired.

(xxiv) Total afforestation plan shall be implemented covering an area of 1588 ha at the end of mining. Green Belt over an area of 120.722 ha. Density of tree plantation 2500 trees/ ha of plants.

(xxv) There are no court cases/violation pending with the project proponent.

(xxvi) Public Hearing was held in two districts. i.e. Sonebhadra (UP) on 10<sup>th</sup> October, 2006 and Singrauli (MP) on 20<sup>th</sup> January, 2007.

(xxvii) The monitoring report on compliance status of existing EC conditions have been forwarded by the Regional Office, MoEFCC at Bhopal vide letter dated 11<sup>th</sup> August, 2017.

**41.17.3** During deliberations, the EAC noted the following:-

The proposal is for environment clearance to the expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Dudhichua, Post Khadia, District Sonebhadra (UP) and Tehsil Waidhan, District Singrauli (MP).

The project involves 749.78 ha of forest land, for which forest clearance has been obtained to effect its diversion for non-forestry use vide letter dated 30<sup>th</sup> July, 1990 (555 ha in Uttar Pradesh) and letter dated 17<sup>th</sup> November, 2005 (194.78 ha in Madhya Pradesh).

The project report for the earlier proposed expansion of Dudhichua Coal Mining Project was approved by the Board of CIL on 25<sup>th</sup> November, 2017. Mining Plan for revised scope of the project i.e. expansion from 15.5 to 17.5 MTPA in mine lease area of 1752 was approved by the Board of M/s Northern Coalfields Ltd on 26<sup>th</sup> September, 2018.

The project was earlier granted environmental clearance vide letter dated 28<sup>th</sup> February, 2008 for 12.5 MTPA capacity in an area of 1752 ha. Further, environmental clearance to the project for expansion from 12.5 MTPA to 15.5 MTPA in the same area was granted by the Ministry on 10<sup>th</sup> December, 2008 based on the public hearing conducted at Sonebhadra (UP) on 10<sup>th</sup> October, 2006 and Singrauli (MP) on 20<sup>th</sup> January, 2007.

Earlier, the Ministry had granted ToR to the project for expansion of Dudhichua Opencast Coal Mine from 15.5 MTPA to 25 MTPA by M/s Northern Coalfields Limited in an area of 2390.722 ha located in Tehsil Waidhan District Singrauli (MP) and Tehsil Dudhi in District Sonebhadra (UP), vide letter dated 1<sup>st</sup> February, 2018 for preparation of EIA/EMP reports along with public consultation. However, due to prevailing circumstances, scope of the project was reduced to expansion up to 17.5 MTPA in the existing area of 1752 ha.

The Regional Office, Bhopal has conducted site inspection of the area on 27<sup>th</sup> March, 2017 to monitor the status of compliance of conditions stipulated in the environment clearance dated 10<sup>th</sup> December, 2008 and submitted report vide their letter dated 11<sup>th</sup> August, 2017. The same found to be satisfactory.

**41.17.4** *The EAC, after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration to the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of environmental clearance to the expansion of Dudhichua Opencast*

Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Dudhichua, Post Khadia, District Sonebhadra (UP) and Tehsil Waidhan District Singrauli (MP) for a period of one year, subject to the compliance of terms and conditions as applicable, and the additional conditions as under:-

- *Third party monitoring (by NEERI/CIMFR/IIT) for air quality shall be carried out at identified locations, both ambient and the process area, to arrive at impact of the proposed expansion. The monitoring results along with the recommendations shall be presented before the EAC to assess the efficacy and adequacy of pollution control measures.*
- *The project proponent shall obtain Consent to establish from the State Pollution Control Board for the proposed peak capacity of 17.5 MTPA prior to commencement of the increased production.*
- *Transportation of coal from face to Coal heap shall be carried out by truck. Further, the coal transportation from Coal heap to Coal Handling Plant shall be carried out through covered trucks.*
- *To control production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.*
- *Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions as presented before the Committee, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.*
- *The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 17.5 MTPA.*
- *Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.*
- *Persons of nearby villages shall be given training on livelihood and skill development to make them employable.*
- *To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.*
- *Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.*
- *Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.*

#### **Agenda No.41.18**

**Expansion of Kusmunda Opencast Coal Mine Project from 36 MTPA to 50 MTPA in an area of 1655.825 ha of M/s South Eastern Coalfields Ltd, located in District Korba (Chhattisgarh) - For Environmental Clearance**

**[IA/CG/CMIN/23512/2014, F. No.J-11015/176/2014-IA-II(M)]**

**41.18.1** The proposal was last considered by the EAC in its last meeting held on 26<sup>th</sup> October, 2018, wherein the Committee, in view of suggestions of majority of its members, was not inclined to recommend the proposal, mainly due to non-submission of compliance status for the conditions stipulated in the said environmental clearance dated 3<sup>rd</sup> July, 2018 through the Regional Office of the Ministry.

During the meeting, the Member Secretary informed the Committee that in view of shortage of coal in the country to meet the requirements of linked critical and super-critical thermal power

plants, there is a pressing demand for environmental clearance to the proposed expansion of the project beyond 36 MTPA. He requested the Committee for consideration of the proposal for further expansion to a smaller extent for the present, and that too for a limited period, subject to submission of Consent to Operate, coal production plan for the year 2018-19 and compliance status of the conditions stipulated in the EC dated 3<sup>rd</sup> July, 2018 to the satisfaction of the Ministry/Regional Office.

In view of the differing opinion, the proposal was not concluded and deferred for further deliberations during the next meeting.

**41.18.2** During discussions, the EAC first took note of the chronology of events as under:-

(a) The proposal was originally submitted for grant of environmental clearance to the expansion of Kusmunda Opencast Coal Mining project from 15 MTPA (normative)/18.75 MTPA (peak) to 50 MTPA (normative)/62.50 MTPA (peak) by M/s South Eastern Coalfields Ltd in mine lease area of 3510.348 ha in District Korba (Chhattisgarh). Public hearing for the project was conducted by the SPCB on 11<sup>th</sup> February, 2015.

(b) Mining Plan for the proposed expansion was earlier approved by the Board of M/s Coal India Ltd in its 300<sup>th</sup> meeting held on 28<sup>th</sup> October, 2013. Mine Closure Plan is an integral part of the Mining Plan.

(c) The EAC in its meeting held on 7-8 January, 2016 recommended the project for grant of environmental clearance for a production level of 26 MTPA (peak), subject to compliance of certain specific conditions and adopting mitigating measures. As per the recommendations, the project for expansion from 18.75 to 26 MTPA (peak) in mine lease area of 1449.864 ha, was granted EC by the Ministry on 3<sup>rd</sup> February, 2016.

(d) The proposal for further expansion of the project from 26 to 50 MTPA (normative)/62.50 MTPA (peak) was considered by the EAC in its meeting held on 27<sup>th</sup> February, 2018. During the meeting, the Committee took note of the observations of Ministry's Regional Office, contained in their monitoring report dated 13<sup>th</sup> June, 2017 (site visit on 22<sup>nd</sup> April, 2017), which mainly included the following:-

- Existing measures to check fugitive emissions while spilling, transportation, CHP area, appeared to be insufficient.
- Development of green belt is in nascent stage. The green belt of adequate width needs to be developed around the mine lease area, CHP, overburden dump sites, etc.
- Management of garland and catch drains was observed to be in poor state.
- No action undertaken for restoration and stabilization of overburden.
- Roads within the mine lease area observed to be laden with coal dust having poor drainage system.
- No ETP for treatment of CHP waste water. Only siltation pond provided for settling and recycling of effluent from the CHP.

(e) Taking cognizance of compliance status of the conditions stipulated in the EC dated 3<sup>rd</sup> February, 2016 and the additional control measures adopted by the project proponent, the sectoral EAC in its meeting held on 27<sup>th</sup> February, 2018, recommended the project for grant of EC to its expansion from 26 to 36 MTPA in an area of 1655.825 ha for a period of one year i.e. up to 31<sup>st</sup> March, 2019, subject to compliance of additional terms and conditions as under:-

(i) The project proponent shall obtain prior clearances for regularization and/or diversion of the forest land of 205.961 ha from the concerned regulatory authority to enable its use for non-forestry purpose.

(ii) The project proponent shall collect and analyze one season baseline data for environmental parameters, preferably during April-June, 2018, and submit for consideration of the EAC before 31<sup>st</sup> December, 2018.

(iii) The project proponent shall also submit the details regarding action taken on different observations of the Regional Office before 31<sup>st</sup> December, 2018, for the Committee to examine adequacy and efficacy of pollution control measures and its impact on ambient air quality and to make recommendations for continuance of the project thereafter.

(f) Based on above recommendations of the EAC and subsequent approval of the competent authority, the project for expansion from 26 to 36 MTPA in an area of 1655.825 ha, was granted environmental clearance by the Ministry on 3<sup>rd</sup> July, 2018 for a period up to 31<sup>st</sup> March, 2019, subject to compliance of certain terms and conditions.

**41.18.3** During deliberations on the present proposal, the EAC noted the following:-

The present proposal is for environmental clearance to further expansion of Kusmunda Opencast Coal Mining project from 36 MTPA to 50 MTPA (normative)/62.5 MTPA (peak) by M/s South Eastern Coalfields Ltd in mine lease area of 1655.825 ha in District Korba (Chhattisgarh).

Total project area of 1655.825 ha includes forest land of 205.961 ha. The same has since been regularized under the Forest (Conservation) Act, 1980 by the Ministry vide letter dated 26<sup>th</sup> April, 2018, for diversion to non-forestry purposes.

Consent to Operate under the Water Act, 1974 and the Air Act, 1981, for the last environmental clearance dated 3<sup>rd</sup> July, 2018 has been issued by the State Pollution Control Board vide their letter dated 10<sup>th</sup> December, 2018.

In line with the conditions stipulated in the last EC, the Ministry's Regional Office has forwarded report on status of compliance of the EC conditions vide their letter dated 11<sup>th</sup> December, 2018 based on site inspection carried out on 30<sup>th</sup> November, 2018. The said report mentions about many of the conditions either being complied with or agreed to comply. Also, additional infrastructure required for the proposed expansion, has also been highlighted.

Kusmunda OCP is catering to most of the critical and super critical thermal power plants including State Power Generation Corporation Ltd, CSPGCL (West), NTPC Korba, NTPC Seepat, Adani Power, BALCO, LANCO, Bhillai TPS, etc. In view of shortage of coal in the country to meet the requirements of TPPs, there is a pressing demand for environmental clearance to the proposed expansion of the project beyond 36 MTPA.

**41.18.4** *The Committee, in the first instance, was not convinced with the compliance status and desired for action taken report on different observations of the Regional Office to examine adequacy and efficacy of pollution control measures and its impact on ambient air quality.*

*However, in view of the reported shortage of coal and to cater to the demand of linked critical and super critical thermal power plants, the Committee recommended the project for grant of environmental clearance for further expansion up to 40 MTPA for a period of one year only, subject to terms and conditions stipulated in the environmental clearance dated 3<sup>rd</sup> July, 2018, along with the additional conditions as below:-*

- *The sub-committee of the EAC shall make a site visit to assess adequacy and efficacy of pollution control measures and its impact on ambient air quality.*

- *Third party monitoring (by NEERI/CIMFR/IIT) for air quality shall be carried out at identified locations, both ambient and the process area, to arrive at the impact of the proposed expansions in phases (26-36 MTPA and then up to 40 MTPA). The monitoring results along with the recommendations shall be presented before the EAC to assess the efficacy and adequacy of pollution control measures.*
- *An undertaking duly endorsed by NEERI/CIMFR/ISM, shall be submitted regarding mitigating measures and the infrastructure available for the proposed coal production capacity of 40 MTPA.*
- *Coal production shall be consistent with that given in the approved Mining Plan.*

### **Agenda No.41.19**

#### **Expansion of Lakhanpur Opencast (Phase-II) Coal Mining Project from 18.75 MTPA to 21 MTPA in an area of 2452 ha of M/s Mahanadi Coalfields Ltd, located in District Jharsuguda (Odisha) - For Extension of Environmental Clearance**

**[IA/CG/CMIN/23512/2014, F. No. J-11015/176/2014-IA-II(M)]**

**41.19.1** During deliberations, the EAC noted the following:-

The proposal is for continuation of environment clearance dated 28<sup>th</sup> February, 2018 granted by the Ministry to the expansion of Lakhanpur Opencast (Phase-II) Coal Mining Project from 18.75 to 21 MTPA in an area of 2452 ha (mine lease area of 2240 ha) of M/s Mahanadi Coalfields Limited located in tehsil Lakhanpur, District Jharsuguda (Odisha).

The project was granted environmental clearance by the Ministry vide letter dated 28<sup>th</sup> February, 2018 for a period of one year, subject to compliance of certain terms and conditions, inter-alia including the following:-

- Adequate ambient air quality monitoring stations shall be established in consultation with the State Pollution Control Board, and regular monitoring shall be carried out for particulate emissions (both PM<sub>10</sub> & PM<sub>2.5</sub>), SO<sub>2</sub> & NO<sub>x</sub>. The monitoring results for the period during summer season (April-June, 2018) shall be submitted to the State PCB and the Regional Office of this Ministry.
- The EAC shall review compliance of the actions taken on observations of the Regional Office before December, 2018, and make its recommendations for continuance of the project thereafter. Also, based on the monitoring results, the Committee shall examine adequacy and efficacy of the pollution control measures and its impact on ambient air quality.

The Regional Office, Bhubaneswar has conducted site inspection of the area on 13<sup>th</sup> November, 2018 to monitor the status of compliance of conditions stipulated in the environment clearance dated 28<sup>th</sup> February, 2018, and submitted report vide their letter dated 11<sup>th</sup> December, 2018. The same was found to be satisfactory.

**41.19.2** *The Committee, after detailed deliberations and duly considering observations of the Ministry's Regional Office in their report dated 11<sup>th</sup> December, 2018, recommended for continuance of the environmental clearance dated 28<sup>th</sup> February, 2018 for a period of one year i.e. validity up to 28<sup>th</sup> February, 2020, subject to the terms and conditions stipulated therein remaining the same.*

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Subject: **Re: Draft Minutes of EAC meeting held on 13-14 December, 2018 - reg.**  
To: Charan Jeet Singh <c.jsingh1@gov.in>, Srivastava Additional Director <sk.smree66@nic.in>,  
"S.K. Srivastava" <sk.smree66@gov.in>

Date: 12/21/18 04:28 PM  
From: navin chandra <navinchandrari@yahoo.com>

21/12/2018

Dear Dr. Srivastava Ji,

I have gone through the minutes of the EAC meetings held on 13th and 14th December, 2018. The minutes are in order and can be uploaded on the web site of MoEF &CC.

Regards,

(NAVIN CHANDRA)

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Dr. Navin Chandra,  
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