

Minutes of 32nd meeting of Expert Appraisal Committee for the proposal involving violation of EIA Notification, 2006 held on 22nd - 23rd April, 2020 through Video Conferencing

Day 1: Wednesday, 22nd April, 2020

Time: 11.00 AM to 1.00 PM

32.1. Opening remarks of the Chairman

32.2. Confirmation of the minutes of the 31st meeting held on 28th February, 2020 at Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

32.3 Proposal for consideration

32.3.1 Cluster of Godavarikhani No. 1&3 Inclines, Godavarikhani No. 2&2A Inclines and Godavarikhani No.5 Incline, Telangana by M/s Singareni Collieries Ltd.- for Environmental Clearance- Reconsideration for Environmental Clearance [IA/TG/CMIN/131588/2017] [F.No.23-78/2018-IA.III(V)]

Project proponent along with the consultant EPTRI made the detailed presentation on the project and inter-alia provide the following information:

The Singareni Collieries Company Limited (SCCL) is operating four underground and one opencast mines viz. GDK-1&3 (operating from 1959), GDK 2&2A (operating from 1960), GDK-5 (operating from 1961) and GDK-11 Inclines and Medapalli Opencast in Ramagundam-I area of Peddapalli District, Telangana State.

Present proposal involves underground coal mining operations from Cluster of three operating underground coal mines namely Godavarikhani (GDK) No. 1&3, GDK-2&2A and GDK-5 Incline with a combined production capacity of 1.734 MTPA in villages Janagaon, Musthyala, Jallaram, Sundilla, Mandal Ramagundam, district Peddapalli over a mine lease area of 1356.85 ha.

Earlier, this cluster of mines was proposed for obtaining Environmental clearance. An application in Form-1 was made to MoEF&CC on 08.06.2012, ToR was issued on 14.12.2012 by the sectoral EAC and Public Hearing was conducted on 20.12.2013 and final EMP was submitted on 03.03.2014 to Coal Mining sector for issue Environmental Clearance. However, the proposal was delisted by MoEF&CC and State Government was requested to initiate credible action on the violation under E(P) Act, 1986.

In accordance with S.O. No.804 (E), dated 14th March, 2017, an application in Form-I was submitted to MoEF&CC and deliberated in the 3rd EAC meeting for violation category on 21st-22nd March, 2018 and ToR was issued on 26.06.2019. As per the issued ToR, draft EIA/EMP was prepared and public hearing was conducted on 28.11.2019. EIA/EMP report was submitted to the violation sector for grant of Environmental Clearance on 16.12.2019. Accordingly, proposal was considered in the 29th meeting held on 30th - 31st December, 2019.

Project proponent alongwith the consultant EPTRI in the 29th meeting held on 30th - 31st December, 2019 made the detailed presentation on the project and inter-alia provide the following information:

- 1. Name of the Company, Address Tele No. & E-mail :-**The Singareni Collieries Company Limited, B. Bhaskara Rao Director (Planning & Projects), The Singareni Collieries Company Limited, Kothagudem Collieries – 507101, Bhadradri Kothagudem District, Telangana State, dpp@scclmines.com, Land: 08744 – 242602, Fax: 08744 – 242724
- 2. If a Joint venture, the names & addresses of the JV partners :-** NO
- 3. Latitude and Longitude of the project:-**

Coordinates	GDK 1&3	GDK 2&2A	GDK 5
Latitudes	18 ⁰ 45'24" to 18 ⁰ 46'53" N	18 ⁰ 44'42" to 18 ⁰ 45'42" N	18 ⁰ 43'38" to 18 ⁰ 45'19" N
Longitudes	79 ⁰ 30'25" to 79 ⁰ 32'29" E	79 ⁰ 31'15" to 79 ⁰ 32'38" E	79 ⁰ 31'17" to 79 ⁰ 33'14" E
Topo Sheet Nos.	56 N/9	56N/9 & 56N/10	56N/9 & 56N/10

- 4. Whether the project is in the Critically Polluted Area (CPA) :-** NO
- 5. Cost of the project :-**112.02 Cr
- 6. Employment generated / to be generated.:-**

GDK 1&3	GDK 2&2A	GDK 5
1214	1775	1342

- 7. Benefits of the Project:-**To meet the coal requirements of thermal power plants of Telangana State.
- 8. Whether new or Expansion project, If expansion:** Expansion

GDK 1&3	GDK 2&2A	GDK 5
0.344- 0.486	0.450 - 0.648	0.360- 0.600
41.28%	44.00 %	66.67%

If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006: Not Applicable

- 9. No. and Date of ToR letter issued by MoEF (if this is a case for EC):** F.No.23-78/2018-IA(III), dt. 26th Jun, 2019

10. If the project was considered in EAC, Pl give dates of the meeting (s) : 3rd EAC on 21st–22nd March, 2018 for issue of ToR.

11. Type of Mine: (Opencast / Underground / mixed) :- Underground Coal Mine

12. Capacity of the mine applied for :-

GDK 1&3	GDK 2&2A	GDK 5	Total
0.486 MTPA	0.648 MTPA	0.600 MTPA	1.734 MTPA

13. ML Area

(a) As per block allotment :- Not Applicable

(b) As per approved mine plan

GDK 1&3	GDK 2&2A	GDK 5	Total
541.66 ha.	282.76 ha.	532.43 ha.	1356.85 ha.

14. Date of approval of mine plans, status & date:- Mining Plan & Mine Closure Plan of GDK No. 1&3 was approved by MoC vide No. 13016/2/2006-CA-II dated 17.10.2014. Mining Plan & Mine Closure Plan of GDK No. 2&2A was approved by MoC vide No. 13016/2/2006-CA-II dated 17.10.2014. Mining Plan & Mine Closure Plan of GDK No. 5 was approved by MoC vide No. 13016/6/2013 dated 25.11.2014.

15. Date of Board's approval Approved vide Minute No.521:5:2 on 02.05.2014.

16. Date of Ground Water Clearance and surface water approval 20.02.2020

17. Existing Ground water level in (M) 1.10 to 12.81 m Pre – Monsoon, 1.02 to 11.07 m Post – Monsoon

18. Date of mine closure approval GDK No.1&3 - 17.10.2014, GDK No.2&2A - 17.10.2014, GDK No.5 - 25.11.2014

19. Any river / Nallah flowing near or adjacent to the proposed mine. If yes, please give details: River Godavari flows adjacent to lease area (in the buffer zone) along East - West direction and is situated towards North side of the property. Highest Flood Level (HFL) of the same, recorded in the year 1995, was 837.167m. The RL of the pit mouth of GDK No.1 Incline is 852.885m, GDK No.3 Incline is 850.008m, GDK 2 Incline is 857.110, GDK 2A Incline is 851.210, GDK 5 Incline is 854.000.

20. Details of mine lease:- South Godavari mining Lease

Original lease:

1. Date of entering into original lease deed: 17.10.1927
2. Date of expiry of original lease deed :16.10.1957

1st Renewal:

1. Date of 1st lease renewal : 29.11.1958
2. Whether renewal or deemed renewal : Renewal (17.10.1957 to 31.12.1984)
3. Date of expiry of 1st lease renewal/deemed renewal : 31.12.1984

2nd Renewal:

1. Date of 2nd lease renewal : 11.06.1986
2. Whether renewal or deemed renewal : Renewal (01.01.1985 to 31.12.2014)
3. Date of expiry of 2nd lease renewal / deemed renewal :31.12.2014

3rd Renewal:

1. Date of 3rd lease renewal : 12.01.2015
2. Whether renewal or deemed renewal : Renewal (01.01.2015 to 31.12.2034)
Date of expiry of 3rd lease renewal / deemed renewal :31.12.2034

21. Geological Reserve:

- i. Total Geological Reserves :-

GDK 1&3	GDK 2&2A	GDK 5	Total
154.26 MT	80.53MT	151.64 MT	386.43MT

- ii. Mineable reserve

GDK 1&3	GDK 2&2A	GDK 5	Total
117.45 MT	61.31 MT	115.45 MT	294.21MT

- iii. Extractable Reserves

GDK 1&3	GDK 2&2A	GDK 5	Total
40.92 MT	21.36 MT	40.22 MT	102.5 MT

- iv. Per cent(%) of extraction : 34.8

- v. Balance Extractable Reserves (As on 31.03.2019)

GDK 1&3	GDK 2&2A	GDK 5	Total
21.84 MT	8.94 MT	16.51 MT	47.29

- vi. Range of ground water level Pre monsoon : 1.10 m to 12.81 m
Post monsoon: 1.02 m to 11.07 m

- vii. Total estimated water requirement

GDK 1&3	GDK 2&2A	GDK 5	Total
1140 KLD	1849 KLD	3445 KLD	6434 KLD

viii. Details of intersecting ground water level.

Mine	GDK 1&3	GDK 2&2A	GDK 5
Depth in m	8.33	9.04	9.04
RL	841.07	848.17	848.46

22. Details of deposits Seams

i. No of seams

GDK 1&3	GDK 2&2A	GDK 5
1, 2, 3A, 3 & 4	1, 2, 3A, 3 & 4	3A, 3 & 4

ii. Thickness of seams to be worked on

Seams	GDK - 1&3	GDK - 2&2A	GDK - 5
1 Seam	4.5m - 5.0m	5.98 m	-
2 Seam	6m	3.8m - 4.2m	-
3A Seam	1.8m - 2.2m	1.5m - 1.6m	1.6m - 1.8m
3 Seam	6m	7.7m - 7.9m	7.0m - 8.0m
4 Seam	3.5m - 4.0m	4.1m - 4.5m	3.6m - 4.0m

iii. Grade of Coal

GDK 1&3	GDK 2&2A	GDK 5
G'2' and G'9'	G-'7' and G-'9'	G-'7'

iv. Average Stripping ratio Not Applicable

v. Category of gaseousness Degree I

vi. Average gradient 1 in 3 to 1in 5.5

vii. Maximum thickness of seams

Seams	GDK - 1&3	GDK - 2&2A	GDK - 5
1 Seam	5.0m	5.98 m	-
2 Seam	6.0m	4.20m	-
3A Seam	2.2m	1.60m	1.8m
3 Seam	6.0m	7.90m	8.0m
4 Seam	4.0m	4.50m	4.0m

23. Method of mining: The proposal is for extracting coal by adopting semi mechanized method of Bord and pillar mining with LHDs and SDLs by stowing.

24. Life of mine as on 01.04.2019

GDK 1&3 Incline	:	58 Years
GDK 2&2A Incline	:	14 Years
GDK 5 Incline:		35 Years

25. Whether ambient air quality seasonal data has been documented. If so from which season to which season and whether the results are within the prescribed limits.
Yes.

Post Project Environmental Monitoring for Ambient air quality is being documented and the results are within the prescribed limits.

26. Whether the certificate of compliance of the earlier EC from MoEF Regional Office has been obtained, if the proposal is for expansion. :-Not applicable as the proposal is for obtaining EC for the first time.

27. Details of OB :- Not Applicable as these are underground mines.

28. Details of Internal Dumps :- Not Applicable as these are underground mines.

29. Utilization potential of wastes

- (i) Within the mines :The solid waste was generated during tunneling, shaft sinking, etc.
- (ii) Outside mines: The separation of Shale/stones etc. at CHP
- (iii) Efforts made by proponent :The solid waste produced during drivage of tunnels and debris so produced from inter-seam drifts was utilized for underground track ballasting, leveling of the uneven floors and strengthening of surface bank head.

As these mines are being operated from 1959, no appreciable quantity of solid waste is anticipated further.

29. Details of final Mine Voids :-Not applicable as these are underground mines.

30. Details of Quarry :- Not applicable as these are underground mines.

31. Details of Land usage :-

i. Pre-mining :-

S. No	Land Use of Lease Area	GDK 1 & 3	GDK 2 & 2A	GDK 5	Total
1.	Forest Land	Nil	Nil	Nil	Nil
2.	Agricultural land	232.12	61.08	59.21	352.41
3.	Waste Land	165.65	111.27	135.67	412.59
4.	Grazing Land	58.27	76.67	325.82	460.76

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5.	Water Bodies	45.24	26.80	6.73	78.77
6.	Built up area	40.38	6.94	5.00	52.32
Total		541.66	282.76	532.43	1356.85

ii. Core Area (Present Land Use) :-

Sl. No	Description	Area in ha.			
		GDK 1&3	GDK 2&2A	GDK 5	Total
1.	Pit head infrastructure	4.32	4.87	6.05	15.24
2.	Infrastructure for area administration (MVTC, Stores, CHP, etc.)	5.60	6.27	0.67	12.54
3.	Approach Roads	12.24	5.88	18.34	36.46
4.	Township/ colony	6.00	Nil	Nil	6.00
5.	Sand Stock Yard & stowing bunker	22.60	20.50	47.43	90.53
6.	Plantation Existing	82.00	118.00	315.00	515.00
7.	Plantation proposed till closure	7.91	4.20	18.72	30.83
8.	Other purpose	54.87	42.24	39.68	136.79
Total		195.54	201.97	445.89	843.40

iii. Post Mining Land Use

Sl. No.	Land Use details	Area in ha.		
		GDK 1&3	GDK 2&2A	GDK 5
1.	Plantation.	161.06	189.81	421.88
2.	Other areas like roads, infrastructure, etc., left for public use.	34.48	12.16	24.01
3.	Un disturbed land not acquired.	346.12	80.79	86.54
Total		541.66	282.76	532.43
Total		Total plantation of 772.75 ha Out of 843.40 ha of SCCL acquired.		

32. Details of Forest issues :- Not applicable

33. Cost of the Project.:-

i. Total Capital cost :- 112.02 Cr

- ii. Cost of Production (Rs/tonne) :-

GDK 1&3	GDK 2&2A	GDK 5
5189	6386	4950

- iii. Sale Price (Rs/tonne) :-

GDK 1&3	GDK 2&2A	GDK 5
2582	2518	2721

- iv. CSR cost :- As per Companies Act, 2013 and Companies Social Responsibility Policy Rules - 2014, SCCL is spending 2% of its 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 on CSR activities each financial year. In addition, an amount of Rs. 703.74 crores (from February 2016 - April 2019) was deposited with District Collector, Peddapalli, under District Mineral Foundation Trust (DMFT).

- v. R&R Cost: No R&R is involved.

- vi. No of PAFs Not Applicable

- vii. Environmental Management cost :-

GDK 1&3	GDK 2&2A	GDK 5
Rs. 100.00 Lakhs	Rs. 50.00 lakhs	Rs. 100.00 Lakhs

Recurring cost:Rs.52.20 lakhs / annum

34. Details of transportation of coal

- i. In pit: From pit to pithead by belt conveyors/ haulage
- ii. Surface to siding: Up to CHP/Siding by trucks 0.5 km - 2.0 km
- iii. Siding to loading: Loading to Rail way wagons through pre-weigh bin at CHP.

35. Details of reclamation

- i. Total Afforestation plan at the end of mining. This will include:

GDK 1 & 3 Incs.	GDK 2 & 2A Incs.	GDK 5 Inc.
161.06 ha	189.81 ha	421.88 ha
772.75 ha		

- ii. Reclaimed external OB dump Not Applicable
- iii. Internal Dump in ha. Not Applicable

- iv. Green belt in ha. 772.75 ha
- v. Density of the plantation (in no. of plants) 2500 Plants/ha.

36. Detailed Status of Progressive Mining Closure Plan (For expansion projects only)

- a) Implementation of various activities as per approved progressive mine closure plan (in Bar chart):- All the activities are being carried out as per the progressive mine closure plan.
- b) Any deviation from the approved Progressive Mine Closure Plan.:- Nil
- c) Total area excavated (in ha.) :-Not Applicable
- d) Total area backfilled after excavation (in ha.) :-Not Applicable
- e) Total area reclaimed (in ha.) :-515.00 ha (Plantation till 31.03.2019)

37. Any court cases pending. If so, please provide a list with details as annexure.:-

The present proposal was applied for EC as per S.O. 804(E), dt.14.03.2017. Accordingly ToR was issued by MoEF&CC for necessary action by the State Government / SPCB. Environmental Engineer, RO, Ramagundam, TSPCB has filed case under Section 15 &19 of the E(P) Act, 1986 in the Court of Hon'ble Additional Judicial Magistrate of F.C. at Godavarikhani on 23.03.2020 with file No. 331/2020.

38. Give the details of actual production vis-à-vis sanctioned capacity since inception of mine in following format:

Year	EC Sanctioned Capacity (MTPA)	Actual Production (MTPA)			Excess production beyond the 1993-94 base level capacity (MTPA)		
		GDK 1&3	GDK 2&2A	GDK 5	GDK 1&3	GDK 2&2A	GDK 5
1993 - 94	These three are working 1993 - 94 Base levels	0.344	0.450	0.360			
1994 - 95		0.391	0.485	0.324	0.047	0.024	--
1995 - 96		0.349	0.384	0.267	0.005	--	--
1996 - 97		0.378	0.427	0.300	0.034	--	--
1997 - 98		0.350	0.385	0.301	0.006	--	--
1998 - 99		0.369	0.415	0.290	0.025	--	--
1999 - 2000		0.367	0.385	0.308	0.023	--	--
2000 - 01		0.404	0.426	0.331	0.060	--	--
2001 - 02		0.376	0.395	0.405	0.032	--	0.049
2002 - 03		0.343	0.327	0.443	--	--	0.087
2003 - 04		0.300	0.336	0.478	--	--	0.122
2004 - 05		0.337	0.325	0.462	--	--	0.106
2005 - 06		0.304	0.306	0.512	--	--	0.156
2006 - 07		0.162	0.307	0.363	--	--	0.007
2007 - 08		0.271	0.368	0.454	--	--	0.098
2008 - 09		0.298	0.367	0.478	--	--	0.122
2009 - 10	0.307	0.451	0.501	--	--	0.145	

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2010 - 11	0.342	0.550	0.485	--	0.089	0.129
2011 - 12	0.264	0.452	0.437	--	--	0.081
2012 - 13	0.272	0.467	0.495	--	0.006	0.139
2013-14	0.290	0.364	0.475	--	--	0.119
2014-15	0.287	0.339	0.443	--	--	0.087
2015-16	0.254	0.337	0.382	--	--	0.026
2016-17	0.228	0.455	0.382	--	--	0.026
2017-18	0.236	0.294	0.290	--	--	--
2018-19	0.210	0.312	0.315	--	--	--

39. Date and Place of Public hearing :-Public hearing was held on 28th November 2019 at MVTC, Near GDK-5 Incline, Godavarikhani, Peddapalli Dist. TS.

40. The designation of officer presided our the PH :- Joint Collector

41. Name of the EIA consultant who prepared the EIA/EMP report. :-Environment Protection Training and Research Institute (EPTRI), Hyderabad.

42. Whether the consultant has been accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009.:- Yes.
Certificate No. NABET/EIA/1922/RA0143, dated 06.12.2019 valid up to 29.05.2022.

43. Name of specialists/consultants involved in making EIA report and in collecting data. :-Mrs. Shaheda Begum, Mrs. V. Bhavani

44. Whether the project was considered by the IMG of Ministry of Coal for any irregularities. If so the no. and date of the show cause notice and the response of the MoC. :-Nil

Observation and recommendation of the EAC in earlier meeting:

EAC in the 29th meeting deliberated on the information submitted (Form 2, EIA/EMP report/Public Hearing details etc) and as presented by the project proponent. EAC observed that GDK-1&3 mine exceeded the 1993-94 base level production (0.344MT) in 1994-95. Similarly, GDK-2&2A mine exceeded the 1993-94 base level production (0.45 MT) in 1994-95 and GDK-5 mine exceeded the 1993-94 base level production (0.36 MT) in 2001-02. Since the instant proposal is for the cluster not for the individual mine leases, Environmental clearance to the instant project is applicable since 1994-95.

EAC, after detailed deliberation on the information submitted and as presented in the 29th meeting held on 30th - 31st December, 2019, **deferred** the proposal for want of following information:

1. In the declaration by Experts contributing in preparation of EIA/EMP, it was observed that two EIA coordinators and FAEs names mentioned without their category of

eligibility in preparation of EIA/EMP report. Hence EIA consultant organization has to submit revised declaration with experts with their category.

2. Field visit photographs of concerned EIA coordinator involvement during site visit particularly in collection of BLD along with SE&EB functional area experts.
3. As per the Annexure-3D of health status collected from District Medical & Health officer the letter dated 16.10.2018, but actual BLD was collected in March 2019 to May, 2019, please clarify in this regard. In this annexure the data furnished is entire Peddapalli district surrounded by SCCL mines and also mentioned that some data will be furnished in due course. Submit 3 years' baseline health status data within 5 km radius of the proposed project with integrated socio economic profile of the study area with QOL comparison between 1993/94 and 2018/19.
4. Submission of surface contour plan and water danger plan as approved by DGMS.
5. Submission of land use details pre and present and post mining for entire land 1356.85 Ha with LULC comparison as interpreted through Satellite imagery.
6. Distance of Sivaram Wildlife Sanctuary from boundary of cluster of mine and the certification if it is around 10 kms from core zone boundary.
7. Compliance of earlier ground Water Clearance issued on 18.02.2014. Submit the 3D ground water modelling studies and the impact due to pumping of groundwater from these mines based on modelling.
8. Revised ground water clearance if obtained from concerned Authority.
9. Protective measures taken against inundation as approved by DGMS since the river Godavari is flowing adjacent to the mining lease area.
10. Air quality prediction modeling studies based on CMPDI emission factors considering the impact due to handling and transportation of coal for peak production capacity for 1.734 MTPA without control and with control measures and details of air emission year wise of violation period collectively as per the annexure.
11. Air quality monitoring locations table showing the distance and direction wrt to predominant wind directions.
12. During presentation it was mentioned that air quality locations stations are identified based on annual Wind rose data but this details are not furnished in the EIA/EMP report and same to be submitted.
13. Revisit the data of chemical characteristics of coal.
14. Certified CFO compliance report to be obtained from concerned regional office of SPCB.
15. Proposed STP details like capacity and technology.
16. Heavy metals concentrations in the mineralogical composition of RPM is to be rechecked.
17. Capital cost of the project with certificate from finance department of the company to be submitted and also EMP capital and recurring cost incurred year wise if spent, to be submitted.

18. Flow sheet of water treatment and other water management (ground and surface water) system with detailed quantity shall be submitted.
19. Submit in tabular form the gist of written representations received in the public hearing along with commitment by project proponent with time bound action plan
20. Revised CER cost along with the activities based on revised capital cost to be prepared. CER details excluding the activities proposed under CSR with time bound implementation (maximum three years) shall be submitted.
21. Presentation to be made as per the specific ToR and standard ToR issued to the project.
22. Plantation and Green Belt details with the name of species and photographs.
23. Declaration about that no Schedule I species in the core and buffer zone of the proposed project with the list of flora and fauna in the required format.
24. Social Impact Assessment and R&R, if any details to be submitted in the chapter 7 of the EIA/EMP report as per the generic structure
25. As suggested by the committee, revised remediation plan, community and natural resource augmentation plan should be submitted. Activities along with the budgetary provision proposed under remediation plan should be revisited.
26. Details as per Annexure XI as mentioned in the agenda shall be submitted for the violation period.
27. Status of credible action.

PP submitted the above information to the Ministry on **11th March 2020**, accordingly proposal is taken to the EAC for deliberation in present (32nd) meeting held on 22.04.2020 through video conferencing. PP along with the consultant made the detailed presentation on the additional information as sought by the EAC in 29th meeting.

Observation and recommendation of the EAC in the present meeting:

EAC observed that PP has submitted the required information as sought in the 29th meeting such as revised declaration by the consultant, base line health data in the surrounding villages of 5 km for 3 years (2019, 2018, 2017) collected from DM&HO office during March 2020, surface contour plan and water danger plan, land use details pre and present and post mining for entire land 1356.85 Ha with LULC comparison, Certified CFO compliance report from concerned regional office of SPCB, etc. EAC further observed that Ground water clearance (GWC) for the existing 3 mines was obtained in 2007. Later, GW clearance for expansion was again obtained in 2014. But the expansion proposal was delisted. Hence, GW clearance for the present proposal has been obtained on 22.02.2020 which will be implemented once the EC is obtained for this cluster of mines. PP has submitted approved wildlife conservation plan.

EAC noted that PP submitted the revised Remediation plan and Natural and Community Resource Augmentation plan of Rs 277.1 lakhs during the meeting and same was deliberated by the EAC. After detailed deliberation EAC recommended a cost Rs. of 277.1 lakhs to be invested by PP towards Remediation plan and Natural and Community Resource Augmentation plan. However,

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EAC advised PP to provide entire amount of Rs. 20, 00, 000/- to drip irrigation facility to farmers under NRA instead of providing roof top rain water harvesting pits as it has to be provided to the farmers in compliance of CFO conditions. EAC also advised PP to submit following to the Ministry at the earliest:

1. Certificate of Plagiarism check by the Accredited Consultant Organization
2. Changes in CER activities as suggested.
3. DGMS permissions as the copy of it submitted to under ADS reply is not legible.

PP has submitted the above information to the Ministry. EAC after detailed deliberation on the information submitted by the PP (EIA/EMP report, PH issues, Form 2, Additional information,

Annexures etc), recommended the proposal for **grant of Environmental Clearance** subject to the compliance of following specific conditions in addition to all standard conditions applicable for such projects :

1. EAC recommended for an amount of Rs 277.1 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details are given below:

➤ **Remediation Plan along with Cost**

Environment Component	Remediation measures for environmental damage	Total (Rs.)	2020 – 21 (Rs.)	2021 – 22 (Rs.)	2022 – 23 (Rs.)
Air, & Environment Ecology	1. Providing water sprinklers along the village CC roads for suppressing dust.	15,00,000	5,00,000	5,00,000	5,00,000
	2. Monitoring of ambient air quality in nearby 4 villages within buffer zone towards downwind direction	7,50,000	2,50,000	2,50,000	2,50,000
	3. Avenue Plantation in nearby villages	7,50,000	2,50,000	2,50,000	2,50,000
	Total (A)	30,00,000	10,00,000	10,00,000	10,00,000
Water Environment	1. Rainwater recharge pits construction in nearby 4 villages.	20,00,000	10,00,000	5,00,000	5,00,000
	2. Rainwater recharge shaft in 2 villages	20,60,000	8,60,000	6,00,000	6,00,000
	Total (B)	40,60,000	18,60,000	11,00,000	11,00,000
Waste Management	1. Distribution of 10 Nos Waste Collection bins of capacity 500 Litres to be kept in common areas in nearby 4 villages each at INR 9500 per unit	3,80,000	1,50,000	1,50,000	80,000
	2. Providing 6 Nos colour coded bins in nearby 2 schools, 2 hospitals at INR 5000 per unit	1,20,000	40,000	40,000	40,000
	Total (C)	5,00,000	1,90,000	1,90,000	1,20,000

Socio-Economic	1. Self employment generation for local population through skill development in vocational courses for nearby 4 Villages	20,00,000	10,00,000	5,00,000	5,00,000
	Total (D)	20,00,000	10,00,000	5,00,000	5,00,000
Grand Total (A) + (B) + (C) + (D) + (E)		95,60,000	40,50,000	27,90,000	27,20,000

➤ **Natural & Community Resource Augmentation Plan along with the Cost:**

Environmental components	Natural Resource Augmentation	TOTAL (Rs.)	2020 - 21 (Rs.)	2021 - 22 (Rs.)	2022 - 23 (Rs.)
Water Environment	1. Drip irrigation facility to farmers in nearby 4 villages	28,00,000	15,00,000	7,00,000	6,00,000
	2. De-silting of tanks in nearby Jaongoan&sundilla tanks	14,00,000	5,00,000	5,00,000	4,00,000
	3. Channelizing of excess mine water to nearby water tanks for ground water augmentation	10,00,000	4,00,000	4,00,000	2,00,000
	Total (A)	52,00,000	24,00,000	16,00,000	12,00,000
Energy Conservation	1. Distribution of energy efficient LEB bulbs to 250 Households in nearby 4 villages each, at INR 150 Each	1,50,000	50,000	50,000	50,000
	2. Installation of 5 No.s Solar based street lights in nearby 4 villages each at INR 2 Lakhs.	40,00,000	20,00,000	10,00,000	10,00,000
	Total (B)	41,50,000	20,50,000	10,50,000	10,50,000
Land & Ecological Environment	1. Renovation of community wells along with animal water troughs in nearby villages.	8,00,000	2,00,000	2,00,000	4,00,000
	2. Training to nearby village farmers on Land usage and crop pattern, development of social forestry schemes and medicinal plants.	11,00,000	3,00,000	4,00,000	4,00,000
	Total (C)	19,00,000	5,00,000	6,00,000	8,00,000
Grand Total (A) + (B) + (C)		1,12,50,000	49,50,000	32,50,000	30,50,000

➤ **Community Resource Development (augmentation) Plan along with the Cost:**

Sl. No.	Community Resource Development	Total (Rs.)	2020 – 21 (Rs.)	2021 – 22 (Rs.)	2022 – 23 (Rs.)
1.	Construction of 5 common toilets in 4 villages in discussions with the village panchayats. Cost of each Toilet at INR 50,000	10,00,000	5,00,000	2,50,000	2,50,000
2.	Facilitation of computer facility centre in 4 schools in 4 villages	4,00,000	2,00,000	1,00,000	1,00,000
3.	Renovation of Government School building in nearby 2 villages	4,00,000	2,00,000	1,00,000	1,00,000
4.	To Support village level sports activities / library in nearby 4 villages	8,00,000	4,00,000	2,00,000	2,00,000
5.	Employment generation for local population through skill development in nearby 4 Villages	8,00,000	4,00,000	2,00,000	2,00,000
6.	Conducting periodic medical check-up camps for general health in nearby 4 Village	8,00,000	4,00,000	2,00,000	2,00,000
7.	Creating awareness on hygiene and sanitation among Children & women in nearby 4 villages by conducting programs via NGO / Self Help groups.	12,00,000	4,00,000	4,00,000	4,00,000
8.	Improvement of local infrastructure for agriculture purpose (Repair of tank canal, Bund around agriculture land, etc)	15,00,000	5,00,000	5,00,000	5,00,000
Total		69,00,000	30,00,000	19,50,000	19,50,000

Summary for Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan cost:

Sl. No.	Description	Estimated cost (Rs. in Lakhs)
1	Remediation Plan	95.60
2	Natural Resources Augmentation Plan	112.50
3	Community Resources Augmentation Plan	69.00
Total		277.1

2. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs. 277.1 lakhs.
3. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs. 277.1 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
4. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
5. Fund allocation for Corporate Environment Responsibility (CER) of Rs. 218.00 lakhs/- to be implemented as per the details submitted in the Ministry.
6. Ground water clearance conditions shall be implemented in toto.
7. All statutory precautions shall be taken as per the DGMS permission against the danger of inundation.
8. Approved wildlife conservation plan shall be implemented in toto.
9. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
10. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
11. Automatic mist type sprinkling system shall be installed at crusher house and in pit belt conveyor to control production of dust. During transportation of coal from Mine to CHP shall be done by covered trucks with tarpaulin. Adequate number of water sprinklers shall be provided to control dust along coal transport roads.
12. Effective dust suppression system shall be adopted along the railway siding area and between villages. Fabric wind barrier shall be established along the Railway Siding and between villages.
13. STP of 17 MLD capacity with a cost of Rs 29.04 Crores shall be constructed in the township and completed by October, 2021
14. 3D ground water modelling studies are being carried out for assessing the impact due to mining and comprehensive report shall be submitted to Ministry and its concerned Regional office within a year

15. Solid waste management as per SWM rules 2016 shall be complied within their colony.
16. Energy conservation measures for the existing colony and structures and compliance of ECBC norms shall be adhered to for the future colonies and structures.
17. Green belt is to be developed in and around mines and vacant lands of surrounding villages with 24.00 lakhs saplings and free distribution of saplings to surrounding villagers shall be done
18. Quality of Mine discharge water which will be used for drinking purpose shall be checked and should meet the prescribed drinking water standards.
19. Periodical health check-up shall be conducted to monitor the impact of heavy metals present in core zone & buffer zone air quality and also to prepare an action plan to reduce heavy metals concentration and also report to be submitted to concerned regional office of MoEF&CC.
20. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
21. The mining lease holder shall, after ceasing mining operations, under take re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc.

32.3.2 Bandla Limestone mining project (M.L. Area 4.96 Ha) of M/s Friends Mineral, located at MauzaShamahPamta, Tehsil Paonta Sahib, District Sirmaur, Himachal Pradesh – Environmental Clearance [IA/HP/MIN/136142/2018 dated 06.03.2020] [F. No. 23-263/2018-IA.III (V)]

Project proponent along with the consultant M/s Shivalik Solid Waste Management ltd.made the detailed presentation on the project and inter-alia provide the following information:

M/s Friends Minerals Prop, Bandla Limestone Mine, resident of Ward No. 3, Adarsh Colony, Badripur, Paonta Sahib, Sirmour (HP)-173025, was granted mine lease for mining of limestone from hill slope, located at Mauza ShamahPamta, Tehsil Paonta sahib, District Sirmour, Himachal Pradesh over an area of 4.96 ha. Lease was sanctioned on 01.08.1985 in favour of M/s Friends Minerals for 20 years up to 31.07.2005 Renewal was applied 23.07.2007 for period of 20 years which was extended upto 31.07.2015. As per section -8A introduced by MMDR (Amendment) Act 2015, the mining lease has been extended upto 31.07.2035 vide letter no. Udyog – Bhu (Khani -4) Major -122/04-2327 dated 5.06.2015.

As per MoEF, New Delhi Gazette dated 14th September 2006 and amended thereafter, the mining project is categorized as category 'A' project due to the presence of Interstate Boundary of Uttarakhand and Himachal Pradesh within 5 km of the study area.The proposed project activity will be carried out from the Hill Slope located in district Sirmaur. It has been proposed to collect 60,021TPA (maximum) of limestone including waste within the area of 4.96 ha.

Basic Information about the project:

1. Name of the project: -Mining from Bandla Limestone Mine at Mauza: SamahPamta, Tehsil Paonta Sahib, District Sirmour, Prop. M/s Friends Mineral.
2. Name of the Company, Address Tele No. & E-mail Head of organization :- Company Name: M/s Friends Mineral.
Address : Shri Chandra Mohan Sharma, Ward No. 3, Adarsh Colony, Badripur, Paonta Sahib, District: Sirmour, Himachal Pradesh- 173025, Telephone : 01795-260427, 260227, Fax : Email id : bandlalimestone@gmail.com
3. If a Joint venture, the names & addresses of the JV partners including their share :- Not applicable
4. Latitude and Longitude of the project :- Latitude: 30⁰35'39.1" N -30⁰35'43.9" N-30⁰35'41.2" N, Longitude: 77⁰42'20.3" E -77⁰42'22.5" E-77⁰42'18.2" E
5. Whether the project is in the Critically Polluted Area(CPA):- No
6. Cost of the project: -Rs. 55 Lakhs
7. Employment generated/to be generated: -33
8. Benefits of the project
 - Improvement in social infrastructure.
 - Health and safety
 - Employment potential.
9. Whether new or expansion project. If expansion: New Project (60,021 TPA of limestone)
10. No. and Date of the ToR/and revised ToR, if any, letter issued by the MoEF (if this is a case for EC): ToR letter No. F. No. 23-263/2018-IA.III(V) Date 09-Oct-2019.
11. No. and Date of the EC and the revised EC letter issued by the MoEF (if this is a case for reconsideration. If so, what specific reconsideration(s) being sought by the proponent):- No
12. If the project was considered in EAC, Pl. give dates of the meeting (s) :- For Grant of TOR EAC meeting held on 19-20 September 2016, For Grant of TOR EAC (Violation) meeting held on 29/03/2019.
13. Type of Mine: (Open cast/Underground/mixed) Open-cast Mine
 - Capacity of the mine applied for :- 60,021 TPA including waste
 - ML Area 4.96 Hectare
 - (i) As per block allotment :- 4.96 Hectare
 - (ii) As per approved mine plan :- 4.96 Hectare
14. Date of approval of mine plan, mine closure plan, status & date :- Scheme of Mining including Mine Closure Plan, Date of approval: 29 July 2016, Status: approved
15. Date of Ground water clearance and surface water approval: -Not Applicable

16. Existing Ground water level in(M) :- Pre-monsoon period 3.02 to 38.2 m bgl, Post-monsoon period 3.3 to 36.86 m bgl

17. Date of mine closure approval:-----

18. Any river/ Nallah flowing near or adjacent to the proposed mine. If yes, please give details :- Giri River (7 km in SW direction)

19. Details of Mine Lease

Details of Mine Lease-			
1. Date of entering into original lease deed.	1. Date of 1st lease renewal	1. Date of 2nd lease renewal	1. Date of 3rd lease renewal
01.08.1985	23.07.2007	--	--
2. Date of expiry of original lease deed	2. Whether renewal or deemed renewal	2. Whether renewal or deemed renewal	2. Whether renewal or deemed renewal
31.07.2005	31.07.2015 (has been extended up to 31.07.2035 vide letter no. Udyog-Bhu (Khani- 4) Major- 122/04-2327 dated 05.06.2015	--	--
(i)	(ii) 3. Date of expiry of 1st lease renewal/ deemed renewal	(iii) 3. Date of expiry of 2nd lease renewal/ deemed renewal	(iv) 3. Date of expiry of 2nd lease renewal/ deemed renewal (v) [also for subsequent renewals]
	--	--	-

20. Geological Reserve

- i. Total geological reserve :- 40, 65, 907 MT
- ii. Mineable reserve :- 16, 77, 843 Tonnes
- iii. Extractable reserve :- 60, 021 TPA (Limestone)
- iv. Percent (%) of extraction :- --
- v. Range of ground water level:- , Pre-monsoon: 3.02 to 38.2 m bgl, Post-monsoon: 3.3 to 36.86 m bgl
- vi. Total estimated water requirement :- 4.8KLD (Tanker Supply from ChitliKhala natural spring)
- viii. Details of intersecting ground water level :- No

21. Details of Deposits :- -

- i. Depth of over body-
- ii. Grade of ore-
- iii. Stripping ratio–

22. Method of mining:-Open Cast manual mining

23. Life of mine :- 28

24. Whether ambient air quality seasonal data has been monitored. If so, from which season to which season and whether the results are within the prescribed limits. Ambient Air Quality Monitoring was carried out during October to December 2016 further validated during 1st April, 2019 – 30th April, 2019, Summer season, Results were found within permissible limit.

25. Whether the monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion.:-EC has not been obtained

26. Details of O.B.

- (i) External OB dumps :- No

27. Details of Internal Dumps:-Not Applicable

- (i) Number of internal dumps:-1
- (ii) Area of each dump :- 100 m long wire created walls having 1.0 m width and height shall be provided to prevent free flowing of waste materials towards natural drainage.
- (iii) Height of each dump :- 1 m
- (iv) Quantity of wastes filled (MCm):-5,850 tonnes over a period of 5 years.

28. Utilization potential of wastes Overburden

- (i) Within the mines :Making Parapet walls and rehabilitation of benches
- (ii) Outside mines :Maintenance of PWD roads, approach road.
- (iii) Efforts made by proponent:-

29. Details of final Mine Voids–

- i. Area 1.32 ha. (at the end of plan period) 4.48 ha. (at the end of conceptual period)
- ii. Depth 30 m.

30. Details of Quarry

- (i) Total quarry area :- 2.10 Ha.
- (ii) Backfilled quarry area ofha shall be reclaimed with plantation :- --
- (iii) Avoid of ha at a depth of m which is proposed to be converted into a water body :- --
- (iv) Green belt (Safety zone) created in ha :- 0.2

31. Details of Land usage
 (i) Pre-mining
 (ii) Post- Mining

Core area

S.No.	Area broken (ha)	Area reclamation/ rehabilitation (ha)	Backfilling (cum)
As on date	2.10	Nil	Nil
End of review & updation of plan period	1.32	0.90	1900
End of conceptual period	4.48	3.20	16000

32. **Details of Forest issues:**Total forest area involved (in ha) for mining lease :- No forest land involved

33. **Costs of the project**

- (i) Total capital Cost :- Rs 55 lakhs
- (ii) Cost of Production :- 250 rs./tons
- (iii) Sale Price :-270 rs./tons
- (iv)CSRcost :- Rs 4 Lakh
- (v) R&R Cost :- Not Applicable
- (vi)No of PAFs :- Not Applicable
- (vii) Cost for implementing EMP :- 8.8 lakh (Capital) 5 Lakh (Recurring)

34. **Details of villages/habitation in mine lease area :- None**

35. Details of transportation of mineral

- (i) In pit :None
- (ii) Surface to siding :None
- (iii) Siding to loading :None
- (iv)Quantity being transported by Road/Rail/conveyer /ropeway :- ~ 240 Tonnes per day
- (v) Proposed change in transportation means if any, give details:-Existing mode of transportation will be used

36. Details of reclamation

- (i) Mining of Limestone and overburden will be backfilled at the end of conceptual plan.
- (ii) Afforestation shall be done covering an area of: 0.45 ha at the end of mining. This will include:Over 7.5 m strip.Area: 0.25, Saplings: 250Over BenchArea: 0.20, Saplings: 200
- (iii) Reclaimed external OB dump (in ha)--
- (iv) Internal dump(inha)--

- (v) Green belt (in ha)- 0.45 ha
- (vi) Density of tree plantation (in no of plants)- 12 trees per 100 sqm.
- (vii) Void (in ha) at a depth of (in m)which is proposed to be converted into water body:- No rain water storage is proposed
- (viii) Others inha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc):- None
- (ix) Agriculture and horticulture :- None
- (x) Fisheries:-None
- (xi) ECO Tourist/recreation spot :- None

III. LEGAL ISSUES

38. Any court case pending. If so, please provide a list with details as annexure--

Environment (Protection) Act--

Air (P&CP) Act--

Water (P&CP) Act--

MMRD Act--

The Factories Act--

Other land R&R related cases :- No R&R related case against the project.

39. Any violation cases pending. If so, please provide a list with details as annexure.

40. Give details of actual production vis-à-vis sanctioned capacity since the inception of mine in following format or since 1993-94 as applicable:

Year	Actual production (MTPA)	Area in Ha	Excess production beyond the EC sanctioned capacity
1985-86	222.00	4.96	EC not sanctioned
1986-87	4232.630	4.96	EC not sanctioned
1987-88	5889.120	4.96	EC not sanctioned
1989-90	3486.460	4.96	EC not sanctioned
1990-91	5655.250	4.96	EC not sanctioned
1991-92	3951.200	4.96	EC not sanctioned
1992-93	1457.89	4.96	EC not sanctioned
1993-94	5195.900	4.96	EC not sanctioned
1994-95	13926.00	4.96	EC not sanctioned
1995-96	14288.8	4.96	EC not sanctioned
1996-97	10869.400	4.96	EC not sanctioned
1997-98	3637.00	4.96	EC not sanctioned
1998-99	15851.100	4.96	EC not sanctioned
1999-2000	21545.100	4.96	EC not sanctioned
2000-2001	45956.200	4.96	EC not sanctioned
2001-02	20689.400	4.96	EC not sanctioned
2002-03	23357.300	4.96	EC not sanctioned
2003-04	22362.700	4.96	EC not sanctioned
2004-05	17189.600	4.96	EC not sanctioned
2005-06	4968.600	4.96	EC not sanctioned
2006-07	Nil	4.96	EC not sanctioned

32nd MoM of EAC (Violation) held on 22nd – 23rd April, 2020

2007-08	9862.900	4.96	EC not sanctioned
2008-09	8403.4	4.96	EC not sanctioned
2009-10	12250.500	4.96	EC not sanctioned
2010-11	7960.4	4.96	EC not sanctioned
2011-12	6939.5	4.96	EC not sanctioned
2012-13	7921.0	4.96	EC not sanctioned
2013-14	Nil	4.96	EC not sanctioned
2014-15	7609.6	4.96	EC not sanctioned
2015-16	2104.8	4.96	EC not sanctioned
2016-17	21998.3	4.96	EC not sanctioned

Production continued after 2016 with valid consent from HPSPCB vide letter no. HPSPCB/PCB-ID-14970-18/27-29 dated 03.11.14, which was valid till 31.03.2017).

41. Date and Place of public hearing :- 19.04.2017 at Community Centre, Village: Pamta, Tehsil: Paonta Sahib, Sirmaur, H.P. under the Chairmanship of Additional Deputy Commissioner Sh. Harbans Singh

42. Issues raised during Public Hearing and assurance given along with the financial provisions and action plan, if any, by the project proponent. (Please attach as an annexure in a tabular form.)

S.N	Issued raised	marks on the Issued raised	ction plan & Financial provisions
1	Generation of employment by sustainable Development in such a way that minimizing adverse impact on environment	The management ensured to carry out mining activity in scientific way. Besides provide employment to local person.	The mining is carried out as per approved mine plan & condition laid down in EC. Total 33 persons are required for mining activity. The management will ensure that all are haired from the local villages.
2	There is no objection to mining activity in Case mining activity is carried out in scientific way for conservation of environment protection.	The management ensured to carryout mining activities in scientific manner and to Provide check dams and retaining walls	The mining is carried out as per approved mine plan & condition laid down in EC The management will spend Rs 3.0 Lakhs for construction of check dams and Rs 1.0 Lakhs is earmarked for maintenance work
3	Regular water sprinkling	The management ensured for water sprinkling whenever mine will come in operation.	Regular water sprinkling to the haulage road of the mine site (Twice a day & as per requirement) Water Requirement for dust suppression 3.0 KLD

32nd MoM of EAC (Violation) held on 22nd – 23rd April, 2020

4	Contribution towards medical aid by providing ambulance jointly with the other lessees through Panchayat apart from employment to the youth	The management ensured for Contribution towards medical aid by providing ambulance jointly with the other lessees through Panchayat	The joint efforts are made by all the three parties in cluster & with local villagers in presence of Up-Pradhan. It is mutually agreed upon that Ambulance is available on call by 108. At present, the management provides vehicles as and when required. Total contribution by management for medical aid & ambulance Rs 2 Lakhs.
5	Non-exploitation by local(s) as there is no any other source of income and employment except mining activity and proper compensation to the effective person should be provided	The management ensured that there Will be no space for exploitation. Proper compensation is being provided and same shall be continued in near future.	The management will provide compensation as per rules after mutual discussion with affected people
6	The compensation should be provided among all members of family beside this compensation should be assessed on the basis of fodder and crop value.	Shall provide compensation after mutual discussion with local people through Panchayat Pradhan.	The management will provide compensation as per rules after mutual discussion with affected people
7	Effective environmental Protection measures for control of debris for future as well as past mining activity besides provision of more dumping sites.	The management agreed to provide protection measures	The management will spend Rs 3.0 Lakhs for construction of check dams and Rs 1.0 Lakhs is earmarked for maintenance work
8	Damage to water supply scheme as well as natural drinking water sources due to muck from mine area due to mining activities.	In case of any damage to water sources proper compensation is being provided and same shall be continued in near future	There is no damage to water supply scheme. If there is any damage occur due to mining proper maintenance will be done by the mine management. Amount of Rs 0.5 Lakh is earmarked for the maintenance of water supply scheme.

45. Name of the EIA consultant who prepared the EIA/EMP report. :-M/s Shivalik Solid Waste Management ltd.

46. Whether the consultant has been accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009. :-Yes NABET certificate No. NABET/EIA/1922/RA 0128 rev

Observation and recommendation of the EAC in the present meeting:

EAC in the present meeting observed that the information/ data submitted to the Ministry in the form of Annexure IV and Form II are variable and misleading. EAC took it seriously and advised PP to submit the revised Form 2 and Annexure IV as per the format. EAC after detailed deliberation **return the proposal in present form** for want of following information:

1. Base line concentration of PM_{2.5}, SO₂, NO_x is mentioned zero in the column 18 of Form 2.
2. Correct values shall be submitted in the revised Form 2 application.
2. Copy of approved Mining plan with covering letter to be uploaded along with Form 2 application
3. Copy of surface water permission letter and also NOC from state ground water department.
4. Pre mining and Post mining land use plan shall be submitted in the Annexure IV along with the comparison table.
5. Details of Geological reserves/mineable reserves are different in Form 2 and Annexure IV. Correct values shall be submitted in the revised Form 2 application and Annexure IV.
6. Detail of grade of Ore and Stripping ratio to be provided in Annexure IV.
7. Information regarding external and internal dumps is different in Form 2 and Annexure IV. Submit the correct and uniform information in both Form 2 and Annexure IV.
8. Details of top soil management, final mine void and transportation shall be submitted in the Form 2 application .
9. Justification for the submitted capital cost (Rs 55.0 lakhs) of the project. Revised cost should be submitted considering the cost of land and all infrastructures required for running the mine.
10. DSR as per the Ministry Notification dated 25.07.2018 shall be uploaded along with Form 2 application.
11. Details regarding no ground water intersection during the mining activity.
12. As per the ToR, total excavation is 63181 TPA (60021 TPA Limestone and 3160 TPA Waste) whereas in the EIA report total excavation is 60021 TPA including waste. Clarify?
13. Waste generation (1264 Cu.m) to be mentioned in TPA in Form 2 application
14. Detailed presentation on TOR compliance.

15. Details regarding water balance (flow chart) including alternative sources of water through rain water harvesting measures.
16. Status of credible action.
17. Public hearing issues raised and commitment made by Project proponent along fund provision and time frame in tabular form to be submitted.
18. Point wise action plan for ToR Condition No 15
19. Transportation details and use of the mineral (Lime stone) with traffic impact assessment study to be submitted
20. Pre-mining and Post mining land use details to be submitted
21. Submission of Plagiarism check list declaration by EIA consultant Organisation .
22. Comparison of the results of AAQ during 2016 and 2019 for all the parameters are shown almost same, reason may kindly be given.
23. Results of groundwater monitoring Oct-Dec,2016 and2019.
24. Please check calcium and magnesium conc levels
25. Surface water monitoring 2016,EC mentioned as 210&215Ms.it should be in micro SEIMENS per centimetre
26. Chromium should be as Cr+6
27. Biological Oxygen Demand,should be written as Biochemical Oxygen Demand
28. Percentage of Silica is not given as asked in the mineralogical and chemical composition
29. Detailed Hydrogeological report as per GEC 2015.
30. Wild Life Conservation plan .
31. LULC comparison and detailed analysis.
- 32.** Revised damage assessment vis-à-vis remediation and NRAP/CRAP as per the quantity and period of violation as deliberated earlier.
33. Plantation plan/budget as presented in the Slide 17 (Remediation Plan) and Slide 32 (EMP Budget) needs to be addressed with detail plan for plantation with suitable species and maintenance for 5 yrs (as only 250 plant for mine boundaries and 300 plants for road-side plantation with a maintenance cost of Rs. 30.00/yr seems to be inadequate) as per statutory norms;
34. Complete EIA Report with its structure to be submitted.

35. 32.3.3 Chasnalla Colliery including Washery of 1.2 MTPA normative/1.5 MTPA peak along with expansion of Coal Washery of 4.0 MTPA capacity in mine lease area of 230.88ha against total original 348.18 ha of M/s Steel Authority of India Ltd located in village Chasnalla& Het Kandra, Tehsil Jharia-cum-JorapokharcumSindri, District Dhanbad, Jharkhand – Reconsideration for Terms of Reference [F. No. J-11015/26/2019-IA.II(M)]

The Project Proponent along with the NABET accredited consultant made a detailed presentation on the salient features of the project.

1. The project involves manufacturing/extraction of Coal of production capacity (1.2 Nominal/ 1.5 MTPA peak including expansion of existing washery up 4.0MTPA) by M/s Steel Authority of India Ltd in an area of 230.88 hectare (Original 348.18 Ha) at Chasnalla Colliery, village Chasnalla& Het Kandra, Taluka/Mandal Jharia-cum –Jorapokhar - cum- Sindri, District Dhanbad (Jharkhand).
2. The said project/activity is covered under category A of item Coal Mining of the Schedule to the EIA Notification, 2006, and requires prior EC from the MoEF&CC/SEIAA based on the appraisal by Expert Appraisal Committee or the State Expert Appraisal Committee in different States/UTs.
3. Whether project attracts the General Condition specified in the Schedule of EIA Notification(Yes/No)?[providenameofWL/CPA/ESA/Inter-stateboundary/International boundary and distance from theproject]: NO
4. River/ water body Damodar is flowing at a distance of about 500 meter in East direction.
5. Details of Forest issues, if any: No forest area
6. Details of Consent to Operate:
 - (i) Whether Consent to operate obtained (Yes/No)? If yes,; Yes
 - (ii) Date of issue: 28.03.2017 (For Washery 01.10.2019)
 - (iii) Valid upto: 31.12.2017 (Applied for renewal) (For Washery 30.09.2020)
 - (iv) Submit Copies of all Consent to operate obtained since inception: Attached as Annexure – A1 Copy of CTO Chasnalla Colliery and Annexure – A1A Current CTO of Chasnalla Washery.
7. Mine Capacity in ROM (Run of Mine): Proposed 1.2 MTPA Nominal/ 1.5 MTPA Peak
8. Whether the proposal is mining of Minor minerals project(Yes/No)?: No
9. Whether the proposal is mining of Major minerals project(Yes/No)?: Yes
10. No. of Mineral to be Mined with name: 1. Coal
11. Details of mine lease:-

- (i) Date of entering into original lease deed: 27.04.1938
- (ii) Date of expiry of original lease deed: 26.04.2688
- (iii) Date of 1st lease renewal: Application for revalidation submitted (Pending with state Govt. for want of EC)

12. Details of DGMS permission, if any: Permission of underground working obtained.

13. Details of past production of mine since its inception duly in tabular form: The year wise coal production from Chasnalla Colliery since 1993-94 onwards, is as under:

FY	Production (Fig. In T)	FY	Production (Fig. In T)
1971-72	24118	1995-96	430360
1972-73	55800	1996-97	383220
1973-74	183794	1997-98	364948
1974-75	309071	1998-99	384962
1975-76	239781	1999-00	360536
1976-77	229004	2000-01	328325
1977-78	232278	2001-02	412945
1978-79	188607	2002-03	413665
1979-80	473160	2003-04	324535
1980-81	376224	2004-05	362693
1981-82	405396	2005-06	325432
1982-83	428007	2006-07	289988
1983-84	345734	2007-08	664817
1984-85	266935	2008-09	630962
1985-86	245108	2009-10	822402
1986-87	276797	2010-11	770941
1987-88	188756	2011-12	383338
1988-89	305313	2012-13	527487
1989-90	347956	2013-14	484568
1990-91	303152	2014-15	329437
1991-92	353135	2015-16	497432
1992-93	363239	2016-17	480842
1993-94	318800	2017-18	323037
1994-95	382362	2018-19	353835

14. Details of Violation (*Brief description of the project activity that leads to violation of EIA Notification, 2006*):

Chasnalla Mine is old & operational prior to nationalization but in year 2017, DMO, Dhanbad has issued a letter vide ref no. 1897/M dated 18.11.2017 for excess production during 2000-01 to 2016-17, benchmarking production year 1993-94.

15. The chronology of events for seeking EC, deliberations by the respective authorities and the actions taken are reported to be as under:

- (i) Date of application for TOR/EC submitted to MoEF&CC/SEIAA: 03.02.2015, 14.10.2019
- (ii) Date of appraisal of EAC/SEAC meetings so far: 10.04.2015, 15.11.2019
- (iii) Observations/recommendations of the EAC/SEAC in **each meeting**: TOR issued on 29.05.2015 but validity lapsed due to delay of mine boundary certification by CMPDIL and EAC on 15.11.2019, after deliberations observed that project involved violation of EIA Notification, 2006 of the Ministry. The Committee also noted that since PP has earlier applied in the Ministry and the proposal may be forwarded to the Violation Sector for appraisal under the provisions of the Violation notification dated 14.03.2017.
- (iv) Details of action taken by the State Government/SEIAA u/s 5/u/s 19 of the EP Act, 1986 for the alleged violation of the EIA Notification, 2006: DMO, Dhanbad has issued a letter vide ref no. 1897/M dated 18.11.2017 for excess production during 2000-01 to 2016-17, benchmarking production year 1993-94.
- (v) Complaint case filed by the State Government/State Pollution Control Board: NIL
- (vi) Further consideration of the proposal by the EAC/SEAC, in case action was taken as mentioned in point (iv) and (v) above. If yes, furnish details: EAC on 15.11.2019, after deliberations observed that project involved violation of EIA Notification, 2006 of the Ministry. The Committee also noted that since PP has earlier applied in the Ministry and the proposal may be forwarded to the Violation Sector for appraisal under the provisions of the Violation notification dated 14.03.2017.
- (vii) Legal interventions, if any: The case is under consideration of Revisional Authority, Ministry of Coal (The Applicant has prayed for quashing and setting aside the impugned demand notices. The applicant has also filed separate applications praying interim relief of staying the impugned demand notices during the pendency of the Revision Applications).

Observation and recommendation of the EAC in the earlier meeting:

EAC in the 31st meeting, based on the information submitted by the PP and as presented observed, that earlier, the TOR to the project was granted vide MoEF&CC letter No. J-11015/67/2015-IA-II(M) dated 29.05.2015 for normative 1.2 MTPA/1.5MTPA Peak capacity including expansion of washery to 4.0 MTPA in proposed 230.88 ha lease area of original mine lease area (348.18 ha). However, the validity of ToR has expired. Latest Consent to Operate

(CTO) for the existing capacity was issued by JSPCB vide JSPCB/HO/RNC/CTO-1039297/2017/297 dated 28.03.2017. Application for extension of CTO was submitted on 07.12.2017 and it is pending with JSPCB for want of Environment Clearance.

EAC noted that the instant proposal does not have Environmental Clearance for coal mine and washery, further PP had exceeded the production of coal in the years 1994-95 to 2005-06 and then from 2007-08 onwards to 2018-19 beyond the threshold limit of 1993-94 base year production (318800 Metric Tonnes), hence instant proposal is under violation since 1994-95. EAC after detailed deliberation **deferred** the proposal for want of following information:

- i. Copy of letter of intent for mining lease from concerned State Government
- ii. Clarification regarding mining lease area and whether washery area (16.5 Ha) is included in 243.50 Ha.
- iii. Revised from 1 application and pre-feasibility report to be submitted as suggested by EAC.
- iv. Details of production through U/G Mining and Opencast Mining (Coal + OB excavation details))
- v. Justification of proposed Washery capacity along with detailed technology & coal washery.
- vi. Land requirement plan showing U/G workings + Opencast workings and coal Washery details
- vii. Copy of earlier ToR letter issued by MOEF&CC .
- viii. Copy of earlier EAC Minutes.
- ix. Existing and Proposed plantation details with photographs to be submitted
- x. Life of mine with calendar programme of the production details from U/G and Opencast mining operations.
- xi. Past Production details as submitted with the annexures and available in records are variable, submit the correct figures

Project Proponent submitted the above information vide letter dated 30.03.2020. Accordingly, proposal was considered in 32nd EAC meeting (present meeting). Project proponent along with the consultant made the detailed presentation before the EAC on the additional information as sought in the last meeting (31st).

Observation and recommendation of the EAC in the present meeting:

EAC after detailed presentation observed that PP has submitted the revised form 1 and PFR, past production details along with the other information as sought in last meeting. EAC noted that the total lease hold area of Chasnalla is 348.18 Ha out of which TOR/EC application is submitted for an area of 230.88 Ha which includes Deep Mine, Upper Seam, West Quarry and the existing and & new Washery area. Further, out of 348.18 ha, 117.30 ha included in the Tasra Opencast Project for which EC has been granted and for the remaining 230.88 ha, present application is submitted.

EAC deliberated on the information as presented and submitted by the PP and noted that in present application Chasnalla Coal Complex comprises of two existing U/g mines (Deep Mine & Upper Seam) and a Coal Washery. However, in the revised PFR, mining from 230.88 Ha has been proposed covering Deep Mine, Upper Seam, part of West Quarry. Further, West Quarry is an open cast mine. Because of ambiguity in submission, it is not clear whether method of mining is purely underground or also involves open cast mining.

Also PP in the revised Form did not mention total excavation details including Over Burden (OB) in Tonnes instead PP in the annexure mentioned OB in Cum. EAC also observed that PP did not submit the relevant document for mine lease renewal. EAC also deliberated on the mining lease letter dated 25.12.2014 issued by the District mining office, Dhanbad. In the said letter additional information has been sought for renewal of mining lease of 1213 bigha (566 bigha + 647 bigha). EAC noted that 1213 bigha approximately corresponds to 161 Ha, however present EC application is for mining over 230.88 Ha.

In view of above discrepancies, EAC after detailed deliberation **deferred** the project for want of following information:

1. Copy of letter of intent latest for mining lease from concerned State Government for 230.88 Ha and status of earlier points raised by District Mining officer.
2. Clarification regarding, present application is for Underground mining only or involves Open cast mining as well, shall be submitted with production details (Coal and OB).
3. Duly signed annexure comprising of production from UG(T), OCM(T), OB (CUM) having values in tones shall be submitted
4. Status of collection of BLD
5. Justification for Washery capacity.
6. Imported coal transportation details along with connectivity to Washery
7. Any court case pending against the project with details.

32.3.4 Giridih OCP (0.7 MTY) of M/s Central Coalfields Limited located in District Giridih, Jharkhand – Reconsideration for Terms of Reference [IA/JH/CMIN/74445/2018 dated 13.04.2018] [F. No. 23-268/2018-IA.III (V)]

The Project Proponent and the accredited consultant CMPDI, made a detailed presentation on the salient features of the project and interalia provided the following information:

1. Details of Project:
 - a) Name of Mineral Coal
 - b) Project Area 122.70 ha
 - c) Village, Mandal, district Village- Kaharbari, Dhobidih, Gopai etc. Block- Giridih, District-Giridih
2. Category of the project: - A
3. Whether project attracts the General Condition specified in the Schedule of EIA Notification :- No

32nd MoM of EAC (Violation) held on 22nd – 23rd April, 2020

4. Details of river/water body- The general flow of the streams is towards south. Most of the streams meet Barakar River at about 7.84 km south-west of the proposed OCP.
5. Details of forest issues: - No forest land involved.
6. Details of Consent to Operate:
 - (i) Whether Consent to operate obtained (Yes/No)? If yes, Yes
 - (ii) Date of issue 12.01.2020
 - (iii) Valid up to 31.12.2020
 - (iv) Submit Copies of all Consent to operate obtained since inception.
7. Mine Capacity in ROM (Run of Mine) :-0.70 MTY
8. Whether the proposal is mining of Minor minerals project. :- No
9. Whether the proposal is mining of Major minerals project. :- Yes
10. No. of Mineral to be Mined with name :- 1 Coal
11. Details of mine lease: - Land acquired under nationalization.
12. Details of DGMS permission, if any: Permission granted vide letter dated 2016 of Directorate General of Mines Safety, Koderma region
13. Details of past production of mine since its inception duly in tabular form:

Year	Coal Production (Mte)
1993-94	0.23
1994-95	0.17
1995-96	0.20
1996-97	0.18
1997-98	0.20
1998-99	0.38
1999-00	0.26
2000-01	0.13
2001-02	0.15
2002-03	0.19
2003-04	0.32
2004-05	0.33

32nd MoM of EAC (Violation) held on 22nd – 23rd April, 2020

2005-06	0.37
2006-07	0.35
2007-08	0.35
2008-09	0.41
2009-10	0.40
2010-11	0.48
2011-12	0.49
2012-13	0.53
2013-14	0.50
2014-15	0.42
2015-16	0.45
2016-17	0.30
2017-18	0.45
2018-19	0.19

14. Details of Violation : The project has no Prior EC and has exceeded the 1993-94 production.
15. The chronology of events for seeking EC,
- (i) Date of application for TOR/EC submitted to MoEF&CC/SEIAA: Form-I Submitted on 13.04.2018.
 - (ii) Date of appraisal of EAC/SEAC meetings so far: Considered by EAC (Violation) meeting held on 23.10.2018 and 25.06.2019 and 28.02.2020
 - (iii) Observations/recommendations of the EAC/SEAC in each meeting: EAC (Violation) desired submission of proposals separately for Kabribad OC and Giridih OC.
 - (iv) Details of action taken by the State Government/SEIAA u/s 5/u/s 19 of the EP Act, 1986 for the alleged violation of the EIA Notification, 2006: NA
 - (v) Complaint case filed by the State Government/State Pollution Control Board: Nil
 - (viii) Legal interventions, if any :- Nil

Observation and recommendation of the EAC in the earlier meetings:

EAC observed that earlier combined proposal (Giridih-Kabribad OC Mine) was considered in 14th EAC meeting held on 23.10.2018. Project Proponent along with the consultant made the technical presentation and informed to the EAC that proposal for Giridih-Kabribad OC Mine involves total land area of 213.54 ha. After detailed presentation by PP, EAC noted that total mine area of 213.54 ha is comprises of two mines viz: 1) Kabribad OCP 90.84 Ha & 2) Giridih OCP 122.70 Ha which are almost 9-10 km apart. EAC **deferred** the proposal and asked the PP to submit revised Form 1 along with Prefeasibility report and other documents separately for two mines i.e for Kabirabad OCP of 90.84 ha& Giridih OCP 122.70 ha.

In compliance to the observation of EAC in the 14th meeting, PP vide letter dated 02.05.2019 submitted the ADS. Accordingly, proposal was taken up in the 23rd meeting held during 25th - 26th, June 2019. EAC in the said meeting observed that PP has submitted the documents related to Kabirabad OCP only over a mining lease area of 169.45 Ha for 1.0 MTPA capacity. EAC after detailed deliberation on the information submitted, **deferred** the proposal for want of following information:

- i. Details of both the mines is to be submitted as suggested in the 14th EAC meeting.
- ii. Justification for increase in mine lease area of Kabirabad OCP from 90.84 ha to 169.45 ha is to be submitted to Ministry.
- iii. Violation details of Giridih OCP is to be submitted.
- iv. Past production details of both the mines is to be submitted.

Project Proponent vide letter dated 29.01.2020 submitted the revised Form 1 and PFR for both mines separately as suggested by the EAC. Accordingly, proposal was taken up in the agenda of the 31stEAC meeting. PP along with the Consultant made the detailed presentation before the EAC on the additional information sought by the committee in the 23rd meeting. PP informed the following to the EAC:

- i. Giridih OCP (1.0 MTY) is operating mine located in Giridih coalfields of Central Coalfields Limited, Jharkhand.
- ii. Giridih Coalfield is one of the earliest coalfields in India. Mining activity in the coalfield started as early as 1871 by M/s Bengal Coal Company & then by 1State Railway and subsequently transferred to National Coal Development Corporation (NCDC) about 60 years back. Later in the year 1973, it came under the control of Central Coalfields limited (CCL), a subsidiary of Coal India Limited. Presently it is under the administrative control of Giridih Area of CCL.
- iii. This project is located in Giridih district, Jharkhand. Giridih OCP falls within the latitude 24° 10' 04" and 24° 10' 51" North and longitude 86° 14' 47" and 86° 15' 40" East. It is located about 6 Kms to the south of Giridih town.

- iv. Mining Plan & Mine closure Plan of Giridih OCP (1.0 MTPA/168.15 Ha) was approved by CCL board on 04.11.2019

After detailed presentation by the PP, EAC observed that PP has submitted theseparate proposal along with the Form 1 & PFR. Giridih OCP has produced 0.23 Mt in 1993-94 and has gone up the 1993-94 production level in the year 1998-99, 1999-2000 and 2003-04 to 2017-18, hence instant mine is in violation of EIA Notification since 1998 onwards. EAC, further observed that the earlier combined proposal was submitted for 1.3 MTY of Coal production from the total mining lease area of 213.54 Ha (Kabirabad OCP of 90.84 ha& Giridih OCP 122.70 ha). Now, the proposal is submitted for 1.0 MTY Coal production from 168.15 Ha of Giridih Open Cast mine. EAC in **31st meeting held on 28.02.2020**deliberated on the information submitted by the PP (Form1, PFR, ADS reply of 23rd meeting) and **deferred** the project proposal for want of following information:

1. Revised production details of the Giridih open cast mine to be submitted.
2. Revised Form 1 & PFR for extraction of Coal from a mining lease area of 122.70 Ha.

Project proponent submitted the information to the Ministry, as sought by the EAC in the 31st meeting held on 28.02.2020. Accordingly, proposal was taken for consideration by the EAC in the agenda of 32nd meeting (present meeting). Project proponent along with the consultant made the presentation on the additional information before the EAC.

Observation and recommendation of the EAC in the present meeting:

EAC in the present meeting observed that now PP has submitted the proposal (revised Form 1 and PFR) for ToR for Giridih Opencast Coal Mine project of 0.70 MTPA in project area of 122.70 Ha of M/s Central Coalfields Limited located in Giridih District, JharkhandThe EAC, after detailed deliberations on the information presented and submitted by the PP, **recommended for issuing Standard Term of Reference** along with the following specific Term of Reference for undertaking EIA and preparation of Environment Management Plan (EMP):

- i. The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate for the project to be issued till the project is granted EC.
- ii. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

- v. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.
- vi. The PP is required to conduct public hearing as per EIA notification, 2006.
- vii. One season base line data is to be collected and reported in the EIA/EMP report.
- viii. Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 1st May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
- ix. In case of violation of undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
- x. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to prepare accordingly.
- xi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- xii. Detailed R&R plan is to be submitted in the EIA report.
- xiii. Details of Ecology Restoration with Plantation/Greenbelt development Plan to be furnished both for Remedial Plan and EMP budget.

32.3.5 Kabribad OCP (0.6 MTY) of M/s Central Coalfields Limited located in District Giridih, Jharkhand– Reconsideration for Terms of Reference [F. No. 23-1/2020-IA.III]

The Project Proponent and the accredited consultant CMPDI, made a detailed presentation on the salient features of the project and interalia provided the following information:

1. Details of Project-
 - a) Name of Mineral Coal
 - b) Project Area 90.84 Ha
 - c) Village, Mandal, district Village- Chunjka, Patrodih, Khandia, Chilga, District: Giridih
2. Category of the project :- A
3. Whether project attracts the General Condition specified in the Schedule of EIA Notification :- No
4. Details of river/water body-Name of the river/water body Distance from the project Direction :- The general flow of the streams is towards south. Most of the streams

meet Barakar River at about 6 km south-west of the proposed OCP. The water level is very close to the surface during rainy season and about 20m below surface during dry season.

5. Details of forest issues: - No forest land is involved.
6. Details of Consent to Operate: Application for CTO has been applied online. Dt. 25.11.2019.
7. Mine Capacity in ROM (Run of Mine) : Kabribad OCP: 0.60 MTPA.
8. Whether the proposal is mining of Minor minerals project :-No
9. Whether the proposal is mining of Major minerals project :- Yes.
10. No. of Mineral to be Mined with name:1 Coal
11. Details of mine lease: -Land is acquired under Nationalization.
12. Details of DGMS permission, if any: Permission granted vide letter dated 2016 of Directorate General of Mines Safety, Koderma region.
13. Details of past production of min since its inception duly in tabular form

Year	Kabribad OC Coal Production (Mte)
1993-94	0.297
1994-95	0.280
1995-96	0.195
1996-97	0.288
1997-98	0.249
1998-99	0.128
1999-00	0.078
2000-01	0.104
2001-02	0.110
2002-03	0.146
2003-04	0.122
2004-05	0.150
2005-06	0.137

2006-07	0.201
2007-08	0.403
2008-09	0.415
2009-10	0.371
2010-11	0.338
2011-12	0.234
2012-13	0.310
2013-14	0.431
2014-15	0.559
2015-16	0.331
2016-17	0.188
2017-18	0.250
2018-19	0.187

14. Details of Violation: -The project has no Prior EC and has exceeded the 1993-94 production.

16. The chronology of events for seeking EC,

(i) Date of application for TOR/EC submitted to MoEF&CC/SEIAA: Form-I Submitted on 13.04.2018.

(ii) Date of appraisal of EAC/SEAC meetings so far: Considered by EAC (Violation) meeting held on 23.10.2018 and 25.06.2019 and 28.02.2020.

(iii) Observations/recommendations of the EAC/SEAC in each meeting: EAC (Violation) desired submission of proposals separately for Kabribad OC and Giridih OC.

(iv) Details of action taken by the State Government/SEIAA u/s 5/u/s 19 of the EP Act, 1986 for the alleged violation of the EIA Notification, 2006: Nil

(v) Complaint case filed by the State Government/State Pollution Control Board: Nil

(viii) Legal interventions, if any Nil

Observation and recommendation of the EAC in the earlier meetings:

EAC observed that earlier combined proposal (Giridih-Kabribad OC Mine) was considered in 14th EAC meeting held on 23.10.2018. Project Proponent along with the consultant made the technical presentation and informed to the EAC that proposal for Giridih-Kabribad OC Mine involves total land area of 213.54 ha. After detailed presentation by PP, EAC noted that total mine area of 213.54 ha is comprises of two mines viz: 1) Kabribad OCP 90.84 Ha & 2) Giridih OCP 122.70 Ha which are almost 9-10 km apart. EAC **deferred** the proposal and asked the PP to submit revised Form 1 along with Prefeasibility report and other documents separately for two mines i.e for Kabirabad OCP of 90.84 ha& Giridih OCP 122.70 ha.

In compliance to the observation of EAC in the 14th meeting, PP vide letter dated 02.05.2019 submitted the ADS. Accordingly, proposal was taken up in the 23rd meeting held during 25th - 26th, June 2019. EAC in the said meeting observed that PP has now submitted the documents related to Kabirabad OCP only over a mining lease area of 169.45 Ha for 1.0 MTPA capacity. Kabirabad OCP has produced 0.297 Mt in 1993-94 and has gone up the 1993-94 production level in the year 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2012-2013, 2013-2014, 2014-2015, 2015-2016, hence violation of EIA Notification. EAC after detailed deliberation on the information submitted, **deferred** the proposal for want of following information:

- i. Details of both the mines is to be submitted as suggested in the 14th EAC meeting.
- ii. Justification for increase in mine lease area of Kabirabad OCP from 90.84 ha to 169.45 ha is to be submitted to Ministry.
- iii. Violation details of Giridih OCP is to be submitted.
- iv. Past production details of both the mines is to be submitted.

Project Proponent vide letter dated 29.01.2020 submitted the revised Form 1 and PFR for both mines separately as suggested by the EAC. Accordingly, proposal was taken up in the agenda of the 31stEAC meeting held on 28.02.2020. PP along with the Consultant made the detailed presentation before the EAC on the additional information as sought by the committee in the 23rd meeting. PP informed the following to the EAC:

- i. Kabribad OCP is an existing project in Giridih area, Central Coalfields Limited. This proposal has been prepared for 1.00 MTY within the project area of 169.45 Ha.
- ii. Giridih Coalfield is one of the earliest coalfields in India. Mining activity in the coalfield started as early as 1871 by M/s Bengal Coal Company & by then State Railway and subsequently transferred to National Coal Development Corporation (NCDC) about 60 years back. Later in the year 1973, it came under the control of Central Coalfields limited (CCL), a subsidiary of Coal India Limited. Presently it is under the administrative control of Giridih Area of CCL. This proposal is put up for a rated capacity of 1.00 MTY within the project area of 169.45 Ha.
- iii. The proposed Kabribad OCP is located in the Giridih Coalfield and falls in the Giridih District of Jharkhand. Kabribad OCP falls under the administrative control of Giridih Area of Central Coalfields Limited (CCL). It is bounded by latitudes 24° 8' 47" to 24° 9' 57" North and longitudes 86°17' 38" to 86°18' 39" East. The block is covered in Survey of India toposheet no. 72L/8 (in 1:50,000 scale).

- iv. PP apprised EAC about the justification for increase in mining lease area of Kabribad OCP from 90.84 ha to 169.45. PP submitted that initially Kabribad OCP & Girdih OCP were planned as cluster. As per the direction of EAC, separate mining plan were prepared by CMPDI for both Girdih OCP & Kabribad OCP. The mining plan of Kabribad OCP was prepared for 169.45 Ha by CMPDI and approved by CCL in the 479th meeting

After detailed presentation by the PP, EAC observed that PP has submitted the separate proposal along with the Form 1 & PFR. EAC, further observed that the earlier combined proposal was for **1.3 MTY** of Coal production from the total mining lease area of 213.54 Ha (Kabribad OCP of 90.84 ha & Girdih OCP 122.70 ha). Now, the proposal is submitted for **1.0 MTY Coal production from 169.45 Ha of Kabribad Open Cast mine**. EAC deliberated on the information submitted by the PP (Form 1, PFR, ADS reply of 23rd meeting) and opined that justification submitted by the PP regarding an increase in mining lease area from 90.84 ha to 169.45 Ha is not convincing. EAC therefore **deferred** the project proposal for want of following information:

1. Revised production details of the Kabribad open cast mine to be submitted.
2. Revised Form 1 & PFR for extraction of Coal from a mining lease area of 90.84 Ha.

Project proponent submitted the information to the Ministry, as sought by the EAC in the 31st meeting held on 28.02.2020. Accordingly, proposal was taken for consideration by the EAC in the agenda of 32nd meeting (present meeting). Project proponent along with the consultant made the presentation on the additional information before the EAC.

Observation and recommendation of the EAC in the present meeting:

EAC in the present meeting observed that PP has now submitted the proposal (revised Form 1 and PFR) for ToR for Kabribad Opencast Coal Mine project of 0.60 MTPA in project area of 90.84 Ha of M/s Central Coalfields Limited located in Girdih District, Jharkhand. EAC, after detailed deliberations on the information presented and submitted by the PP, **recommended for issuing Standard Term of Reference** along with the following specific Term of Reference for undertaking EIA and preparation of Environment Management Plan (EMP):

- i. The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate for the project to be issued till the project is granted EC.
- ii. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific

and Industrial Research (CSIR) institution working in the field of environment.

- iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- v. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.
- vi. The PP is required to conduct public hearing as per EIA notification, 2006.
- vii. One season base line data is to be collected and reported in the EIA/EMP report.
- viii. Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 1st May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
- ix. In case of violation of undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
- x. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to prepare accordingly.
- xi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- xii. Detailed R&R plan is to be submitted in the EIA report.
- xiii. Explore the possibility utilisation OB for internal dumping rather than the external dumping.
- xiv. Details of Ecology Restoration with Plantation/Greenbelt development Plan to be furnished both for Remedial Plan and EMP budget.

Day 2: 23rd April, 2020

32.4.1 Enhancement of iron ore production from 3.0 MTPA to 6.0 MTPA at Daitari Iron Mine (ML Area 1018.3085 Ha) at Keonjhar and Jaipur District, Odisha by M/s Odisha Mining Corporation Ltd. – Environmental Clearance [IA/OR/MIN/129891/2007 dated 13.03.2020] [F. No. 23-236/2018-IA.III (V)]

Project proponent along with the Consultant Mecon Limited, Jharkhand, Certificate No. NABET/EIA/1619/RA 0068 made the detailed presentation and inter alia provided the following information:

32nd MoM of EAC (Violation) held on 22nd – 23rd April, 2020

1. Name of the Project :- Daitari Iron Ore Mining Project of M/s Odisha Mining Corporation Limited, located in Harichandanpur tehsil, District Keonjhar&Jajpur, Odisha.
2. Name of the Company, Address Tele No. & E-mail Head of organization :**Address for Correspondence:-** Odisha Mining Corporation Limited
OMC House, Post Box No. 34
Dist. Khurda, Odisha – 751001
Tel: 0674-2377458, Fax: 0674-2391629, 2396889, 2394772
Email: envcl.omc@gmail.com
Registered Address:-
OMC House, Post Box No. 34
Bhubaneswar – 751001, Odisha.
3. If a Joint venture, the names & addresses of the JV partners including their share :- Not Applicable
4. Latitude and Longitude of the project :- Latitude: 21°05'33.09684"N to 21°07'08.80500"N, Longitude : 85°46'01.89300"E to 85°49'17.01804"E
5. Whether the project is in the Critically Polluted Area (CPA): No
6. Cost of the project Rs. 19878.135 Lakhs - *Capital cost for expansion of Daitari iron ore mining project*
7. Employment generated/ to be generated :- 1250
8. Benefits of the project :- It aims to provide additional direct or indirect employment to the local population of the area.
 - The proposed project aims to fulfill its social sustainable responsibility through promoting and maintaining permanent structures as follows:
 - Facility for village school including classroom, toilet construction, ceiling fan/coolers, books for school library etc.
 - Vocational training to be provided to the persons for improving their skills in income generation techniques like stitching, hatchery, plumber, carpenter, blacksmith etc.
 - Formation of self-help groups to develop the saving and helping each other with financial resources instead of going for heavy interest debts.
9. Whether new or expansion project. If expansion:
 - (i) From MT toMT : (i) Enhancement of iron ore production from 3 MTPA to 6 MTPA at Daitari Iron Ore Project (M.L. Area: 1018.3085 ha).
 - (ii) What is the % of expansion :- Expansion % - 100%
10. If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006. Not Applicable.
11. If expansion, please indicate the number and date of the certified Compliance Report of Regional Office of the MoEFCC. :-File No. 101-335/15/EPE dated 21.06.2019
12. No. and Date of the ToR /and revised ToR, if any, letter issued by the MoEFCC (if this is a case for EC) :- **F. No. 23-236/2018-IA.III(V) dated 16.01.2019**

13. No. and Date of the EC and the revised EC letter issued by the MoEF (if this is a case for reconsideration. If so, what specific reconsideration(s) being sought by the proponent) :- Not Applicable
14. If the project was considered in EAC, Pl. give dates of the meeting (s). :- 13th Meeting dated 18.09.2018-19.09.2018 – Consideration of ToR
15. Type of Mine: (Opencast/Underground/mixed): Open Cast
16. Capacity of the mine applied for :6 MTPA (Iron ore)
17. ML Area
 - (i) As per block allotment 1812.99 ha [794.6815 ha ML land surrendered]
 - (ii) As per approved mine plan **1018.3085 ha [Retained ML Area]**
18. Date of approval of mine plan, mine closure plan, status & date :- Modified Mining Plan along with progressive mine closure plan has been approved by Indian Bureau of Mines for an area of 1018.3085 ha vide letter no. MPM/FM/05-ORI/BHU/2015-16/3906 dated 22.03.2016.

Final Mine Closure Plan (FMCP) for the proposed area to be surrendered i.e. 794.6815 ha was approved by IBM vide letter no. 314(3)/2012-MCCM (CZ)/FMCP-6/453 dated 15.03.2013.
19. Date of Board's approval: Approval has been obtained.
20. Date of Ground water clearance and surface water approval.
 - NOC to abstract 750 m³/day of Ground Water has been obtained from CGWA, Govt. of India vide NOC No. CGWA/NOC/MIN/ORIG/2017/2622 dated 31.05.2017.
 - NOC for drawl of 0.081 Cusecs of surface water from Department of Water Resource, Govt. of Odisha has been obtained vide letter no. 7869 dated 04.09.2018.
21. Existing Ground water level in (M)**380 m AMSL**
22. Date of mine closure approval: -Progressive mine closure plan has been approved by Indian Bureau of Mines for an area of 1018.3085 ha vide letter no. MPM/FM/05-ORI/BHU/2015-16/3906 dated 22.03.2016.
23. Any river/Nallah flowing near or adjacent to the proposed mine. If yes, please give details.:Damsalnala flows from east to west along the length of Sukinda valley about 2.5 km (aerial distance) from the ML boundary.

24. Details of mine lease:-

<p>1. Date of entering into Original lease deed: * 27.01.1966.</p> <p>2. Date of expiry of Original lease deed: <u>26.01.1996</u></p> <p><i>* <u>The Mining Lease for 1812.99 ha</u></i></p>	<p>2. Date of 1st lease renewal: - 21.01.1995 [Date of application for renewal for 1812.99 ha] - 22.05.1997 [Date of revised application for 190.2 ha ML area] - 09.02.2006 [date of subsequent revised application to original ML area of 1812.99 ha] - 08.10.2013 [date of permission from state Govt. for 1018.3085 ha area, rest 794.6815 ha surrendered]</p> <p>2. Whether renewal or Deemed renewal</p> <p>3. Date of expiry of 1st lease renewal/deemed renewal: 26.01.2017</p>	<p>3. Date of 2nd lease renewal: - <u>Valid upto 21.01.2036</u></p>
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25. Geological Reserve:

- (i) Total geological reserve 187.21 Million Tonnes (as on 01.08.2015)
- (ii) Mineable reserve 154.96 Million Tonnes (as on 01.08.2015)
- (iii) Extractable reserve 154.96 Million Tonnes (as on 01.08.2015)
- (iv) Per cent (%) of extraction 82.77 %
- (v) Range of ground water level > 130 m bgl
- (vi) Total estimated water requirement: Average water consumption for domestic and industrial use are 750 m³/day and 198 m³/day respectively
- (vii) Details of intersecting ground water level The mine working will not intersect ground water table.

26. Details of Deposits :

- (i) Depth of ore body 284 m (max.)
- (ii) Grade of ore Average : 62.20% Fe
- (iii) Stripping ratio 1.33 (waste) m³ : tonne (ore)

27. **Method of mining:** Open Cast

28. **Life of mine** 28 years

29. **Whether ambient air quality seasonal data has been monitored. If so, from which season to which season and whether the results are within the prescribed limits. Not Applicable**

30. **Whether the monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion.** Yes; Certified Compliance Report was issued in respect of Daitari iron ore mine by Eastern Regional office Bhubaneshwar vide letter no. 101-335/15/EPE dated 21.06.2019.

31. Details of O.B.

- (i) External OB dumps: Proposed
- (ii) No. of OB dumps 6 nos. [WD1a, WD1b, WD1c, WD1d, WD2a, WD2b]
- (iii) Area of each dump: [WD1a-32.59 ha, WD1b-30.05 ha, WD1c-34.40 ha, WD1d-36.67 ha, WD2a-33.09 ha, WD2b-7.087 ha]
- (iv) Height of each dump 60 m (6 lifts of 10m each)
- (v) Quantity (in MCm) of OB in each dump [Mcu.m] [WD1a-12.87, WD1b-4.3, WD1c-30.27, WD1d-4.24, WD2a-8.68, WD2b-0.33]
- (vi) Year of back filling After current planned period till end of work
- (vii) No. of OB dumps reclaimed: Not Applicable.

32. Details of Internal Dumps: None

33. Utilization potential of wastes -

- (i) Within the mines Reclamation of mined out areas by backfilling.
- (ii) Outside mines -
- (iii) Efforts made by proponent To be used for backfilling.

34. Details of final Mine Voids

- (i) Area 396.1245 [Afforested]
- (ii) Depth Ultimate pit limit : 510-750 m AMSL;
Adj. Ground level: 384 m AMSL

35. Details of Quarry:

- (i) Total quarry area : 569.556 ha [Conceptual stage]
- (ii) Backfilled quarry area of shall be reclaimed with plantation: 173.4261 ha [Conceptual stage].
- (iii) A void of ha at a depth of m which is proposed to be converted into a water body: Nil
- (iv) Green belt created in ha. 0.88 ha

36. Details of Land usage

(i) Pre-mining LANDUSE DETAILS:

S. No.	Landuse	Within ML area (Ha)
1.	Agriculture land	7.2140
2.	Forest Land	846.39950
3.	Wasteland	155.5360
4.	Grazing Land	0.0000
5.	Surface Water bodies	0.0000
6.	Settlements	8.6790
7.	Other (Specify) Road	0.4800
	Total	1018.3085

(ii) Post- Mining

S. No	Landuse during	Plantation	Water body	Public Use	Undisturbed	Total

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.	mining					
1.	External /Internal Dump	280.4721	0	0	0	280.4721
2.	Mineral stack yard	10.3419	0	0	0	10.3419
3.	Excavation	569.5560	0	0	0	569.5560
4.	Roads	0	0	19.2448	0	19.2448
5.	Built up area	20.7148	0	0	0	20.7148
6.	Green belt	106.1173	0	0	0	106.1173
7.	Undisturbed area		0	11.8616	117.0989	11.8616
	Total	987.2021	0.000	31.1064	117.0989	1018.3085

(iii) Core area

Particulars	Existing Land use	At the end of Scheme period i.e. Yr 2019-20	Conceptual Stage
Mining	62.7175	63.2371	569.5560
Subgrade Dump	-	-	-
Waste Dumping	-	-	280.4721
Mineral Stacking & Processing	15.0330	14.7127	10.3419
Infrastructure, Plant & Machinery	10.6072	13.3927	20.7148
Roads	7.1154	8.2932	19.2448
Magazine with Safety Zone	91.9580	91.9580	91.9608
Statutory Safety Barrier	11.0661	11.0661	13.2765
Green belt/Rehabilitated area	0.8800	0.8800	0.8800
Tenant & Unauthorised Occupant Land	14.8729	14.8729	11.8616
Total	214.2501	218.4127	1018.3085

37. Details of Forest issues

- (i) Total forest area involved (in ha) for mining lease. 846.3995 ha
- (ii) Total broken forest area. 95.60 ha
- (iii) Status of Forest Clearance and extend of forest land diverted in ha.

Status of FC within ML:

Stage-II FC has been accorded for an area of 95.60 ha by MoEF&CC (FC Division) vide letter no. 8-164/97-FC dated 25th/27th January 2005.

Stage-I FC for balance 746.3325 ha forest land involved in the project is under process vide Proposal no. FP/OR/MIN/9112/2015.

Status of FC outside ML:

The Stage-II Forestry Clearance has been accorded for an area of 249.9685 ha by MoEF&CC (FC Division) vide letter no. 8-02/2013-FC dt. 27.08.2014.

Stage-I FC for 106.016 ha (Daitari Conveyor Corridor proposal) has been accorded by MoEF&CC (which includes 4.467 ha of Daitari ML area) vide no. 8-27/2017-FC dated 27.09.2017.

Stage-I FC for 24.9612 ha (Daitari Transmission Line) has been accorded by ERO, MoEF&CC, Bhubaneswar vide no. 5-ORC 281/2016-BHU dated 19.12.2016.

(iv) Is there any National Park, Eco-sensitive zones, within 10 km radius? If so, give the details. No

(v) Extent of forest land in the project (including safety zone and all types of forest land) (in ha) 846.3995 ha (Rebana RF and Daitari PF); 249.96 ha (Daitari Extension Area); 106.016 ha (Conveyor corridor) and 24.9612 ha for 33 KVA transmission line.

(vi) Total forest land for which Stage-1 FC is available (give area in ha), provide breakup of this area in following format.

Area (in ha)	Stage-I FC issued vide letter no. & date.	Validity period of earlier FC granted.
* 95.60	Stage-I FC: Letter no. 8- 164/97-FC dated 25 th August 1998.	Till Lease period.
4.467	Stage-I FC: Letter no. 8- 27/2017-FC dated 27.09.2017.	Till Lease period.

* **Stage-II FC: Letter no. 8- 164/97-FC dated 27th January 2005 for 95.60 ha.**

(vii) Balance forest land for which Stage-I FC is not available (give area in ha) 746.3325 ha

(viii) Details of wild life issues involved, if any. If so, whether WL management plan has been prepared; pl. indicates the status. The Site Specific Wildlife Conservation Plan has been prepared and approved by PCCF (WL) & CWLW, Odisha vide letter no. 9569/1WL(C) SSP-382/2012 dt. 2nd December 2013 with a total financial outlay of Rs. 1798.70 Lakhs. OMC has deposited Rs. 1518.35 lakhs (through RTGS mode vide UTR SBINH 14083303067 dt. 22.03.2014) towards the approved activities to be taken up by the DFO, Cuttack Division and DFO, Keonjhar WL Division in the zone of influence (10km radius) to be completed within 10 years of operation.

(ix) Whether Schedule-I species, if yes conservation plan is approved by CWLW? Yes. The conservation plan has been approved by PCCF (WL) & CWLW, Odisha vide letter no. 9569/1WL(C) SSP-382/2012 dt. 2nd December 2013.

38. Costs of the project:

(i) Total capital Cost: 198.78135 crore

(ii) Cost of Production: Rs. 1061.48 /- per tonne

(iii) Sale Price: Rs. 3966 /- per tonne

- (iv) CSR cost: Approx. Rs. 30 lakhs per year
- (v) R&R Cost: Not Applicable
- (vi) No of PAFs: Not Applicable
- (vii) Cost for implementing EMP: cost: Rs. 130 lakh (approx. including NPV, CA, Mine closure cost and wildlife conservation cost) Recurring Cost: Rs.67 lakh per annum (approx)

39. Details of villages/habitation in mine lease area

- (i) Inside the lease No fresh area is to be acquired for the expansion. Thus, the project does not envisage R&R.
- (ii) Surrender by lease Not Applicable
- (iii) Extent of cropland acquired/ being acquired in ha. NIL

40. Details of transportation of mineral

- (i) In pit: Dumpers / Tipper Trucks
- (ii) Surface to siding: The finished products is/will be transported through 3.8 km long downhill closed conveyor belt to the stock pile at Baliparbat, located at a distance of 10 km, and the sized ore from Baliparbat will be dispatched by rail.
- (iii) Siding to loading: Finished ore of CLO (10-40mm) & fines (-10mm) produced through OHP & converged at Baliparbat Stock yard through the belt conveyor shall also be loaded by loaders of 0.91 – 1.5 cu.m capacity & transported through 16 - 25 t tippers to railway siding for wagon loading. Direct loading onto buyer’s trucks shall be done at Baliparbat stock yard for outbound sales.
- (iv) Quantity being transported by Road/Rail/conveyer /ropeway Existing: Road:0.5 MTPA; Conveyor 2.5 MTPA (up to Baliparbat)
Proposed: Road:0.5 MTPA; Conveyor 5.5 MTPA (up to Baliparbat)
- (v) Proposed change in transportation means if any, give details. None

41. Details of reclamation:

- a. Afforestation shall be done covering an area of: ha at the end of mining. This will include: 987.1967 ha
- (i) Reclaimed external OB dump (in ha) : 280.4751 ha
- (ii) internal dump (in ha) Nil
- (iii) Green belt (in ha) 0.88 ha
- (iv) Density of tree plantation (in no of plants) 1600 nos./ha
- (v) Void (in ha) at a depth of (in m) which is proposed to be converted into water body Nil;
- (vi) Others in ha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc).

Type of land	Afforestation (Area in ha)
Magazine with safety zone	91.9608
Statutory safety barrier	13.2765
Infrastructure, plant and machinery	20.7148
Mineral stacking and processing	10.3419

- (vii) Agriculture and horticulture Nil
- (viii) Fisheries Nil
- (ix) ECO Tourist/recreation spot Nil

42. Any court case pending. If so, please provide a list with details as annexure.

Yes; A criminal case [no. 2(C)CC-8/2014] was filed before the Court of J.F.M.C., Jajpur Road against OMC to take cognizance of offence U/s 15 of the Environmental (Protection) Act, 1986 for violation of EIA notification 1994 clause-1 (ii) & III(b) by producing iron ore without obtaining EC from MoEF Govt. of India.

(i) Environment (Protection) Act As mentioned above.

(ii) Air (P&CP) Act Nil

(iii) Water (P&CP) Act Nil

(iv) MMRD Act Nil

(v) Factories Act Nil

(vi) Other land R&R related cases No private land will be acquired for the project. Hence the project does not envisage R&R.

43. Any violation cases pending, if so, please provide a list with details as annexure. No.**44. Give details of actual production vis-à-vis sanctioned capacity since the inception of mine in following format since 1993-94 :**

Environmental Clearance is applied.

Year	EC sanctioned Capacity (in Million tonnes/ year)	Actual production (in Million tonnes/ year)	Excess production beyond EC sanctioned capacity
1993-94	202835	202825	0
1994-95	202835	410257	207422
1995-96	202835	230985	28150
1996-97	202835	258878	56043
1997-98	202835	115054	Nil
1998-99	202835	296766	93931
1999-00	202835	300747	97912
2000-01	202835	283155	80320
2001-02	202835	667891.200	465056.2
2002-03	202835	861073.870	658238.9
2003-04	202835	896980	694145
2004-05	202835	1101048.728	898213.7
2005-06	202835	1343234.582	1140400
2006-07	202835	1917962.630	1715128
2007-08	202835	736548.111	533713.1
2008-09	202835	1593553.469	1390718
2009-10	202835	1652347.540	1449513
2010-11	3000000	787799.820	Nil
2011-12	3000000	1988975.425	Nil
2012-13	3000000	703440.0	Nil
2013-14	3000000	351589.830	Nil
2014-15	3000000	1801704.100	Nil
2015-16	3000000	2999635.0	Nil

2016-17		2824235.0	
2017-18			

45. Date and Place of public hearing:Keonjhar: 01.10.2019 at Mareda Field Near Daitari Gram Panchayat office and Jajpur: 04.10.2019 at Ambatola, Dehudisahi, Chinguripal Gram Panchayat.
46. The designation of officer presided over the PH. ADM Keonjhar ; ADM Jajpur
47. Issues raised during Public Hearing and assurance given along with the financialprovisions, if any, by the project proponent. (Please attach as an annexure in a tabular form.) Given in Annexure 7.1.1, 7.1.2 & 7.2 of EIA/EMP Report
48. Number of representation record in writing from the district and outside of district, please give details. Keonjhar : 419 &Jajpur : 318
49. Name of the EIA consultant who prepared the EIA/EMP report. MECON Limited (A Govt. of India Enterprise), Ranchi – 834002 has been appointed as Accredited Consultant Organisation for carrying out EIA/EMP studies.
50. Whether the consultant has been accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009. Yes; Sr. No. 109 in the "List of Accredited Consultant Organisations (Alphabetically) / Rev. 85 Mar.09, 2020.
51. Name of other specialists/consultants involved in making EIA report in collecting data.EC: Shri P Banerjee; FAEs: Dr. M.K.Mukhopadhyay, Dr. S.K.Singh, Dr. S.Bhattacharya, Shri S Adak, Dr. Sumana Chakraborty, Dr. Ashok Kumar, Shri A.K.Mishra, Shri V. Skaria, Shri Anand Bhardwaj, Shri Sunny Budhraj.

Observations and recommendations of the EAC in the present meeting:

PP further informed to the EAC that the mine was in operation upto Dec. 2009 without prior EC. Credible action initiated as cognizance of offence under Section 15 of the E (P) Act, 1986 against OMC in the Hon'ble Chief Judicial Magistrate, by the said court under Section 15 of the E (P) Act, 1986 on 19.02.2014. DDM, Jajpur vide letter no. 1748/Mines dt.15.09.2017 had raised a demand of Rs. 737,12,42,092/- (Rupees Seven hundred thirty-seven crore twelve lakh forty. two thousand ninety-two only) for production of iron ore during 2000-01 to 2010-11 without Environmental Clearance pertaining to Daitari Iron Ore Project. DDM, Jajpur vide letter no. 1991/Mines dt.31.10.2017 had raised a demand of Rs. 17,28,76,661/- (Rupees Seventeen crore twenty eight lakh seventy six thousand six hundred sixty one) only for production of iron ore from 07.01.1998 to 31.03.2011 without Forest Clearance pertaining to Daitari Iron Ore Project. Also, DDM, Jajpur vide letter no. 2000/Mines dt.31.10.2017 had raised a demand of Rs. 36,95,53,235.00/- (Rupees Thirty six crore ninety five lakh fifty three thousand two hundred thirty five) only for production of iron ore during 2000-01 to 2010-11 without CTO/Mining Plan pertaining to Daitari Iron Ore Project. OMC has paid the demand amount in full to the Govt. of Odisha in line with the demand for production without EC & FC raised by DDM, Jajpur , whereas OMC has paid compensation of Rs. 42,55,63,330.00 along with interest on belated payment with respect to excess production without CTO/Mining Plan.

EAC observed that the Environment Clearance for Daitari iron ore mining project has been accorded by Ministry of Environment, Forest and Climate Change (MoEFCC) vide letter no. J-11015/1003/2007-IA.II(M) dated 22.09.2010 for a production capacity of 3 MTPA. Further, the aforesaid EC letter was amended w.r.t. "grant of temporary permission of two years for completing the installation of conveyor belts and rail heads in the Daitari Iron Ore Mining Project" vide letter no. 11015/1003/2007-IA.II(M) dated 31.03.2017.

EAC further observed that production capacity after grant of EC was within the EC capacity i.e 3.0 MTPA , however PP has mined beyond 1993-94 base level prior to grant of EC for 3.0 MTPA hence violation of EIA Notification. Accordingly, credible action was initiated as cognizance of offence under Section 15 of the E (P) Act, 1986 against OMC in the Hon'ble Chief Judicial Magistrate, by the said court under Section 15 of the E (P) Act, 1986 on 19.02.2014.

EAC deliberated on the information submitted by the PP (Form 2 Annexure IV, EIA/EMP report, PH etc). After detailed deliberation on the information submitted, EAC **return the proposal in present form** the proposal for want of following information:

1. Total land involved in the project is 1018.3058 H (FL : 846.399 and NFL: 171.90 Ha), however cumulative forest land as per FC granted and under consideration is around 1222.50 Ha instead of 846.399 Ha. Clarification shall be submitted in this regard.
2. NOC dated 31.05.2017 for ground water withdrawal for abstraction of 750 cum/day was valid till 25.05.2019. Revised NOC shall be submitted and also the status of NOC for surface water withdrawal
3. In the column 20, land ownership, total forest land mentioned is 746.335 Ha. Clarify? And land use in 93/94,09/10 and present and conceptual with classification as per revenue and the impact between 94/95 and 09/10 shall be submitted in tabular form with explanation.
4. Approved Mining Plan to be submitted as the modified mining plan dated 22.02.2016 "Validity shall expire on the day as per the provision of MMDR Act 2015 dated 26.03.2015 or on 31.03.2020, whichever is earlier.
5. Total excavation details in Tonnes including waste, OB, top soil etc shall be submitted and the project caption and requirement of EC shall be for total excavation and hence it shall be mentioned clearly.
6. Ministry vide letter dated 31.06.2017 granted amendment for road transportation and issued direction u/s 5 to OMC to install conveyer belt as well as rail heads as envisaged in the EC letter dated 22.09.2010 within two years. Two years' time as given by the Ministry is already over, justification in this regard shall be submitted.
7. Clarity on Forest clearance to be obtained and already obtained for the Forest land involved in the project. Status of Stage I FC for balance Forest land involved in the project
8. Give detailed clarification about Daitri conveyor corridor proposal (106.016 ha which includes 4.467 Ha of Daitri ML area) is part of this Mining lease area of 1018.3085

9. Submit detailed clarification about daitri extension area (249.96 Ha) and its activities whether covered in this proposal.
10. Reconcile all the land use land cover data submitted in the Form 2 and Annexure IV before and after mining.
11. Base line concentration is mentioned zero in column 10.
12. Impact of transport and handling of waste shall be considered in damage assessment and also the impact of tertiary crushing plant, colony and relevant transport in and out shall be taken into consideration, besides AQUIP table should indicate with and without control measures.
13. Input data considered for all environmental parameters to arrive at the damage assessment cost shall be submitted and the modelling details.
14. In EIA report, Table no.3.8,unit of all the parameters is given in microgram per cubic meter whereas in presentation slides it is given as g/m³ and the equipment sensitivity is also expressed as g/m³
15. Table 3.9 is missing.
16. Table 3.9.9, heavy metals in PM10, Metals like As, Ni and Pb as per NAAQS 2009,not given, however it is mentioned in table no 3.8.
17. Concentration levels of PM10 in work zone are shown more. The work zone Air Quality Norms : Proper units should be given
18. Table 3.13, monthly water balance: Units should be given
19. Table 3.15: Results of surface water quality should be revisited.
20. PH varies from 6.72 to 6.9,acidic, proper explanation is required
21. . Iron conc. In SW2 shown more (1.230 mg/lit). Clarify?
22. Estimate faecal coliform in surface water and submitit in the report
23. BOD showed 2,1 &2mg/ litre. Clarify?
24. Table 3.17: Iron content in GW3 is shown 5.715mg/litre, reason for this should be given.
25. In texture, percentage distribution of sand, silt and clay is not given. Submit the same in the EIA report.
26. Details of aquatic flora and fauna shall be recorded and submit in the EIA report.
27. Air Quality modelling is done only for PM10. Submit the modelling results for PM_{2.5}, SO₂ and NO_x as well.
28. Summary and Conclusion chapter should be as per the guideline (EIA notification 2006)

- 29.** Plagiarism check list declaration to be submitted by EIA consultant organization
- 30.** Presentation shall be made before EAC on specific ToR recommendation of CSIR-NEERI carrying capacity study and the status.
- 31.** Activity wise detailed EMP cost and recurring cost with time frame to be submitted
- 32.** Submission of latest compliance report from concerned regional office regarding noncompliance of earlier EC conditions
- 33.** Submission of permission from State Govt. regarding mining activity is to be permitted outside the mining lease area -compliance of ToR Point No13 not submitted
- 34.** In slide No 105 Stage-I FC – applied for balance 746.3325 instead of FC Acknowledgement attached ToR Acknowledgement
- 35.** EIA/EMP to be revised and uploaded along with Form 2 application and the earlier EC was for 1812.99 ha and whereas you have asked for EC over an area of 1018 ha and you have also mentioned in your report that you are considering to retain the area of 1812.99 ha - please explain.
- 36.** Damage assessment is arrived at by using EU28 handbook for env costs as arrived in case of CPCB(specific for stone quarry as directed by NGT)and as well as Env.costs in Energy and Transport sectors by The Federal Env. Agency, which is pertinent to power sector and transport sector with respect to European (Germany) conditions for Urban and rural areas wherein the mortality and morbidity rate considered are 55000-110000 Euros.(VOLY)
- 37.** As per 13.11.5 the ecological damage cost worked out is 27.18 lacs for a violated production of about 9.5 mln tonnes of iron ore and by considering damage value due to biodiversity, health, crop ,material separately wherein these costs are based on average env ..costs of air pollution due to power generation from fossil fuel in Germany and does not relate to this activity and the emission rates per tonne of ore production shall be rechecked and revalidated and revised cost shall be submitted. Further for violation qty of 5.6 mln tonne of cu.ore over a period of 25 years the damage cost for Air impact is furnished at 12.07 crores where the same model has been used whereas for a violated total production 9.5 mln tonnes(considering 3.0 mln tonne annual production for emission computation while in the above referred other mine annual production of 3.21 lac ton is considered.)There is a huge difference in emission rate between these) and the cost arrived at is 27.18 lacs.
- 38.** Water: i) Surface water usage for mining activity @8ltres/ton shall be explained and it cannot so low (water used for plantation is nil and for drilling and dust suppression for a production 10000tpd is very low).water reduction during monsoon is not counted. SWater consumption shall be quantified on annualised basis and the rate for the shall be as per CPCB guideline and further qty of surface water annually and deficiency in management shall be computed for damage as per average annual rainfall for the violation period.

Ground Water: QTY of GW used by about 1000 mine employees for the violation period has not been considered on prorata as per CPCB rates in the absence of NOC during violation period.

39. Ecology and Biodiversity: Total plantation done so far is 9550 trees covering an area of 6.9 ha whereas the safety zone itself is around 12 ha besides other nonforest areas and streams.

The shortfall in providing GB along the boundary (Safety Zone) and plantation in the non mining area like waste lands to comply with the requirement of 33% plantation and atleast 50% of the requisite area plantation in the non forest area should have done considering the number of years operated so far and the damage cost has to consider besides plantation along the water bodies and cost needs to be revised considering the above.

40. Wild life conservation expenditure (including solar fencing) which is effective from 2017 and whereas ,during violation years this expenditure has been saved and a min 10% of the annual exp per year should be considered for damage/remediation for violation period.

41. The total damage cost assessed ,sw damage cost being substantial(2.30 cr) and the total damage cost computed in the EIA is about 3.30 cr and correspondingly the Remediation, NRAP and CRAP costs computed by PP is 11.22 cr ,which has no relationship between the two.

42. Further saving in EMP Cost , profit accrual during the violation period , a minimum of 3% of those total saved cost has not been considered in the CRAP .

43. Details of proposed Greenbelt Development Plant with appropriate budget estimate including 5 years maintenance cost to be suitably estimated; Damage Remediation Plan (Table 13.18.1 of EIA) need to detailed out while considering Rs. 4.00L in 30 villages (names of villages, nos of saplings; species to be distributed, etc.)

32.4.2 Expansion of Surda Copper Mine from 0.39 million TPA to 0.9 million TPA (ROM) by M/s Hindustan Copper Ltd., located at village (s) - Surda, Sohada, Pathargora, Benashole villages and Forest Block No. 1098, Tehsil - Ghatsila, District - East Singhbhum, Jharkhand (MLA: 388.68 ha)– Reconsideration for Environmental Clearance.

[IA/JH/MIN/145023/2020 dated 27.02.2020] [F.No. 11015/80/2012- IA.II (M)]

Project proponent along with the consultant MECON Limited, Ranchi Jharkhand, NABET accredited made the detailed presentation and interalia provided the following information:

The proposal of M/s Hindustan Copper limited is for production of 0.9 Million Tonne per annum (MTPA) of Copper Ore from – Surda Mine- (ML Area 388.68 ha, located at Survey Nos.100,101,102, 160 &1098, at Villages Surda, Sohada, Benasole, Pathargora, Forest Block, Tehsil Mosaboni ,District East Singhbhum, State Jharkhand. The mining lease is located on Survey of India Topo-sheet no. **73 J/6** bounded between latitudes 22°32'42" N and 22°34'19" N and longitudes 86°25'41" E and 86°26'42" E.

The said project/activity is covered under Category 'A' [Sl.no. 1(a) of Schedule: “List of project or activities requiring prior environmental clearance”] of MoEF&CC notification dated 14th September, 2006 in connection with Environment (Protection) Rules 1986.

Highest production achieved is 400008 tonnes in 1989-90 and accordingly CTO of 4 Lakh Tonne per year was issued by JSPCB. Now 2018-19 onwards CTO for 317238 tonnes has been issued by JSPCB considering production for the year 1993-94 as base year.

Details of the Project

1. Number of minerals: Whether mineral is major or minor. Status of same mineral before 2006 (major or minor): Major Mineral. Status of mineral before 2006 was also major mineral

2. Letter of Intent (LoI) / Mining Lease Details:

Letter from the Deputy Director of Mines and Geology, vide order no.517 (M) dated 18.03.2015 and the lease deed was executed for 5 years w.e.f 15.07.2017 and is valid till 31.03.2020.

- Surda is part of Mosaboni Mining Lease. Mosaboni Mining Lease granted from 16.06.1939 to 15.06.1984. (6923 Ha).
- 1st renewal from 16.06.1984 to 15.06.2004.
- 2430 Ha was surrendered on 15.08.1994.
- Remaining areas was 4493.0 Ha.
- 2nd renewal granted from 16.06.2004 to 15.06.2014 for 388.68 Ha. 4104.32 Ha was surrendered vide Gazette notification dated 23.06.2004.
- 3rd Lease Renewal application submitted and Form D obtained on 18.03.2013 for 388.68 Ha.
- Matter further taken up with GOJ in view of the MMDR Amendment Ordinance 2015 and letters from Jt. Secretary, Ministry of Mines and Under Secretary, GOI for renewal of the lease till 31.03.2020.
- Lease extended till 31.03.2020 vide letter no. 517/M dated 18.03.2015
- Lease deed was executed on 15.07.2017

3. Whether the project is in the Critically Polluted Area(CPA): *No*

4. Cost of the project: Rs. 203 Crores

5. Employment generated/to be generated: 1600

6. Benefits of the project:

- *Utilisation of India's scarce copper ore resources reducing imports.*
- *Under expansion modern machinery with lower specific fuel consumption will be deployed*
- *HCL will continue plantation of native tree species*
- *HCL will construct amenities for local people*
- *HCL will contribute towards skill development of local villagers.*
- *Continued employment for ~1500 people in a predominantly tribal area.*
- *Indirect employment for ~4000 people*

7. Whether new or expansion project. If expansion: Applying for EC for First Time
8. If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006. No
9. No. and Date of the ToR /and revised ToR, if any, letter issued by the MoEF (if this is a case for EC): J-11015/80/2012-IA.II(M) dated 21-02-2020
10. No. and Date of the EC and the revised EC letter issued by the MoEF (if this is a case for reconsideration? If so, what specific reconsideration(s) being sought by the proponent)
Applying for EC for First Time
11. If the project was considered in EAC, Pl. give dates of the meeting(s).:
19-20, Sept.,2016 & 04-02-2020 (for violation ToR)
12. Type of Mine:(Opencast/Underground/mixed): *Underground*
13. Capacity of the mine applied for: *900,000 tonnes per year of copper ore*
14. ML Area
 - (i) As per block allotment: *388.68 ha*
 - (ii) As per approved mine plan: *388.68 ha*
15. Date of approval of mine plan, mine closure plan, status & date: *Mining plan for a lease area of 388.68 ha has been approved by the Regional Controller of Mines, Indian Bureau of Mines, Ranchi vide letter No. RAN/ESB/Cu/MP-21 12018-19 dated 16.04.2019 which is valid till 31.03.2020*
16. Date of Board's approval: ML. *Granted in 1939. Project in operation since 1956. Expansion project for Surda Approved by HCL's Board on 14-09-2010.*
17. Date of Ground water clearance and surface water approval.: *13-07-2013 from CGWA*
18. Existing Ground water level in (M): *12 – 16 m below ground level*
19. Date of mine closure approval. *PCMP approved along with Mining Plan on 16.04.2019*
20. Any river / Nallah flowing near or adjacent to the proposed mine. If yes, please give details.

Surda Mine Lease is drained by mainly by two streams. The northern and central parts are drained by seasonal drainage channels originating from springs in ML which form the GharadubaNala. The southern part of the ML is drained by the Surda Nala. These perennial streams flow towards the south-east / east to meet each other about 2 km east of the lease's south-eastern corner before draining into the Subarnarekha River ~0.5 km further east. Another perennial stream, the KankuramNala , flows from the south-west towards the north-east just beyond the lease's northern boundary to join the Subarnarekha River about 2.5 km north-north-east of Surda Mine Lease. A small area in the north-western corner of the lease drains into the Kankuramnala.

21. Details of mine lease:-

1. Date of entering into original lease deed. <i>16-6-1939</i>	1. Date of 1 st lease Renewal: <i>16-6-1984</i>	1. Date of 2 nd lease Renewal: <i>16-6-2004</i>	1. Date of 3 rd lease renewal
2. Date of expiry of original lease deed: <i>15-6-1984</i>	2. Whether renewal or deemed renewal: <i>Renewal</i>	2. Whether renewal or deemed renewal <i>Renewal</i>	2..... 3.....
	3. Date of expiry of 1 st lease renewal/deemed renewal: <i>15-6-2004</i>	3. Date of expiry of 2 nd lease renewal/ Deemed renewal: <i>31-03-2020</i>	[ALSO FOR SUBSEQUENT RENEWALS.....]

22. Geological Reserve:

- (i) Total geological reserve: *28.57 Million Tonnes*
- (ii) Mineable reserve: *2.85 Million Tonnes*
- (iii) Extractable reserve: *20 Million Tonnes*
- (iv) Percent(%) of extraction: *70%*
- (v) Range of groundwater level: *12 – 16 m below ground level*
- (vi) Total estimated water requirement: *2740 m³/day industrial water + 160 m³/day potable water*
- (ix) Details of intersecting groundwater level: *Ground water table intersected. Expected that 500 m³/day will seep into expanded mine.*

23. Details of Deposits :

- (i) Depth of ore body: *Ore body is dipping at an angle of 35° towards NE.*
- (ii) Grade of ore: *1.04% Cu*
- (iii) Stripping ratio: *Not Applicable*

24. Method of mining: *Underground mining by Horizontal Cut & Fill, Room & Pillar and Post Pillar Methods*

25. Life of mine: *30 Years*

26. Whether ambient air quality seasonal data has been monitored. If so, from which season to which season and whether the results are within the prescribed limits.

Original EIA Report prepared on the basis of Baseline Environmental Data generated during Post Monsoon Season, 2012 and Post Monsoon Season, 2014. Present EIA Report prepared also on basis of baseline environmental data being monitored during Jan- Feb. – March, 2020. A few values of PM10 exceed the maximum permissible value but at locations well away from the activities of Surda Mine

27. Whether the monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion.: *Not Applicable as applying for EC for 1st time.*

28. Details of O.B.: *Not Applicable as mine is an underground mine.*

- (i) External OB dumps: *One external waste rock dump created during early 1950s*
No of OB dumps :*As above*
- (iii) Area of each dump :*5.49 ha*
- (iv) Height of each dump: *~5 m*
- (v) Quantity(in MCm) of OB in each dump: *~0.14 MCM*
- (vi) Year of backfilling: *Not Applicable*
- (vii) No.of OB dumps reclaimed: *One*
- (x) If garland drains and settlement facility for runoff created: *External dump reclaimed during late 1950s / early 1960s*
- (ix) Whether run offwaterbeing utilized: *No.*

29. Details of Internal Dumps: *Not Applicable*

30. Utilization potential of wastes

- (i) Within the mines: *100% (all waste rock is utilised for stowing in underground voids)*
- (ii) Outside mines: *Not Applicable*

31. Details of final Mine Voids

- (i) Area: *Project is underground mine with stowing*
- (ii) Depth: *600 m*

32. Details of Quarry:

- (i) Total quarry area: *Not Applicable as project is underground mine*
- (ii) Greenbelt created in ha.: *18.79 ha*

33. Details of Land usage

LANDUSEDETAILS

(i) Pre-mining

S. No.	Land Use	Within ML Area (Ha)	OutsideMLArea (Ha)	Total
1.	Agriculture land	111.048		111.048
2.	Forest land	149.03	-	149.03
3.	Wasteland	-		-
4.	GrazingLand	118.404		118.404
5.	Surface water bodies	3.504		3.504
6.	Settlements	3.165		3.165
7.	Other (Roads)	3.529		3.529
	TOTAL	388.68		388.68

(ii) Post- Mining

Sl. No	Description	Land use				Total
		Plantation	Water Body	Public use	Undisturbed area	
1	External Waste dump	5.49	Nil	Nil	Nil	5.49
2	Top soil storage area	2.94	Nil	Nil	Nil	2.94
3	Mineral storage area	4.85	Nil	Nil	Nil	4.85

Sl. No	Description	Land use				Total
		Plantation	Water Body	Public use	Undisturbed area	
4	Infrastructure (Adm. Building, workshop, magazine, township)	-	-	32.38	-	32.38
5	Green Belt	18.79	-	-	-	18.79
6	Roads	-	-	1.88	-	1.88
7	Undisturbed area	Nil	Nil	Nil	322.35	322.35
	Total	32.07	Nil	34.26	322.35	388.68

Adm. Buildings, workshops, roads, township, magazine house etc. have been accounted for Public Use whereas magazine safety zone is accounted under "Undisturbed Area". Surda Nala and village pond has been included under "Undisturbed Area".

(iii) Core area

Existing land Utilisation and Land Utilisation at End of the Mine's Life

Sl. No.	Land Use	Existing	Conceptual
1.	Area for mine entry, excavation	2.52	2.52
2.	Area for new shaft (proposed)	Nil	10.76
3.	Old Waste dump (reclaimed)	5.49	5.49
4.	Area for top soil storage	2.94	2.94
5.	Mineral storage	4.85	4.85
6.	Infrastructure (Adm. Building, office, shaft portals, workshop etc.)	8.41	8.41
7.	Township	10.69	10.69
8.	Roads	1.88	1.88
9.	Greenbelt & Plantation (<i>including 7.5 m along ML boundary 5.24km i.e. 3.501 ha</i>)	18.79	18.79
10.	Balance unused land	333.11	322.35
	Total	388.68	388.68

34. Details of Forest issues

- (i) Total forest area involved (inha)for mining lease. *149.03*
- (ii) Total broken forest area.: *31.07 ha*
- (iii) Status of Forest Clearance and extend of forest land diverted in ha.:
Stage II FC Received.
- (iv) Is there any National Park, eco-sensitive Zones, within 10km radius? If so, give the details.: *No*
- (v) Extent of forestland in the project (including safety zone and all types of forest land) (inha): *Total Forest Land in ML Area – 149.03 ha. Forest Area Broken – 31.07 ha. Surface Extension of Underground extensions: 52.44 ha. Total diverted forest area is 83.51 ha.*
- (vi) Total forestland for which Stage-1 FC is available (give area in ha), provide break up of this area in following format:

Area(in ha)	Stage-1FC issued vide letter no. &date	Validity period of earlier FC
203.62	Letter no.8-64/93-FC(I) dated 11-04-1997	Co-terminus with mining lease

(vii) Balance forestland for which Stage-1FC is not available (give area in ha): -

(viii) Details of wildlife issues involved, if any. If so, whether WL management plan has been prepared;

No Biosphere Reserve, Wildlife Sanctuary, National Park, Ramsar Site, Tiger Reserve, Elephant Reserve, Elephant Corridor within 10 km of Surda Mine Lease

(ix) Whether schedule-I species, if yes conservation plan is approved by CWLW?

No Schedule I species found in Core Zone. Only Schedule I species found in Buffer Zone is Indian Python. Site Specific Wildlife Conservation Plan Prepared and submitted.

35. Costs of the project :

- (i) Total capital Cost: *Rs. 203 Crores*
Cost of Production: *~Rs1457 per tonne*
- (iii) Sale Price: *Ore beneficiated and used in HCL's own copper smelter cum refinery*
- (iv) CSR cost: *CSR Budget for 2019 – 20 – Rs. 1.9773 Crores*
- (v) R&R Cost: *Not Applicable as no additional land acquisition / leasing*
- (vi) No of PAFs: *Not Applicable*
- (vii) Cost for implementing EMP: *Rs. 1.57 Crores*

36. Details of villages/habitation in mine lease area

- (i) Inside the lease: *5 Villages (Surda, Sohada, Benashole, Pathargora, Forest Block 1098)*
- (ii) Surrender by lease
- (iii) Extent of cropland acquired/being acquired in ha.: *No cropland will be acquired*

37. Details of transportation of mineral

- (i) In pit: *Mine tubs*
- (ii) Surface to siding: *Mined ore raised to surface in skips / cages and loaded onto tipper trucks for transport to Copper Ore Concentrator Plant.*
- (iii) Siding to loading: *Not Applicable*
- (iv) Quantity being transported by Road/Rail/conveyer /ropeway: *Presently ~3 lakh t transported by road.*
- (v) Proposed change in transportation means if any, give details: *No change*

38. Details of reclamation:

a. Afforestation shall be done covering an area of: 32.07 ha at the end of mining. This will include:

- (i) Reclaimed external OB dump(inha) : 8.43 ha + 4.85 ha Mineral Storage Area
- (ii) Internal dump(inha): *Not Applicable*
- (iii) Greenbelt (inha): 18.79 ha
- (iv) Density of tree plantation (inno of plants): ~1600 trees / ha
- (iv) Void (in ha) at a depth of(in m)which is proposed to be converted into water body:),: *Not Applicable*
- (v) Others in ha(such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc).
- (vi) Agriculture and horticulture: 111.048 ha of agricultural land in ML area left untouched.
- (vii) Fisheries: *Not Applicable*
- (ix) ECO Tourist/recreation spot: *Nil*

39. Any court case pending. If so, please provide a list with details as annexure.

- (i). Environment(Protection) Act: *None*
- (ii). Air(P&CP) Act: *None*
- (iii). Water (P&CP) Act: *None*
- (iv).MMRDAct: *None*
- (v). The Factories Act: *None*
- (vi). Other land R&R related cases: *None*

40. Give details of actual production vis-à-vis sanctioned capacity since the inception of mine in following format or since 1993-94 as applicable:

Year	EC sanctioned capacity(MTPA)	Actual Production (MTPA)	Excess production beyond the EC sanctioned capacity (MTPA)	Excess production beyond 1993 – 94 (MTPA)
1993 - 94		0.317238	0.317238	0
1994 - 95		0.308494	0.308494	0
1995 - 96		0.327096	0.327096	0.009858
1996 - 97		0.318517	0.318517	0.001279
1997 - 98		0.328717	0.328717	0.011479
1998 - 99		0.287217	0.287217	0
1999 - 2000		0.203364	0.203364	0
2000 - 01	0 as the mine did not have EC. The highest annual copper ore production achieved prior to 1994 was	0.293997	0.293997	0
2001 - 02		0.270429	0.270429	0
2002 - 03		0.089281	0.089281	0
2003 - 07		<i>0 as Mining</i>	<i>0 as Mining Suspended</i>	0
2007 - 08		0.049466	0.049466	0
2008 - 09		0.328168	0.328168	0.010930
2009 - 10		0.387843	0.387843	0.070605
2010 - 11		0.396841	0.396841	0.079603

2011 - 12	400,008 tonnes in 1989 - 90.	0.395745	0.395745	0.078507
2012 - 13		0.398537	0.398537	0.081299
2013 - 14		0.398569	0.398569	0.081331
2014 – 15		0.179036	0.179036	0
2015 – 16		0.267251	0.267251	0
2016 – 17		0.313856	0.313856	0
2017 – 18		0.175391	0.175391	0
2018 – 19		0.217524	0.217524	0

41. Date and Place of public hearing: 15th Dec., 2015 at Vocational Training Centre of Surda Mine (within ML Area)
42. The designation of officer presided over the PH: Addl. District Magistrate, East Singhbhum District
43. Name of the EIA consultant who prepared the EIA/EMP report.: MECON Ltd.
44. Whether the consultant has been accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009.: Yes

Observation and recommendations of the earlier EAC meetings

EAC deliberated on the information as presented and as submitted to the Ministry (Form 2, EIA/EMP report, PH details) in the 31st meeting held on 28.02.2020. EAC based on the information submitted by the PP noted that instant PP had undergone mining without prior environmental clearance. The committee deliberated on the project of Surda Copper Mine (0.9 million TPA) and has observed that proposal has been appraised in 2015 by the sectoral EAC for the expansion of project but EC was not issued for want of clarity on forest clearance. It was also observed by the sectoral EAC that project has been operating prior to 1993. Taking into consideration of 1993 -94 base level (3,17,238 tonnes), PP had gone for expansion during 1995-96 (3,27,096 tonnes) without seeking prior environmental clearance hence PP is in violation since 1995-96.

EAC after detailed deliberations on the proposal in the 31st meeting **deferred** the proposal for want of following information:

- i. Revised plan showing mining lease area reduced from 388.68 Ha to 323.16 Ha as FC Clearance available for 83.51 Ha out of 149.03 Ha of Forest land.
- ii. Status of credible action against violation.
- iii. Land requirement plan showing surface features along with Non forest land acquired, Forest Land already acquired and Forest land to be acquired;
- iv. Plantation details (Existing/Proposed) along with species to be used, capital and recurring expenditure with maintenance;
- v. Revised damage assessment to be calculated by considering the violation period from 1995-96 to 2018-19 for the excess quantity from the base year and qty as per SC judgement.
- vi. Fresh one-month baseline data as stipulated in the ToR to be incorporated in the revised EIA/EMP report. Comparison table should be made with earlier baseline data collected with fresh baseline data .
- vii. Greenbelt plan with plantation details of existing and proposed
- viii. Revised benefit accrued due to excess production during entire violation period from 1995-96 to 2018-19.

- ix. Revised capital cost with certification from concerned F&A department.
- x. Revised CER cost as per Ministry OM dated 01.05.2018 considering this project as green field project.
- xi. Copy of PH minutes to be uploaded in Form 2 application.
- xii. Revised EIA/EMP report to be submitted as some Typographical error observed in earlier report.
- xiii. Clarification for the BLD collection reported in EIA/EMP report for the month of March 2020

Observation and recommendations of the EAC in the present meeting (32nd)

Project proponent submitted the above information online on 14.03.2020, as sought by the EAC in the 31st meeting held on 28.02.2020. Project proponent made the detailed presentation on the additional information in the present meeting (32nd). EAC deliberated on the information as presented and submitted by the PP. EAC observed that baseline environmental data generation has now been carried out by Env. Engg. Laboratory of M/s MECON for the period 06-02-2020 to 06-03-2020. Total Mining Lease Area of the project is 388.68 Ha having 149.03 ha of Forest land in it. Out of 149.03 Ha of FL, 83.51 Ha has been diverted whereas 65.52 Ha is yet to be diverted. PP apprised EAC that any u/g mining or any activities related to u/g mining shall not be carried out in the forest land within mining lease for which FC to be acquired. EAC noted that PP has submitted the land use plan of 323.16 ha (excluding the forest land for which FC to be obtained). EAC also noted that credible action against the PP u/s 19 of E(P) act 1986 has not been initiated.

EAC also made an observation that instant project is for the first time EC and therefore should not be considered as an expansion project as far as EC is concerned. Accordingly, title of the project may be modified. EAC after detailed deliberation on the information submitted and as presented, **deferred** the project for want of following information:

1. Lease renewal status after 31.03.2020
2. Details of Dumps and Stripping ratio not provided.
3. FC is co-terminus with Mining lease. Lease validity is over on 31.03.2020. Status of FC?
4. Surface Water bodies are missing in post mining land use details.
5. Proposal submitted is for the first time environmental clearance, hence it cannot be considered as expansion project. Accordingly submit the EIA/EMP report with revised title.
6. Justification for cost taken for arriving damage assessment of air environment. Damage assessment shall be computed for the differential qty from the base year and base quantity in line with SC judgement. It is noted that EU 28 Hand book for ENV prices are considered in the assessment without giving due consideration for the Indian conditions and the costs. It is observed in the tables 13.8 to 13.12 that assessed values for PM 10 and other parameters like NOX does not represent a proper value as explained and hence all the damage costs for Air impact has to be reassessed besides for discounting to Indian conditions and considering health impacts separately as per Tata nagar study is superfluous, since EU 28 takes care of the same. Emission rates shall be rechecked.
7. Impacts due to partial provision of GB/plantation by not fulfilling 50% of the requirement and the deficiency shall be computed for damage.

8. Likewise Crop loss at 25% of the annual yield cost for specific impacted extent shall be reworked and likewise other parameters like CO₂, etc .
9. Table of AQIP with and without control measures shall be submitted.
10. SW/GW: sourcing of GW without @500kld, Non provision of water structures like Garland drain, settling tanks and RWH deficiency which has to be provided as per CGWA NOC of 2018 besides water drawn from Subarnarekha river for the violation period shall be considered for damage costs and vis-à-vis remediation.
11. LU/LC/Ecology: A minimum of 32 ha of plantation,.9 ha of avenue plantation and 1,2 ha along water bodies should have been in place now and hence damage cost shall be computed accordingly.
12. Profit accrued during violation as per prorata shall be recomputed and 3 % profit added to damage cost in CRAP.
13. No discount is permitted for the statutory costs incurred by the PP during this period.
14. PP calculated the water environment (Surface Water) damages based on the prevailing water tax rates (Rs 2.0/m³) instead of CPCB guidelines. Revise the damages as per the CPCB rates and as suggested by EAC.
15. PP did not address damages to Land environment vis-à-vis top soil management and Noise environment. Revise the damage assessment for air quality by considering CMPDI emission rates
16. Copy of credible action taken against the PP
17. CER activities with year wise details
18. Land requirement plan showing the mining lease area of the 323.16 Ha only (excluding the forest land for which FC to be obtained) with latitude and longitude.
19. NOC from state ground water department
20. CFO compliance report presentation before EAC to be made
21. Capital cost of the project shall consider the brought down cost of 93/94 plus capex involved between 93/94 and 2019 plus expansion cost.

32.4.3 Construction of Residential Township at village Narendrapur, District Dhenkanal (Odisha) by M/s Tata Steel BSL Ltd. Reconsideration for Terms of Reference [IA/OR/IND/68669/2017 dated 13.09.2017] [F. No. 23-128/2018-IA.III (V)]

Project proponent along with the consultant made the detailed presentation and interalia provided the following information:

The project involves construction of residential cum commercial complex (Residential township with total build up area of **146577 sqm** in a total plot area of **201537.497 Sqm** at Narendrapur, village Narendrapur, Taluka/Mandal Odapada District : Dhenkanal, (Odisha) by M/s Tata Steel BSL Ltd (formerly Bhushan Steel Limited). The project site is permitted for residential cum commercial use as per approved Master Plan of the area. Planning /building permission for built up area of **146577 sqm** was obtained from the TAMDA (Talcher –Angul-Meramandali Development Authority) vide letter No.985BP/TAMDA dtd. 11.05.2017

The said project/activity is covered under category B of item 8(a) of the Schedule to the EIA Notification, 2006, and requires prior EC from the MoEF & CC/SEIAA based on the appraisal by Expert Appraisal Committee or the State Expert Appraisal Committee. The chronology of events for seeking EC, deliberations by the respective authorities and the actions taken are reported to be as under: -

Application for EC was submitted to SEAC-III/SEIAA in Odisha: 06.02.2014

Final observations/recommendations of The SEAC to the SEIAA/ State Government :- The project has already started construction without obtaining prior Environmental Clearance. Vide letter dated 15th April' 2017, SEIAA communicated to the Company to apply online for EC at central level as per MoEF Notification dated 14th March, 2017 as regard to grant of EC for violation cases.

Action taken by the State Government /SEIAA :- *The Environment Department of the State Government vide letter August, 2014 issued directions u/s 5 of the EP Act, 1986 for the alleged violation of the EIA Notification, 2006, which were replied by the project proponent on 25th August, 2014. The State Government, after taking note of the submissions of the project proponent, confirmed the directions u/s 5 of the EP Act, 1986 on 13th February, 2015, with the directions to stop the construction work till EC is obtained from the competent authority. SEIAA directed the then management to suspend further construction and to submit a written resolution in form of commitment to ensure that violation will not be repeated.*

Complaint case filed by the State Government/State Pollution Control Board Show cause notice was issued by the Collector & District Magistrate under section 16(1) read with section -19 of the Environment protection Act-1986.

Further consideration of the proposal by the SEAC and recommendations: -Vide letter No. 2813/SEIAA, dtd.15.04.2017, SEIAA directed to file application for EC at central level from MoEF&CC.

Final recommendations of SEIAA :- Vide letter dated 15th April' 2017, SEIAA communicated to the Company to apply online for EC at the central level as per MoEF Notification dated 14th March, 2017 as regard to grant of EC for violation cases.

Legal interventions, if any :- Only show cause notices were issued by the Collector & District Magistrate, Dhenkanal and the Member Secretary, Orissa State Pollution Control Board, those were satisfactorily replied with. There has been no more legal interventions.

Now the proposal has been submitted for consideration in pursuance to the Ministry's Notification dated 14th March, 2017 due to violation of the EIA Notification, 2006.

The construction was reported to be started in 2008 and 75% of the build up area was completed by December, 2012 without obtaining the prior EC. Now the proposal has been submitted to the Ministry for consideration in pursuance of the Ministry's Notification dated 14th March, 2017 due to violation of the EIA Notification, 2006.

Observation and recommendations of the EAC in earlier meetings

EAC observed that earlier project was earlier considered in the **8th EAC meeting held on 13-14th June 2018. Based on the information provided by the PP, instant** Project was treated as an integrated project of steel manufacture as residential complex is within 1 km of the plant. Potential impact of the steel industry on the residential colony is required to study. Though, it is a project for construction of residential project, it will be treated as a category 'A' project and hence public hearing will be required in instant case. The EAC, after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC Notification dated 14th March, 2017,

confirmed the case to be of violation of the EIA Notification, 2006 and recommended for issuing Term of Reference for undertaking EIA and preparation of Environment Management Plan (EMP)

In the 21st EAC meeting held during 15-16 April 2019, Member Secretary informed to the EAC-Violation that file was referred back to EAC-Violation on 01.04.2019 from Industry sector for further deliberation regarding applicability of projects under schedule 8 (a). Matter was discussed in the 21st meeting and PP apprised committee that M/s Bhushan Steel has been taken over by M/s Tata Steel ltd and the name of the company changed to M/s Tata steel BSL Ltd w.e.f from 27.11.2018 and the same was approved by the Govt. of India.

EAC in the 21st meeting, after detailed deliberations, deferred the proposal for want of following documents for further consideration of the proposal under category 8(a).

1. Submission of relevant documents from Govt of India regarding name change.
2. Submission of application by the transferee with all the statutory documents required for the name change such as No objection by the transferor and undertaking from transferee that data furnished in the Form 1 application shall be abide by the transferee.
3. Certificate to be obtained from the R.O MoEF&CC whether it is an integrated residential complex or independent residential complex.
4. Submission of relevant documents from Govt of India regarding name change.
5. Submission of application by the transferee with all the statutory documents required for the name change such as No objection by the transferor and undertaking from transferee that data furnished in the Form 1 application shall be abide by the transferee.
6. Certificate to be obtained from the R.O MoEF&CC whether it is an integrated residential complex or independent residential complex.

Proposal was again considered in the 27th EAC meeting held during 31.10.2019-01.11.2019. EAC observed that proposal was earlier considered in the 21st meeting and committee advised PP to initiate the proposal for the name change. Further, EAC directed to obtain clarification from the R.O. MoEF&CC whether it is an integrated residential complex or independent residential complex. EAC in the 27th meeting noted that NOC regarding change of name has been granted to the project proponent. Further, PP submitted the site visit report from the R.O MoEF&CC wherein it has been mentioned that instant project is not an integrated project. EAC in view of R.O report advised PP to submit the revised Form 1/1A and conceptual plan under category 8(a) for further consideration of the project.

Details submitted by the Project Proponent

Project proponent submitted the requisite information to the Ministry, accordingly proposal is taken in the 32nd EAC meeting (present meeting) for consideration of proposal for Terms of Reference under the category 8(a).

Project proponent along with the consultant made the detailed presentation before the EAC in the 32nd meeting and interalia provided the following information:

1. The total plot area of the residential township is 201537.5 sqm and built-up area 146577 sqm. Approximately seventy five percent of total construction has been completed and construction for balance area is under suspension which will be completed after obtaining EC from MoEF&CC.
2. Salient features:

Particulars	Details
Total site Area	201537.497 m2 (49.801 acres)
Total Built-up Area	146577 m2
Total dwelling units	1442 main dwelling units
Number and Types of Building	Type A = 2 Blocks, Type B = 2 Blocks, Type C = 2 Blocks, Type D = 2 Blocks, Type F = 9 Blocks
Social Facilities	Mandir, Hospital, Nursery School, Bank, Shopping Complex, Gymnasium, Restaurants
Residential population	5500
Floating population and visitors	500
Water requirement	995KLD
Source of water	Bramhani River
STP capacity	1000 KLD
Power requirement	4.0 MW
Source of Power	Own Power Plant / Odisha State Electricity Board
Emergency power Backup	From Integrated Steel Plant
Parking Provision	200 nos. of Four Wheeler and 225 nos. of Two Wheeler
Estimated Project cost	597.47crores (INR)

3. Domestic waste water is being treated in STP of 1000m3 capacity and the treated water is being use in gardening. The sludge generated from the treatment is being used for horticulture and landscaping. Municipal Solid waste is generated @ 3.8 ton per day from colony. The generated waste is being handled as per norms. Hazardous waste like discarded paints and oils to be disposed as per prevalent norms. Rooftop rainwater of

buildings will be collected in **6 RWH tanks of total 6800 KLD** capacity for harvesting after filtration.

Observation and recommendations of the EAC in the present meeting (32nd)

EAC deliberated on the information (revised Form 1, revised PFR and annexures etc) submitted by the PP. The EAC, after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC Notification dated 14th March, 2017, confirmed the case to be of violation of the EIA Notification, 2006 and **recommended** for the following:

- (i) Grant of **Terms of Reference** for undertaking EIA and preparation of Environment Management Plan (EMP) as enumerated in **Annexure**.
- (ii) The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted EC.
- (iii) Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- (iv) Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- (v) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
- (vi) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the SEAC and finalized by the concerned regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the concerned regulatory authority.
- (vii) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 1st May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
- (viii) Project proponent should carry out impact assessment study regarding pollution impact of steel plant on the existing township.
- (ix) For associated township of the project to be created or created must provide space for "PHYTO- GRAPHIC BARRIER" between the project and the township according to the

predominant wind direction - A plan accordingly be prepared for the same and should be incorporated in the report.

- (x) Cumulative impact assessment to be carried out for township and existing steel plant which is 1 Km distance from township.
- (xi) Greenbelt Development Plan as per statutory requirement and Remediation measures to be addressed in EIA, which would have defined structures with Chapters.

32.4.4 Kadadiha China Clay Mine of M/s Jagdish Mines & Metals Pvt. Ltd. For exploration of China Clay occurring in the ML area of 367.058 Ha located at villages Kadadiha No.26, Khandabandha No. 43, Kudarbisida No.45 and Rugudi No. 44, TehasilJashipur, District Mayurbhanj, Odisha - Terms of Reference [IA/OR/MIN/73975/2018 dated 04.04.2018] [F. No.23-233/2018-IA.III (V)]

Project Proponent did not attend the meeting

32.4.5 Expansion of Jagannath Opencast Coal Mining project from 6 MTPA to 7.5 MTPA with increase in mine lease area from 430.76 ha to 553.946 ha of M/s Mahanadi Coalfields Limited, located in District Angul, Odisha - Further consideration for Environmental Clearance [IA/OR/CMIN/108556/2018 dated 19.06.2019] [F. No. J11015/177/2015-IA.II(M)]

Project proponent along with the consultant CMPDI, Ranchi Jharkhand, NABET accredited made the detailed presentation and interalia provided the following information:

Jagannath OCP is an old opencast mine of Mahanadi Coalfields Limited located in Talcher Coalfield, Angul District, Odisha. It was opened in January 1970. Initial capacity was 1 MTPA and gradually the capacity increased to 6 MTPA vide EC letter no. J/11015/177/2005-IA-II (M) on 29th September 2005 & then to 7.5 MTPA vide letter no. J-11015/177/2005-IA-II(M) dt:06-09-2018 till 31-03-2019 & extended by six months till 30-09-2019.

The coal from this project is linked to NTPC Talcher TPS through a dedicated 7.0 km conveyor belt corridor apart from other basket linkage. As per sl.no.4 (i) of the above EC, “there being excess coal production and non-compliance of the EC conditions, and thus violation of the EIA notification, 2006. The proposal was then considered by the EAC (Violation) in pursuance of the Ministry’s Notification, 14-03-2017”.

Brief details of the projects are as:

- 1 Name of the Project** Jagannath OCP Expansion (7.5 Mty)
- 2 Name of the Company, Address, Tele No & E-mail** Mahanadi Coalfields Limited, PO: JagrutiVihar, Burla, Sambalpur, 768020, Telephone: 0663-2542084, E-mail: gmenvt2018@gmail.com
- 3 If joint venture, the names & Address of the JV Partners including their share :-** Not applicable
- 5 Whether the project is in the Critically Polluted Area (CPA)** Yes

- 6 **Cost of the Project** Rs. 409.08 Crs. (337.66 Crs., Additional)
- 7 **Employment generated/ to be generated:** -534(Existing) + 185 (Expansion) direct employment opportunity. Beside above indirect employments will also be generated.
- 8 **Benefits of the Projects:-** The proposed Reorganization project will result in following benefits-(i) Improvement in physical and social infrastructure (ii) Improvement in Social Infrastructure (iii) Increase in employment potential (iv) Contribution to the Exchequer (both State and Central Govt.) (v) Post mining enhancement of Green covers (vi) Improvement of Electrical Power Generation and consequently rise in electric power consumption thereby improvement in overall economic growth of the country.
- 9 **Whether new or Expansion Project:** EC has been granted vide letter no. J-11015/177/2005-IA-II(M) dt:06-09-2018 for expansion from 6.0 to 7.5 MTPA till 31-03-2019. As per sl.no. 4(i) of the above EC, the proposal shall be separately considered by EAC (Violation).EC extended till 31-09-2019 vide letter no. J-11015/177/2005-IA-II (M) dt: 20-03-2019 and further extended till 31.03.2020 vide letter dated 01.10.2019.
- 10 **If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006:-** NA
- 11 **If expansion, please indicate the number and date of the certified compliance report of Regional Office of the MoEF&CC-** Project has been inspected by the ERO office, MoEF&CC on 26.12.2019.
- 12 **No. and Date of the ToR /and revised ToR, if any,** letter issued by the MoEF (if this is a case for EC) ToR issued vide letter J-11015/177/2005-IA-II(M) dated 10.12.2018.
- 13 **If the Project was considered in EAC, Pl. gives dates of the meeting(s).** Yes, the proposal was considered in the 24th EAC (Violation) meeting held on 23.07.2019.
- 15 **Type of Mine (Open cast/ Underground/ mixed)** Open Cast
- 16 **Capacity of the mine applied for** 7.5 Mty
- 17 **ML Area**
(a) As per block allotment (Ha)
(b) As per approved mine plan (Ha) :- 553.946 Ha
- 18 **Date of approval of mine plans, mine closure plan, status &date:-**
Approved by MoC vide letter no. F.No.34012/(04)/2011-CPAM Dtd. 16th May 2017

19 **Date of Board's Approval:-** The Mining Plan and Mine Closure Plan of Jagannath OCP Expansion (7.5 MTPA) was approved by MCL Board on 18-04-2017 (189th meeting)

20 **Date of Ground water clearance and surface water approval.** NOC granted vide no. CGWA/NOC/MIN/ORIG/2020/7354 dated 05.02.202. For surface water withdrawal, an agreement has been made with State Govt on 08.06.2000 for lifetime of coalfields.

21 **Existing Ground Water level**

Pre monsoon	Min – 0.80 mbgl
	Max – 13.27 mbgl
Post monsoon	Min – 1.05 mbgl
	Max – 9.85 mbgl

22 **Date of mine closure approval:-** Approved by MoC vide letter no. F.No.34012/(04)/2011-CPAM Dtd. 16th May 2017

23 **Any river/ Nallah flowing adjacent to the proposed mine. If yes, please give details**

- a. Bangarujhor is about 100 m (North)
- b. Brahmani river is about 7.5 km (East).
- c. Nandirajhor is about 6.0 km (South).
- d. Singharajhor is about 6.5 km (North-West).

Details of Mine lease

The Land acquired under Coal Bearing Areas (Acquisition and Development) Act, 1957 & The Land Acquisition Act, 1984

Technical Details

24 **Geological Reserve**

- i Total geological reserve 82.97 Mt
- ii Mineable reserve 72.14 Mt
- iii Extractable reserve 72.14 Mt
- iv Percent (%) of extraction 100%
- v Range of ground water level

Pre monsoon	Min – 0.80 mbgl
	Max – 13.27 mbgl
Post monsoon	Min – 1.05 mbgl
	Max – 9.85 mbgl

vi Total estimated water requirement 1924.70 Kld

vii Details of intersecting ground water level. For pheratic aquifer – 1.05 mbgl
For deeper aquifer – around 31 mbgl

25 **Details of Seams**

- i No of Seams 6

ii Thickness of seams to be worked on (range in mt)

Particulars	Unit	Max	Min	Avg.
Seam Thickness				
i) Seam V A	m	4.29	2.40	2.01
ii) Seam IV	m	11.80	4.0	7.62
iii) Seam III Top	m	5.56	1.79	3.92
iv) Seam III Bottom	m	5.20	1.70	4.33
v) Seam III Combined	m	16.70	11.59	11.26
vi) Seam II	m	36.55	25.91	31.08

iii Grade of Coal G12

iv Stripping ratio 1.07

v Category of gaseousness Not Applicable

vi Average gradient 3° to 5°

vii Maximum thickness of seams

Particulars	Unit	Max
Seam Thickness		
i) Seam V A	m	4.29
ii) Seam IV	m	11.80
iii) Seam III Top	m	5.56
iv) Seam III Bottom	m	5.20
v) Seam III Combined	m	16.70
vi) Seam II	m	36.55

26 **Method of mining** Opencast Mining by Shovel – Dumper/ripper-dozer in OB/parting; surface miner, pay loader & tipper in coal

27 **Life of mine** 10 years (as on 01-04-2019)

28 **Whether ambient air quality seasonal data has been monitored. If so, from which season to which season and whether the results are within the prescribed limits.** Baseline data has been generated for the period from 03-11-2017 to 02-02-2018. Results are within the prescribed limit.

29 **Whether the monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion.** :- Project has been inspected by the ERO office, MoEF&CC on 26.12.2019 and the Certified Compliance Report is awaited.

30 **Details of O.B**

i External OB dumps

ii No of OB dumps 2 (Existing)

iii Area of each dump 36.470 (Existing)

iv Height of each dump 30 m

- v Quantity (in Mm³) of OB in each dump 5.51 Mm³ (as on 31-03-17)
- vi Year of back filling At present, the OB of the existing mine is being dumped internally. The entire OB from proposed project (80.94 Mm³) will be dumped internally in continuation with present internal dumping.

31 Details of internal dumps

- i Number of Internal dumps 2
- ii Area of each dump 249.325 Ha
- iii Height of each dump Up to ground level
- iv Quantity of wastes filled 158.43 Mm³

32 Utilization Potential of Wastes Back filling of Solid waste (OB) in de-coaled area

- i Within the mines Backfilling
- ii Outside the mines NA
- iii Efforts made by proponent OB generated is concurrently backfilled into the mine.

32 Details of final Mine Voids:

- i Area 227.401 Ha
- ii Depth Minimum 48 m to Maximum 165 m

33 Details of Quarry

- i Total quarry area 476.726 Ha
- ii Backfilled quarry area which shall be reclaimed with plantation:
229.15 Ha-Plantation 20.175 Ha (Public use/ To be converted to grass land (conceptual)
- iii Area and depth of void which is proposed to be converted into water body
227.401 Ha, Minimum 48 m to Maximum 165 m
- iv Green belt created (in Ha): 158.35 Ha

34 Details of Land usage

Sl. No.	Type of Land	Within ML area (Ha)	Outside ML area (Ha)	Total Area (Ha)
1	Agricultural	106.75	0	106.75
2	Waste land	158.04	24.48	182.52
3	Forest Land	82.736	0	82.736
4	Grazing	0	0	0
5	Surface water bodies	55	0	55
6	Others (afforestation by Jagannath OCP) Settlement	151.42	0	151.42
Total:		553.95	24.48	578.426

(i) Pre-Mining land use:

Sl.	Particulars	Area (in ha)
-----	-------------	--------------

No.		Forest	Non-forest (Govt. & tenancy)	Total (ha)
A	Break-up of mining lease area:			
1	Quarry excavation	82.736	393.990	476.726
2	External Dumps (In old Jagannath OCM only)	0.000	36.470	36.470
3	Infrastructure like workshop, store, CHP & land between infrastructure (In old Jagannath OCM)	0.000	40.750	40.750
	Sub-total (A) (Mining lease area)	82.736	471.210	553.946
B	Break-up of area outside mining lease area (in ha):			
1	Land for rehabilitation colony	0.000	11.270	11.270
	Sub-total (B)	0.000	11.270	11.270
	Grand Total (A+B)	82.736	495.690	578.426

ii) Post-Mining/closure land use (Core zone)–

Sl. No.	Land use during Mining	Land Use (Ha)				Total
		Plantation	Water Body	Grass land	Undisturbed	
1	External OB dump	36.470	-	-	-	36.470
2	Top soil dump	will be spread over the backfilled area				
3	Excavation	229.15	227.401	20.175	--	476.726
4	Built up area	8.15	--	--	32.60	40.750
	Total	273.77	227.401	20.175	32.60	553.946

External dump will be re-handled during post closure & proposed to be converted into public use/grass land

iii) Core Area

Sl.	Particulars	Area (in ha)
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No.		Forest	Non-forest (Govt. & tenancy)	Total
1	Quarry excavation	82.736	393.990	476.726
2	External Dumps (In old Jagannath OCM only)	0.000	36.470	36.470
3	Infrastructure like workshop, store, CHP & land between infrastructure (In old Jagannath OCM)	0.000	40.750	40.750
	Mining lease area	82.736	471.210	553.946

35 Details of Forest Issues

- i) Total forest area involved (in ha) for mining lease: 82.736 Ha
- ii) Total Broken Forest Area: 82.736 Ha
- iii) Status of Forest Clearance and extend of forest land diverted: Forest clearance for 82.736 Ha (58.096 Ha & 24.64 Ha) have been obtained on 9th Nov, 2005 and 7th Feb, 2014 respectively.
- iii) Is there any National Park, eco- sensitive Zones, within 10KM radius? Is so, Give the details: No
- iv) Extent of forest land in the project (including safety zone and all types of forest land) (in ha) 82.736 Ha
- v). Total forest land for which stage-I FC is available (give area in ha), Forest clearance for 82.736 Ha (58.096 ha & 24.64 Ha) have been obtained on 9th Nov, 2005 and 7th Feb, 2014 respectively.

Area (in ha)	Stage-1 FC issued vide letter no. & date	Validity period earlier of FC granted
58.096	8-70/2004-FC, Dt- 19.11.2004	
24.64	8-87/2012-FC dt: 15- 03-2013	30 Years

35 Cost of project:

- i) Total Capital Costs Rs. 409.08 (including 337.66 crs., Additional)
- ii) Cost of production Estimated Rs. 853.01/tonne
- iii) Sale Price (Actual) Desired selling price Rs. 919.49/tonne
- iv) CSR Cost (Actual) Fund for CSR will be allocated based on 2% of the average net profit of the company for the three immediately preceding financial

years or Rs. 2.00 per tonne of coal production of the previous year whichever is higher.

- | | | |
|------|--------------------------|---|
| v) | R&R Cost | Estimated Rs. 919.20 Lakh (Additional) |
| vi) | No of PAFs | 230 (Additional) |
| vii) | Cost of implementing EMP | Rs. 6.27 Crores (additional Capital cost) |

36 Details of Villages/habitation in Mine lease Area

- i) Inside the lease: Balanda, Purunia, Nakshetrapur, Chandpur, Padmabatipur, Rakas
- ii) Surrender by lease: Acquired under Coal Bearing Areas (Acquisition and Development) Act, 1957 & The Land Acquisition Act, 1984
- iii) Extent of cropland acquired/ being acquired in ha.:- 31 Ha

37 Details of transportation of coal

- i) In Pit: 7.5 MTPA Surface Miner coal through Tippers
- ii) Surface to siding Surface to TTPS : 2.0 Mty (through belt conveyer)
Surface to siding : 4.0 MTPA (Through Tippers)
Surface to Road sale : 1.5 MTPA
- iii) Siding to loading Through Pay loader
- iv) Quantity being transported by Road/Rail/conveyer /ropeway Conveyor belt:
2.0 MTPA
Rail: 3.0 MTPA
Road: 1.0 MTY

37 Details of reclamation

- i) Reclaimed external OB dump (in ha): 36.47 Ha, which will be re-handled back into quarry during mine closure.
- ii) Internal dump (in ha): 249.325 Ha (post closure). 229.15 Ha will be afforested and the remaining 20.175 Ha is proposed to be converted into grass land.
- iii) Green belt (in ha): 8.15 Ha
- iv) Density of tree plantation (in nos of plants): 2500 nos per Ha
- v) Void (in ha.) at a depth of (in m) which is proposed to be converted into water body: 227.401 Ha, Minimum 48 m to Maximum 165 m
- vi) Other in ha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc.) :- 4.90 Ha
- vii) Agriculture and horticulture :- Nil
- viii) Fisheries :- Nil
- ix) ECO Tourist/recreation spot :- Nil

38. Detailed status of Progressive Mining Closure Plan (For expansion projects only)

- a. Implementation of various activities as per approved progressive mine closure plan (in Bar chart): Backfilling has already been started in some part of the quarry as per the approved MCP. External dumps are planted.
- b. Any deviation from the approved Progressive Mine Closure Plan: No
- c. Total area excavated (in Ha): 358 (As on 31/03/19)
- d. Total area backfilled after excavation (in Ha): 199.65 (As on 31/03/19)
- e. Total area reclaimed (in Ha): 129.15 (As on 31/03/19)

LEGAL ISSUES: Any violation cases pending. If so, please provide a list with details as annexure: Yes, A case has been filed under sec 15 & 19 of Environment (Protection) Act, in sub divisional judicial magistrate, Talcher by collector, Angul Odisha having no.-2 (C) CC, Env-Case no. -2/2020 dated 18.02.2020 for excess production of coal (3,26311 Tonnes) beyond EC capacity of 6 MTPA in the year 2010-11. The case is not finalized and now in in pending status.

Demand notice for Rs. 95.03 Cr issued by Dy. Director of Mines under MMDR Act 1957 for excess production beyond EC capacity. has been set aside by Revisional Authority, MoC vide order dtd 11.11.2019

39 Give details of actual coal production vis-à-vis sanctioned capacity since the inception of mine in following format

Year	EC sanctioned capacity (MTPA)	Actual Production (MTPA)	Excess production beyond the EC sanctioned capacity
1970-71	--	0.00	--
1971-72	--	0.03	--
1972-73	--	0.06	--
1973-74	--	0.15	--
1974-75	--	0.21	--
1975-76	--	0.40	--
1976-77	--	0.39	--
1977-78	--	0.42	--
1978-79	--	0.62	--
1979-80	--	0.58	--
1980-81	--	0.89	--
1981-82	--	0.87	--
1982-83	--	1.17	--
1983-84	--	1.75	--
1984-85	--	2.21	--
1985-86	--	2.33	--
1986-87	--	2.02	--
1987-88	--	2.20	--
1988-89	--	2.50	--
1989-90	--	3.21	--
1990-91	--	4.30	--
1991-92	--	5.18	--
1992-93	--	5.50	--
1993-94	--	5.15	--
1994-95	--	5.51	--
1995-96	--	5.53	--
1996-97	--	5.60	--
1997-98	--	5.49	--
1998-99	--	5.40	--
1999-2000	--	5.02	--
2000-01	--	5.43	--
2001-02	--	5.69	--

32nd MoM of EAC (Violation) held on 22nd – 23rd April, 2020

2002-03	--	5.20	--
2003-04	--	4.34	--
2004-05	--	3.57	--
2005-06	6.0	4.45	Nil
2006-07	6.0	5.57	Nil
2007-08	6.0	5.31	Nil
2008-09	6.0	5.42	Nil
2009-10	6.0	5.70	Nil
2010-11	6.0	6.33	0.33
2011-12	6.0	6.00	Nil
2012-13	6.0	6.00	Nil
2013-14	6.0	6.00	Nil
2014-15	6.0	2.65	Nil
2015-16	6.0	4.36	Nil
2016-17	6.0	3.34	Nil
2017-18	6.0	3.61	Nil
2018-19	7.5	5.014	Nil
Total		168.684	0.33

- 43 Date and Place of Public Hearing :- 19/02/2019, 10:30 AM, Premises of Jagannath Kalakendra, Jagannath Area, Near Balanda.
- 44 The designation of officer presided over the PH :- Additional District Magistrate, Angul
- 45 Number of representations received in writing from the district and outside of district, please give details:- 21 representations within the district
- 46 Name of the consultant who prepared the EIA/EMP report :- CMPDI
- 47 Whether the consultant has been accredited by the QCI & National Accreditation Board of Education and Training (NABET) as per MoEF OM dated 2nd December 2009:- Yes vide letter no. NABET/EIA/01/12/002 Dt: 31/01/2012.

Observation and recommendations of the EAC in earlier meetings

The project was considered by EAC violation in the 14th EAC meeting held on 23-10-2018 and ToR issued vide letter dated 10th December, 2018. Public hearing for the same was conducted on 19-02-2019. Final EIA/EMP complying all the conditions of ToR along with Remediation Plan, Natural and Community Resource Augmentation Plan (NCRAP) has been prepared and submitted to MoEF&CC through Parivesh Portal on 30-04-19 and re-submitted on 19-06-2019.

Status of Credible legal Action: D(T/P&P) MCL vide letter dtd 23.12.2019 requested the Principal Secretary, (Dept of Forest & Environment), Govt of Odisha vide letter dtd 23.12.2019 to initiate legal credible action. Director, Environment -cum- Special Secretary, Govt of Odisha had vide letter dtd 05.02.2019 and 02.01.2020 requested the Collector and DM Angul to initiate Legal action. Collector and DM Angul issued Show Cause Notice to GM Jagannath vide letter dtd 21.01.2020. Reply to show cause notice had been submitted vide letter dtd 21.01.2020.

The proposal of EC earlier has been considered in the 24th EAC Violation meeting held during 22-24.07.2019. Project proponent along with the consultant from CMPDI presented the case before the EAC in 24th meeting and apprised EAC that Jagannath OCP Expansion 7.5 MTPA is an opencast coal mine located in Talcher Coalfield in Angul district of Odisha. It is an old mine operating since 1970. Project has been granted EC for expansion from 6.0 Mtpy to 7.5 Mtpy, with EC validity till 31-03-2019. As per the EC letter J-11015/177/2005-IA-II(M) on 6th September 2018, there being excess coal production and non-compliance of the EC conditions (Coal production exceeded to 6.33 MTPA beyond EC capacity of 6.0 MTPA in the year 2010-11), and thus violation of the EIA notification, 2006.

EAC (Violation) in 24th meeting after detailed deliberation on the information as presented by the PP observed that the Consultant and the Proponent did not present full EIA report as the case was to be considered for grant of EC beyond Sept, 2019 as well the specific ToR present made was found to be grossly inadequate in terms of damage assessment where proper weighted to water quality and air quality was not properly addressed. The components of CER were not properly addressed with year wise activity. In view of above EAC **deferred** the project for want of following:

1. Revised quantification of damage assessment to all the environmental parameters.
2. Furnish full copy of EIA report adding chapter 13 before the committee.
3. General presentation on the standard ToR is to be made before the committee.
4. Benefit accrued during the violation period is to be submitted.
5. Worst case scenario considering total capacity/quantity under mining along with revised AQIP modelling.
6. Ground water intersection details along with clearance letter is to be submitted.
7. Hydrological studies as per the GEC 2015 is to be submitted and studies of micro water shed details of the mining area and ground water numerical and analytical model studies depicting the impact on ground water regime of the water shed area and the remedial plans to augment the damage due to mining shall be brought out.
8. Impact of mining dust on soil quality shall be studied.
9. Status of credible action as per the ToR is to be submitted.
10. Details of R & R implementation status is to be submitted.
11. EMP cost under capital and recurring head is to be submitted component wise.
12. Revised Form 2 application submitting details like OB management, details of final voids, legible copy of FC letter and PH advertisement
13. Garland drain, toe wall and slopes drains details with photograph is to be submitted.
14. Existing green belt with photographs shall be submitted.
15. Risk assessment and disaster management plan be submitted.
16. Coal linkage letter.
17. Status of credible action.

18. Whether mine is in critical polluted area?
19. An EMP indicating all environmental related features like Green Belt, surface water structures like garland drain, toe wall, check dam, settling ponds, safety zone. All the dumps including separate top soil dump, piezometers locations etc. and other features shall be submitted and also water danger plan with or without protection measures against inundation as per DGMS specified to be submitted.
20. Safety Management Plan of the mine being implemented to be submitted.
21. Compliance status of conditions enumerated in EC obtained in 2005/2006.
22. LULC analysis for the core and as well as buffer zone.

The reply to the above 22-point compliance along with revised EIA EMP has been uploaded through the Parivesh Portal on 16.12.2019. The Certified Compliance Report of ERO, MoEF&CC Bhubaneswar has been received vide File No. 1010-1063/18/EPE/265 dated 29.01.2020. Accordingly, proposal was reconsidered in the 30th meeting held during 3rd – 4th February 2020.

Project proponent along with the consultant made the detailed presentation on the additional information sought by the EAC in the 24th meeting. EAC deliberated on the information submitted by the Project proponent and after detailed deliberation, **deferred** the proposal for want of following information:

1. Ionic balance of surface and ground water quality characterization be checked and produce revised quality or otherwise confirm by monitoring both surface and ground waters and Fluoride concentration levels seem to be high in some of the groundwater as mentioned in the EIA/EMP Report. It needs to be checked
2. Monitoring of river water quality (Brahmani river) (upstream and downstream) be carried out to observe the impact of BanjaruJhor Nallah on river water quality.
3. Nitrate nitrogen, Ammonical nitrogen and total nitrogen in effluent be checked.
4. PH and electrical conductivity of soil be verified with soil water proportion.
5. Cation exchange capacity of soil be checked carefully and reported as per the texture of the soil (soil quality at kandhabarani village)
6. Proof of Status of credible action.
7. Protection measures taken against Banjaru Nallah about safety and Environmental points of view which flows in 100metrs.
8. Pre mining land use, present mining land use and conceptual mining land use (Post mining) and the analysis in the same format as briefed during the meeting and relevant change to be used for damages on prorata basis.
9. Time bound. Action plan for partially complied EC condition as reported by concerned regional office.

10. Stage wise water pumping details, pre mining during violation period and present as per mine progress and Impact of mining activity on Bangaru Nallah and Brahamani river.
11. Impact on Soil Quality comparison analysis in 2006 and 2019.
12. Submission of Copy of approved Public Hearing Minutes from concerned SPCB
13. In Rakesh village Air quality is very high, hence detailed Air pollution control plan to be submitted.
14. Justification for Air quality modelling that the maximum Air quality (Baseline plus predicted GLC) was 536.79 ug/m³, but after control measures it was reduced to 147.39 ug/m³
15. Air quality modelling to be done for SO_x and NO_x also.
16. Damage assessment for air shall be recalculated for the relevant violation period for PM₁₀, PM_{2.5}, SO_x and NO_x.
17. Revised Damage assessment cost for surface water and ground water extraction.
18. In case damages to crops and habitation shall be worked for total and agriculture loss @ a min 25% of the total assessed.
19. Clarification regarding mine is falling under critically polluted area with Justification.
20. Revised details of requirement of garland drain , Toe wall, toe drain length, No of check dams and settling ponds and so far provided as per the annexure to be submitted and damages assessed accordingly. Water danger plan and Safety management plan to be submitted.
21. Forest land diversion plan to be submitted showing forest land area involved in Jagnathpur OCP.
22. Study report about controlled blasting techniques with latest blast vibration measurement.
23. Revised CER cost with activities to be submitted.
24. Economic benefit accrued due to excess coal production during violation period with certification from finance department. 3% profit of excess production to be added for damage assessment cost in Community Resource Augmentation Plan.
25. Table of EMP with capital and recurring so far spent and planned.
26. In case of in-pit filling a quantity of 155 Mm³ occupies an area of 227 Ha needs to be justified.

27. In case of reclamation of mined out area, it has to be explained as to how it will satisfy the guidelines of SC judgement for creating grazing and community useful greenery.
28. Damage assessment, remediation, CRAP and NRAP shall be reworked and submitted as briefed in the meeting.
29. Impact due to ground water abstraction during mining operations shall be assessed and explain through analytical numerical modelling by micro water shed analysis covering core zone and catchment area of Bangaru Nala.

Observation and recommendations of the EAC in present meeting (32nd)

Project proponent submitted the compliance of 24th meeting on 04.04.2020 to the Ministry. Accordingly, proposal is considered in the present meeting (32nd). PP made the detailed presentation before the EAC on the additional information as sought in the 24th meeting. After detailed presentation by the PP, EAC observed that a case has been filed in the court of the Sub- Divisional Judicial Magistrate, Talcher vide letter no. 2(C) C C.(Env) Case No. 2/2020 as credible action against violation. PP has submitted the Time bound action plan for partially complied EC conditions. Revised CER cost has been calculated as per office memo vide F.No.22- 65/2017-IA.III Dated: 01/05/2018 of MoEF&CC, Rs. 2.80 crores have been provided for CER. The CER fund will be spent on drinking water supply, sanitation, health, education, skill development, roads etc. EAC further observed that PP has submitted the Revised Remediation plan and Revised Action Plan for Natural and Community Resource Augmentation plan. PP submitted the total budgetary provision of Rs 3987.74 lakhs for Remediation plan, Natural and Community Resource Augmentation plan.

EAC also observed that work related to the impact due to groundwater abstraction during mining operations analytical and numerical modelling by micro water shed analysis, is under progress by the PP. EAC opined that as such study will take considerable time to complete, therefore, PP may submit the report on the same to the Ministry as and when it is completed.

One EAC member raised some issues regarding ionic balance, pH of the soil, water quality, soil quality data. EAC further advised PP that activities proposed under Remediation plan, Natural Resource Augmentation (NRA) plan, Community Resource Augmentation (CRA) plan shall be quantified. Further, supply of drinking water through Tankers to nearby villages under Remediation plan shall be replaced with provision of R.O plant to the villages. Also, activities and budgetary provision for NRA and CRA shall be submitted in separate tables. EAC advised PP to submit the aforesaid information to the Ministry at the earliest. Thereafter, Ministry circulate the information to the concerned EAC member for verification.

PP submitted the information via mail to the concerned Member Secretary on 28.04.2020, which was then forwarded to the concerned EAC member for verification.

EAC after detailed deliberation on the information submitted by the PP (EIA/EMP report, PH issues, Form 2, Additional information, Annexures etc) including information furnished on 28.04.2020, recommended the proposal for **grant of Environmental Clearance** subject to the compliance of following specific conditions in addition to all standard conditions applicable for such projects:

1. EAC recommended for an amount of Rs 3987.74 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details are given below:

Remediation Plan along with budgetary provision (in lakhs)

Sl. No.		Activity Proposed	Year 1	Year 2	Year 3	Total
1	Air & Noise Environment	Additional avenue Plantation along Rakash Village Road in 6.00Ha land with 15000 Nos. of local species and maintenance in subsequent years adjacent to Project boundary of Jagannath OCP.	40	20	10	70
Total Air Environment (A)						70
2		Installation of one RO plant near Jagannath OCP and Supply of treated potable water to Dera , Ghantapada and Handidhua villages.	130	110	110	350
Total Water Environment (B)						350.00
1	Ecology	Urban Plantation at village of Dera, Derjang, Telisingha and Kamarei with total Nos. of 20000 local species covering area of 8.00 Ha	60.00	20.00	20.00	100.00
2		Procurement of plant sapling for distribution to nearby villagers i.e. Dera, Handidhua, New jilinda, Derjang etc.	5.00	5.00	5.00	15.00
Total Ecology (C)						115.00
1	Socio-economic activity	Construction of KalyanMandap at Dera village of size 150 Sqm and other facilities like Toilets, Green Room Dining Hall etc.	10.00	10.00	10.00	30.00
2		Construction of 2 Nos. of classrooms for Chalagarh primary school	5.00	5.00	5.00	15.00

		Chalagarh.				
3		Awareness programs on Environmental protection i.e. arrangement of Folk dance team, Video show etc at nearby villages etc.	5.00	5.00	5.00	15.00
4		Additional skill development training for unemployed youth of 250 Nos. of village Ekdal, New Jilinda, Chalgarh, Ghantapada village etc.	10.00	10.00	10.00	30.00
5		Health care and organizing medical camps:- 1) Eye checkup camp at Kukudang,2) Routine health checkup camp at Dera, 3) Blood sugar and Blood pressure check up camp at Derjang etc.	5.00	5.00	5.00	15.00
6		Installation of Iron removal & Chlorination plant for supply of Drinking water to Rakash village shifted people at R&R Site, Boulpur(10000 GPH)	200.00	75.00	75.00	350.00
7		Installation of Overhead Tank with Pipe line around Narayan Sevashram, Kukudang village (6000 Ltrs.)	5.00	3.00	2.00	10.00
Total Socio-Economic Environment (D)						465.00
1	Land Environment	Collection solid waste from Jagannath Colony and Ananta colony	5.00	5.00	5.00	15.00
2		Providing 10 Nos. colour coded bins in DAV (Both) Schools, Jagannath Area and Govt. Hospital, Angul.	4.00	3.00	3.00	10.00
3		Plantation in vacant/open spaces in near R&R site of Balanda and Dera village for prevention of soil erosion of covering Area of 3.00 Ha.	10.00	10.00	10.00	30.00
Total Land Environment (E)						55.00
TOTAL COST (A+B+C+D+E)						1055.00

Natural Resource Augmentation Plan along with budgetary Provisions (in lakhs)

Sl. No.	Activities Proposed	Year 1	Year 2	Year 3	Total
1	Proposal for development of 7.5Mtrs thick green belt of length 19.80KM covering 15.00Ha land with 22500 nos of sapling of local species like sal,gambhari, kurum etc. along safety zone/ around the Mine lease boundary & 75 Mtrs thick green belt(5.00Ha) along downstream direction near Bharatpur Coal corridor Road with 12500 species of local sapling.. This will include 3 years maintenance cost.	100.00	100.00	50.00	250.00
2	Development of green belt along streams,pondsetc of peripheral villages. Of 2.00 Ha. with 5000 Nos. of local sapling	5.00	5.00	10.00	20.00
3	Rain water Harvesting (Roof Top) type with ground discharge facility 20 nos of aprox. 4000M ³ /Annum capacity at Jagannath Colony	20.00	20.00	10.00	50.00
Total for Natural ResourceAugmentationplan					320.00

Community Resource Augmentation Plan along with budgetary Provisions (in lakhs)

Sl. No.	Activities Proposed	Year 1	Year 2	Year 3	Total
1	Construction of RCC Drain from Majhidian Pond to Chechari pond at Ghabntapada:- Total length-195 mtrs	100.00	50.00	30.00	180.00
2	Construction of Cement concrete drain at R&R site, Boulapur of length 5650 Mtrs	60.00	50.00	49.09	159.09
3	Construction of Cement concrete Road at R&R site ,Boulapur of length 3890 Mtrs.	150.00	100.00	50.00	300.00
4	Constructions of a High school at Dera(New) with all facilities including , smart display board, separate library 10000 books etc and having 26 Class Rooms,06 Nos. Hall and 13 Toilets Nos. of rooms to provide education to local villagers' kids .	500.00	500.00	200.00	1200.00
5	Extension of DAV, Dera English medium School for improving Education for kids of local villagers having 16 Nos. Class Rooms, 10 Nos. Toilets & 05 Halls.	150.00	100.00	50.00	300.00
6	Renovation of Road from Regional Hospital ,Dera to hanuman Mandir, Dera Length 519.5 Mtrs	50.00	30.00	20.00	100.00
7	Strengthening of Bituminous Road including both side cement Concrete drains from Gurudwar to FCI gate Chhak having Road Length 1351.00 Mtrs and drain length 3000 Mtrs	100.00	100.00	72.65	272.65
8	Construction of Library cum Meeting Hall at NarayanSevashram, Kukudang village(1 Hall, 1 Office & 1 Pantry)	4.00	3.00	1.00	8.00

9	Providing solar lamps of 100 Nos along the roads of Jagannath and Balanda colony and supply of Solar lights to households near Dera, ,New Jiinda and Ekdal villages(100 nos)	10.00	10.00	10.00	30.00
10	Training/Workshop on advance agriculture/irrigation practices for 250 persons of village Deulbera, Handidua and Ghantapada.	1.00	1.00	1.00	3.00
11	Providing 6 nos Communities toilet to Handidhua and Dera village	15.00	15.00	0.00	30.00
12	Laying of pipe line/infrastructure for clean water supply to nearby communities/villages and locations will be decided after consultation with State Administration.	0.00	20.00	10.00	30.00
Total for Community Resource Augmentation plan					2612.74

Summary

Sl. No.	Activity Proposed	Total (Rs. In Lakhs)
1.	Cost of damage/remediation Plan	1055.00
2.	Community Resources Augmentation Plan for three years	2612.74
3.	Natural Resources Augmentation Plan for three years	320.00
Total		3987.74

2. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs. **3987.74** lakhs.
3. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs. **3987.74** lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
4. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
5. Fund allocation for Corporate Environment Responsibility (CER) of Rs. 2.80 crore/- to be implemented as per the details submitted in the Ministry.
6. Impact due to groundwater abstraction during mining operations analytical and numerical modelling by micro water shed analysis shall be completed at the earliest and submitted to the Ministry and its concerned regional office.
7. Embankment to be constructed along the Bangaru nallah
8. No discharge of mine water outside the Mining lease area.
9. Regular water quality to be monitored in upstream and downstream of Brahmani river with flow of the river to observe the impact of Bangaru nallah.
10. Action plan as submitted to Ministry to control air pollution at Rakas village to be implemented in toto.
11. All statutory precautions shall be taken as per the DGMS permission.
12. Wildlife conservation plan shall be prepared for Schedule I (Peafowl) species present in the study area and submitted to the Competent Authority for approval. Same shall be implemented after approval of the Competent Authority.
13. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
14. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

15. Automatic mist type sprinkling system shall be installed at crusher house. During transportation of coal from Mine to CHP shall be done by covered trucks with tarpaulin. Adequate number of water sprinklers shall be provided to control dust along coal transport roads.
16. Effective dust suppression system shall be adopted along the railway siding area and between villages. Fabric wind barrier shall be established along the Railway Siding and between villages.
17. Solid waste management as per SWM rules 2016 shall be complied within their colony.
18. Energy conservation measures adhering to part of ECBC norms shall be complied with.
19. Quality of Mine discharge water, if any, will be used for drinking purpose shall be checked and should meet the prescribed drinking water standards.
20. Periodical health check-up shall be conducted to monitor the impact of heavy metals present in core zone & buffer zone air quality and also to prepare an action plan to reduce heavy metals concentration and also report to be submitted to concerned regional office of MoEF&CC.
21. Study on "Impact of coal mining dust on the soil quality with respect to Physico-chemical , fertility status, exchangeable cations, CEC, and productivity of soil to be carried out and the study report with dully authentication and verification by the concerned authority be submitted to Ministry and concerned regional office by 31.3.2021
22. Project proponent shall obtain closure report from the concerned regional office regarding time bound action plan submitted for partially complied earlier EC conditions.
23. The mining lease holder shall, after ceasing mining operations, under take re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc.
24. Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
25. To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.
26. Thick green belt of 75 m width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.

LIST OF PARTICIPANTS IN 32ND MEETING OF EAC FOR THE PROPOSAL INVOLVING VIOLATION OF EIA NOTIFICATION, 2006 HELD ON 22ND – 23RD APRIL, 2020 THROUGH VIDEO CONFERENCING

Sl. No.	Name	Designation	Attendance	
			22.04.2020	23.04.2020
1.	Dr. Satish R Wate	Chairman	P	P
2.	Dr. G.V. Subrahmanyam	Member	P	P
3.	Dr. A.L. Ramanathan	Member	A	P
4.	Dr. M.V. Ramana Murthy	Member	A	p
5.	Shri K Gowarappan	Member	P	P
6.	Dr. Dilip S. Ramteke	Member	P	P
7.	Dr. Poonam Kumria	Member	P	P
8.	Dr. Bharat Jain	Member	P	P
9.	Dr. Subrata Maity	Member	P	P
10.	Shri Ashok Agrawal	Member	P	P
11.	Shri Raghu Kumar Kodali	Scientist 'F' & Member Secretary	P	P

Terms of Reference for EIA and preparation of Environment Management Plan

1. Project description, its importance and the benefits.
2. Project site details (location, toposheet of the study area of 10 km, coordinates, google map, layout map, land use, geological features and geo-hydrological status of the study area, drainage).
3. Land use as per the approved Master Plan of the area, Permission/approvals required from the land owning agencies, Development Authorities, Local Body, Water Supply & Sewerage Board, etc.
4. Land acquisition status, R&R details.
5. Forest and Wildlife and eco-sensitive zones, if any in the study area of 10 km – Clearances required under the Forest (Conservation) Act, 1980, the Wildlife (Protection) Act, 1972 and/or the Environment (Protection) Act, 1986.
6. Baseline environmental study for ambient air (PM₁₀, PM_{2.5}, So₂, NO_x & CO), water (both surface and ground), noise and soil for one month (except monsoon period) as per MoEF&CC/CPCB guidelines at Minimum 5 locations in the study area of 10 km.
7. Details on flora and fauna and socio-economic aspects in the study area.
8. Likely impact of the project on the environmental parameters (ambient air, surface and ground water, land, flora and fauna and socio-economic, etc).
9. Source of water for different identified purposes with the permissions required from the concerned authorities, both for surface water and the ground water (by CGWA) as the case may be, Rain water harvesting, etc.
10. Waste water management (treatment, reuse and disposal) for the project and also the study area.
11. Management of solid waste and the construction & demolition waste for the project vis-avis the Solid Waste Management Rules, 2016 and the Construction & Demolition Rules, 2016.
12. Energy efficient measures (LED lights, solar power, etc) during construction as well as during operational phase of the project.
13. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
14. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
15. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

Contd.. (Annexure)

All the building projects including hotels, hospitals shall be prescribed with the following additional TOR points along with Specific TOR enumerated for study of ecological damages, remediation including above mentioned points for EIA and preparation of Environment Management Plan:

- (i) The EIA would study the impact of dewatering and draw up an action plan for disposal of the excess water.
- (ii) The EIA would study the impact of Demolition and conformance to the Construction and Demolition Rules under the E.P. Act, 1986.
- (iii) Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.
- (iv) The Air Quality Index shall be calculated for base level air quality.
- (v) A detailed report on compliance to ECBC-2017 norms.
- (vi) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (vii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 2 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA and the plan to be implemented to the satisfaction of all the concerned state departments and implementing agencies.
- (viii) The permission of the CGWA for abstraction of ground water if any and for basement/excavation dewatering if applicable.
- (ix) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (x) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- (xi) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (xii) The Air Quality Index shall be calculated for base level air quality.