



State Level Environment Impact Assessment Authority, Jharkhand

Nursery Complex, Near Dhurwa Bus Stand, P.O+P.S-Dhurwa, Ranchi, Jharkhand-834004

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Letter No : EC/SEIAA/2021-22/2378/2021

Ranchi. Date :

**To: M/s Fairmine Carbons Pvt. Ltd.,
Sri Rajeev Kumar Singh,
Director,
401, 4th Floor, 'Crosswindz',
41, Court Road, Ranchi – 834001,
Jharkhand.**

Sub: Prescribing of ToR to “Rajhara North (Central & Eastern) Coal Block Opencast Project of M/s Fairmine Carbons Pvt. Ltd., Village : Pandwa & Rajhara, Tehsil : Pandwa & Nawa Bazar, Dist. : Palamau, Jharkhand (117.80 Ha)”, (Proposal No. SIA/JH/ CMIN/60295 /2021) - regarding.

Ref: Your application no.- FCPL / RNC/21-2/32, dated – 26.07.2021.

Sir,

It is in reference to the project to “**Rajhara North (Central & Eastern) Coal Block Opencast Project of M/s Fairmine Carbons Pvt. Ltd., Village : Pandwa & Rajhara, Tehsil : Pandwa & Nawa Bazar, Dist. : Palamau, Jharkhand (117.80 Ha)**” along with the application in the prescribed format (Form-1) and a copy of the pre-feasibility report and approved mine plan to prescribe the ToRs for undertaking detailed EIA study for the purpose of obtaining environmental clearance under the provisions of the EIA Notification, 2006 in respect of the above mentioned project.

This is a new project which has been taken for appraisal on 04.08.2021.

The proposal was considered by the committee to determine the “Terms of Reference (TOR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 1 (a) (i) Mining of Minerals (Coal) as per EIA Notification, 2006.

Project background :

M/s Fairmine Carbons Pvt. Ltd. for Coal Mining from Rajhara North (Central & Eastern) Coal Block Opencast Project along with Crushing & Screening plant, located at, Mauza – Pandwa & Rajhara, Block – Patan & Bishrampur, District – Palamau, State – Jharkhand. Area : 105.65 Ha & additional 12.15 Ha will be acquired outside the allotted block.

Rajhara North (Central & Eastern) coal block was previously allocated to Mukund ltd, Vini Iron & Steel Udyog Ltd. by Ministry of Coal, Govt. of India, vide letter no. 34011/35/2009 -cpam dt. 21.07.2008. Allottees got Mining Plan approved with capacity of 0.75 MTPA by Ministry of Coal vide- MoC letter no. 13016/52/2008-ca-j (part) dt 16/12/2011. Subsequently, in compliance to the judgment of Hon'ble Supreme Court, allotment of coal blocks were cancelled. Now, pursuant to e-auction conducted by Ministry of Coal, M/s Fairmine Carbons Pvt. Ltd. became the successful

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bidder and subsequently block was vested vide Vesting Order no. na-104/11/2020-na dt.03.03.2021. Project area of the Mine is 117.80 ha. (105.65 Ha + 12.15 Ha additional for infrastructure) Approved Mining Plan was vested to the new allottee vide above mentioned Vesting Order.

Plot no. & Khata no. of the Blocks is given in below :

Rajhara :

Khata No. : 92, 136, 222, 237, 320, 328

Plot No. : 1597(P), 1600(P), 1603(P), 1604, 1605(P), 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614(P), 1618(P), 1625(P), 1642(P), 1643, 1677(P), 1678(P), 1683(P)

Pandwa :

Khata No. : 4, 6, 7, 10, 14, 15, 17, 19, 21, 25, 27, 28, 29, 34, 36, 44, 47, 54, 57, 59, 60, 64, 68, 74, 75, 80, 81, 87, 88, 92, 93, 97, 102, 107, 108, 109, 110, 112, 117, 123, 127, 129, 130, 131, 132, 136, 140, 144, 146, 148, 149, 151, 152, 156, 157, 158, 161, 164, 168, 172, 177, 182, 184, 187, 188, 192, 201, 206, 211, 214, 216, 219, 220, 222, 226, 227, 235, 236, 240, 242, 243, 244, 247, 251, 253, 256, 261, 263, 264, 266, 267, 268, 270, 272, 273, 274, 275, 277, 278, 280, 281, 285, 286, 288, 290, 291, 293, 295, 296, 297, 298, 299, 300, 301, 304, 305, 306, 307, 308, 309, 311, 312, 313, 314, 318, 319, 320, 322, 323, 326

Plot No. : 572(P), 659, 660, 662, 663, 667, 668, 670, 671, 673, 675, 676, 677, 678, 681, 683, 686, 687, 688, 689, 690, 692, 693, 694, 695(P), 707(P), 742(P), 743(P), 744(P), 745(P), 746(P), 747(P), 751(P), 758(P), 759(P), 760(P), 767(P), 768, 770(P), 778(P), 780(P), 781, 782, 783, 784, 785, 787, 789, 801(P), 803, 805, 806, 807, 808, 809, 810, 811, 813, 814, 815, 816, 817, 818, 819, 820, 823, 824, 825, 82, 827, 829, 830, 832, 833, 835, 836, 837(P), 838, 839(P), 842(P), 843(P), 944, 946(P), 947(P), 955(P), 956(P), 957(P), 958(P), 962, 963, 966, 967, 974, 975, 976, 977, 978, 980, 981, 984, 985, 986, 987, 988, 989, 991, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1025, 1026, 1027, 1028, 1029, 1030, 1031(P), 1032(P), 1033, 1034, 1035, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1051, 1056, 1061, 1065, 1066, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1080, 1082, 1084, 1086, 1087, 1088, 1091, 1094, 1095, 1098, 1105, 1108, 1112(P), 1115, 1119, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1129, 1137, 1138, 1139, 1144, 1145, 1154, 1157(P), 1159, 1160, 1161, 1169, 1171, 1172(P), 1175, 1176, 1178, 1181, 1212(P), 1219, 1220, 1222, 1242(P), 1247, 1248(P), 1250, 1251, 1256(P), 1261, 1262, 1263, 1267, 1277, 1279(P), 1283(P), 1285(P), 1368(P), 1478, 1485, 1898, 1260, 1472(P), 1481, 1474, 48(P), 657(P), 658(P), 661, 664(P), 665, 666, 669, 672, 674, 684, 691, 706(P), 769, 779, 786, 788, 790, 791(P), 802(P), 804, 812, 821, 822, 828, 831, 834, 943(P), 943(P), 943(P), 945, 953(P), 954(P), 954(P), 954(P), 954(P), 959(P), 960(P), 961, 964, 965, 968, 969, 970, 971, 972, 972, 972, 973, 979, 982, 983, 990, 992, 993, 994, 995, 1006, 1014, 1023, 1023, 1023, 1024, 1049, 1050, 1052, 1053, 1054, 1055, 1057, 1058, 1059, 1060, 1062, 1064, 1067(P), 1067(P), 1067(P), 1067(P), 1068(P), 1079(P), 1079(P), 1081, 1083, 1085, 1100, 1101, 1102, 1103, 1106, 1107, 1110(P), 1114, 1117, 1120, 1128, 1130, 1131, 1132, 1133, 1135, 1136, 1140, 1141, 1142, 1143, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1155, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1170, 1174, 1177, 1179, 1183(P), 1183(P), 1183(P), 1192(P), 1192(P), 1194(P), 1214(P), 1215, 1216, 1217, 1218(P), 1221, 1223(P), 1224, 1225, 1226(P), 1243, 1244, 1246, 1252, 1253, 1254, 1255(P), 1259, 1265, 1266, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1278, 1280(P), 1470(P), 1471(P), 1473, 1476, 1479, 1482, 1483, 1486, 1487(P), 1488(P), 1492(P), 1900(P), 679, 680(P), 682, 685, 1036, 1063, 1089, 1090, 1092, 1093, 1096, 1097, 1099(P), 1104, 1109(P), 1113, 1116, 1118, 1134, 1156, 1158, 1173, 1180(P), 1245, 1257, 1258, 1264, 1475, 1477, 1480, 1484, 1172(P), 954(P), 954(P), 954(P).

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954(P). 959(P). 960(P). 1180(P). 1182. 1183(P). 1183(P). 1183(P). 1184(P). 1067 (P). 1067 (P). 1067 (P). 1067 (P)

Executive Summary :

1.	General	
a)	Name and address of the Applicant Company	M/s Fairmine Carbons Pvt. Ltd. Address: Flat No. 401, 4th Floor, 'Crosswindz', 41, Court Road, Ranchi – 834001, Jharkhand.
b)	Name and address of the Block Allotted	Rajhara North (Central & Eastern) Coal Block Opencast Project. Located at : Mauza – Pandwa & Rajhara, Block – Pandwa & Nawabazar, Dist. : Palamau, State : Jharkhand.
c)	Applied/ required Lease Area as per the Mining Plan under consideration (hectares)	105.65 ha (Mining Block allotted) 12.15 ha (outside the allotted block) Total – 117.80 ha.
d)	Details of outside area:	<ul style="list-style-type: none"> • The additional area mentioned above does not form part of any other coal block. • It is non coal bearing. • Additional 5.20 Ha area is required adjoining to the northern boundary of the block for accommodating part of quarry batter, nalla diversion channel and highway diversion. Also additional area measuring 6.95 ha will be required adjoining to the eastern block boundary for settling pond, coal stack, road and other facilities.
e)	Status of the Applicant Company:	Private Limited Company.
f)	Coal Mine Development and Production Agreement	11th January, 2021
g)	ROM Quantity proposed to be produced as per Mining Plan	0.75 MTPA
h)	Beneficiation required – Yes/No	No
i)	Ultimate depth of Mining	75 m
j)	Estimated project cost	Approx. 97.20 Crores
k)	Water demand	234 KLD
l)	Water Table	10-13 m bgl
m)	Manpower	208
n)	No. of working days per year	300 days
2.	Location	
a)	Location of the Block	Village : Pandwa and Rajhara, Block : Pandwa and Nawabazar, District : Palamau, Jharkhand
b)	Name of the Coalfield/ Coal belt	Daltonganj Coal field of Jharkhand
c)	Particulars of adjacent blocks: North, South, East, West	In North – Non Coal bearing area: In South - CCL Rajhara colliery:

		In East – No adjacent coal block: In West - CCL Rajhara colliery:
d)	Toposheet No. with latitude and longitude	The area falls in the Survey of India Topo-sheet No.72D/4 Latitude 24° 09' 41" N to 24° 10' 04" N and Longitude 84° 02' 59" E to 84° 04' 13" E.
e)	Nearest Railway Station	Kajri Station. lies at a distance of about 4.0 KM.
F)	Nearest Airport	Birsa Munda Airport. Ranchi. which is about 170 KM.

3.	Geology and Exploration	
a)	Quality (Grade) of coal as per GR :	The overall grade of coal seams varies between D & E. (in few cases F grade).
b)	Total geological reserves in the block	22.525 MT
c)	Geological reserves considered for mining.	Gross 22.525 MT Net 20.272 MT
d)	No. of coal seams	3.
e)	Corresponding Extractable reserves.	15.609 MT
f)	Percentage of recovery w.r.t. geological reserves:	77 %

4.	End Use of Coal	
a)	Proposed end use	Basket linkage for thermal power, sponge iron, cement plant, brick kiln & other industrial uses.
b)	Washing / Beneficiation	No washing/ Beneficiation is required.

5.	Environmental Management	
a)	No. of villages/Houses to be shifted	<ul style="list-style-type: none"> • 23 hutments of CCL are located in the block which CCL will vacate before handing over the block to the allottee. • 147 houses of Pandwa village are lying within the block for which rehabilitation plan is under preparation.
b)	Population to be affected by the project	431 persons in 147 households

Geology & Reserve :

Seam	Vertical Net	Net Mineable (MT)	Extractable 97% (MT)
Rajhara Top	1. 985. 364.68	1. 811. 855.33	1. 721. 262.57
Rajhara Middle	947. 726.50	788. 412.78	748. 992.14

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+Rajhara Bottom	17. 339. 107.49	13. 830. 105.55	13. 138. 600.27
Total	20,272, 198.66	16, 430, 373.66	15, 608, 854.97

Calendar Plan for excavation :

Year	Coal (MT) Prog.	Total waste (OB + top soil) (Mcum) PROG.	Rehandling OB (Mcum) PROG.	With Rehandling OB: Coal ratio (Stripping ratio) Prog. Cumil.
1 st	0.3	0.62	0	2.07
2 nd	0.75	1.44	0	1.96
3 rd	0.75	1.20	0	1.81
4 th	0.75	1.20	0	1.75
5 th	0.75	1.40	0	1.78
6 th	0.75	1.71	0.476	1.99
7 th	0.75	1.69	0.476	2.13
8 th	0.75	1.69	0.476	2.23
9 th	0.75	1.69	0.476	2.31
10 th	0.75	1.69	0.476	2.37
11 th	0.75	1.50	0	2.33
12 th	0.75	1.50	0	2.31
13 th	0.75	1.50	0	2.28
14 th	0.75	1.50	0	2.26
15 th	0.75	1.50	0	2.24
16 th	0.75	1.50	0	2.23
17 th	0.75	1.50	0	2.21
18 th	0.75	1.50	0	2.20
19 th	0.75	1.50	0	2.19
20 th	0.75	1.50	0	2.18
21 st	0.75	1.50	0	2.17
22 nd	0.3	0.57	0	2.17
Total	15.6	31.4	2.38	

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Water Requirement :

Water Requirement	Quantity (KLD)
Sprinkling @ 1 mm/pass. twice a shift for three shifts = 30 cum/ day/km for four km road	120.00
Plantation @ 10 cum/hac for max 4 hac @ 20 cum/ ha	80.00
Vehicles washing for 26 washable vehicle or 52 vehicles/ week or 8 vehicles/day @ 2 cum/ vehicle 16-12 recirculation = 4 m3/day make up water.	4.00
Drinking at working place @ 45 lpd/head for 208 workers. say for 220 persons. Suitable treatment may be required for providing the water for drinking purpose.	10.00
Quarters for 15 workers. staff and executives. Taking each quarter with 5 persons @ 135 litres per head	10.00
Miscellaneous (drinking water supply)	10.00
Total	234

Power requirement & source :

The size of HEMM equipment is small which will be operated on diesel fuel and will not require any electric power. The total power requirement for the proposed mine will be less than 1 MVA which is easily available at nearby village within 500 m distance through a high tension line 11 KVA/3.3 KVA by JSEB.

Green Belt development :

Green belt / Plantation within lease area will developed at following sites :

Block area	55.25 Ha
North side	4.62 Ha
East side	4.15 Ha
Total	64.02 Ha

For Nawa Bazar Deputy Director, Palamu Tiger Project, North Division, Medinagar vide letter no. 461, dated 22.06.2021 certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

For Pandwa Deputy Director, Palamu Tiger Project, North Division, Medinagar vide letter no. 462, dated 22.06.2021 certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

For Nawa Bazar DFO, Palamu Division vide letter no. 1860, dated 22.06.2021 certified that the distance of reserved / protected forest is 250 m from proposed project site.

For Pandwa DFO, Palamu Division vide letter no. 1861, dated 22.06.2021 certified that the distance of reserved / protected forest is 250 m from proposed project site.

The CO, Pandwa vide letter no. 242, dated 07.07.2021 & The CO, Nawa Bazar vide letter no. 58, dated 02.03.2021 has mentioned all plot & khata no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyani & Register II.

SEAC, Jharkhand has suggested the ToRs in its 89th meeting dated 04th, 05th 06th & 07th August, 2021 for undertaking detailed EIA / EMP study and SEIAA, Jharkhand has

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approved the ToRs in its meeting held on 12th & 13th August, 2021. The SEAC has recommended following project specific conditions :-

- i. Hydrogeological report will be prepared in EIA with regard to water intersection.
- ii. Baseline data has already been generated during the period 05 March to 05 June, 2021. Additional one month baseline data should be conducted in the month October, 2021 and to be included in the EIA report.
- iii. The permission of diversion of river and national highway as per Govt. of India will be submitted alongwith EIA report.

The TORs prescribed for undertaking detailed EIA study are as follows:

1. The EIA Report shall be prepared 7,50,000 TPA (Peak) rated capacity in an ML / project area of 117.80 ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
2. An EIA-EMP Report would be prepared for 7,50,000 TPA (Peak) rated capacity to cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for 7,50,000 TPA (Peak) of coal production based on approved project/Mining Plan for 7,50,000 TPA (Peak). Baseline data collection can be for any season except monsoon.
3. A map specifying locations of the State, District and Project location should be provided.
4. A Study area map of the core zone and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
5. Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
6. Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
7. A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
8. A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.

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9. In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and Flood Control Department of the concerned state.
10. Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map.
11. Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

Land use details for opencast project should be given as per the following table :

S. N.	Land use	Within ML area	Outside ML area	Total
1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			

12. Break-up of lease/project area as per mining operations should be provided.
13. Impact of changes in the land use due to the project, if much of the land being acquired is predominantly agricultural land/forestland/grazing land.
14. One-season (non-monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
15. Map of the study area (1: 50, 000 scale) (core and buffer zone clearly delineating the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources should be provided. The number and location of the stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Values should be provided based on desirable limits.
16. Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora fauna and, or if the area is occasionally visited or used as a habitat by Schedule-I fauna, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan should be prepared and submitted with EIA-EMP Report; and comments from the CWLW of the State Govt. should also be obtained and furnished.
17. Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of

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- production from the approved Mining Plan. Geological maps and sections should be included.
18. Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
 19. Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
 20. Detailed water balance along with flow chart should be provided. The break-up of water requirement for the various mine operations should be given separately.
 21. Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be given.
 22. Impact of mining and water abstraction use in mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
 23. Impact of blasting, noise and vibrations should be given.
 24. Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
 25. Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop, management plan for maintenance of HEMM, machinery, equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
 26. Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP / Silo entirely wagons and into trucks / tippers.
 27. Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28° angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
 28. Efforts be made for maximizing progressive internal dumping of O.B., sequential mining, external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.
 29. Impact of change in land use from mining operations and whether the land can be restored to agriculture use post mining.
 30. Progressive Green belt and Ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEF&CC given below) and selection of species (native) based on original survey/land use should be given.
 31. Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the status of pre- mining should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of rehandling (wherever

applicable) and backfilling and progressive mine closure and reclamation should be detailed.

Table 3 : Post-Mining land use pattern of ML / Project area (ha)

Land use during mining	Land use (ha)				
	Plantation	Water body	Public use	Undisturbed	Total
External OB dump					
Top soil dump					
Excavation					
Roads					
Built up area					
Green belt					
Undisturbed area					
	Total				

32. Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be accorded ?.
33. Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
34. Risk Assessment and Disaster Preparedness and Management Plan should be provided.
35. Integration of the Environmental Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.
36. Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
37. Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
38. CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
39. Corporate Environment Responsibility:
 - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

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40. Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
41. In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
42. Status of any litigations/ court cases filed/pending on the project should be provided.
43. Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
44. Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval, NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

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

Total ML / Project area (ha)	Total forest land (ha)	Date of FC	Extent of forest land	Balance area for which FC is yet to be obtained	Status of application for diversion of forest land

45. Besides the above, the below mentioned general points should also be followed:-
 - a) A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
 - b) All documents may be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The Questionnaire for environmental appraisal of mining projects as prescribed by the Ministry shall also be filled and submitted.
 - f) Approved mine plan along with copy of the approval letter for the proposed capacity should also be submitted.
 - g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013 /41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in

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structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH process again with the revised documentation.

The EIA report should also include

1. Surface plan of the area indicating Contours of main topographic features, drainage and mining area.
2. Geological maps and sections and
3. Sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

Sd/-

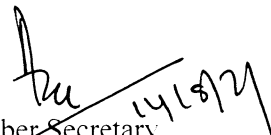
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Memo No : EC/SEIAA/2021-22/2378/2021/ 107.

Ranchi, Date : 14.08.2021.

Copy to:

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi for information and necessary action.
2. Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.


Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

