

EASTERN COALFIELDS LIMITED**Annexure I**

01. DALURBAND
02. PANDAVESWAR
03. KENDRA
04. KHOTTADIH UG
05. KHOTTADIH OCP
06. KHOTTADIH CHP
07. SAMLA
08. DALURBAND OCP
09. NATUNDANGA
 - A. PURE SAMLA (5 & 6 PITS)
 - B. DARULA (SOUTH SAMLA)
10. GANGARAMCHAK
11. JHANJRA 1 & 2 INCLINE
12. JHANJRA 3 & 4 INCLINE
13. M.I.C.
14. NAKRAKONDA
15. SONPUR BAZARI PROJECT
16. SONPUR BAZARI PROJECT (CHP)
 - A. NEW KENDA U.G.
 - B. KENDA WEST OCP UNIT
17. NEW KENDA CHP
18. BAHULA
19. BAHULA CHP
20. LOWER KENDA
21. HARIPUR
22. CHORA
23. CHORA OCP
24. SIDULI
25. C L JAMBAD
26. MADHAIPUR
27. MANDERBONI
28. BANKOLA
29. CENTENARY INCLINE
30. SHYAMSUNDARPUR
31. KUMARDIHI A
 - A. KUMARDIHI 3 & 4 PITS
 - B. NORTH INCLINE
32. TILABONI
33. MOIRA
34. KHANDRA
35. KUMARDIHI B
 - A. 5 & 6 PITS
 - B. GOENKA KAJORA A & B PITS
 - C. C PIT
36. SHANKARPUR
37. SHANKARPUR OCP
38. NABA KAJORA
49. AMRITNAGAR
50. MAHABIR (MAHABIR PATCH OCP)
51. NORTH SEARSOLE
52. KUNUSTORIA
53. KUNUSTORIA CHP
54. BANSRA
55. BANSRA OCP
56. CHORA BLOCK MINE
57. PARASEA
58. PARASEA OCP
59. PARASEA 6 & 7 INCLINE
60. BELBAID
61. AMRASOTA INCLINE A & B
62. BHANORA WEST BLOCK
63. GIRIMINT (KUSADANGA INCLINE)
64. NINGAH
65. S. S. INCLINE
66. NEW GHUSICK
67. MUSLIA
68. KALIPAHARI
69. CHALKBALLAVPUR
70. MONOHARBAHAL
71. TIRAT
72. KUARDIH
73. RATIBATI PROJECT (7 PIT)
74. CHAPUI KHAS
75. J. K. NAGAR
76. JEMEHARI
77. NIMCHA
78. SATGRAM PROJECT
79. MITHAPUR
80. PURE SEARSOLE
81. SATGRAM INCLINE
82. KALIDASPUR PROJECT
83. ARDHAGRAM OCP
84. SEETALDASJI
85. SECTOR OF J.K. NAGAR FIRE PROJECT
86. RANIPUR
87. PARBELIA
88. DUBESWARY
89. BHAMURIA
90. SEETALPUR
91. SODEPUR
92. MOUTHDIH
93. CHINAKURI 1 & 2 PIT
94. CHINAKURI 3 PIT
95. PATMOHONA PIT

39. MADHABPUR
40. LACHIPUR
41. GHANASHYAM
42. KHAS KAJORA
43. MADHUJORE
44. MADHUSUDANPUR
45. PARASCOLE
46. JAMBAD
47. JAMBAD OCP
48. CENTRAL KAJORA

96. BEJDIH
97. METHANI U.G.
98. METHANI O.C.P.
99. DHEMOMAIN
100. NARSAMUDA
101. NAGESWAR
102. KANKARTALA
103. TOPOSI OC PATCH
104. KHOTTADIH OCP (EXPANSION)

Annexure II

Annexure II
EASTERN COALFIELDS
LIMITED

1. BONJEMEHARI OCP
2. MOHANPUR OCP
3. DABOR
 - a) RANGAKANALI
 - b) MUKTAICHANDI INC.
4. SANGRAMGARH
 - a) SAMDIH (P.B. INCLINE)
5. GOURANGDIH
 - a) GOURANDIH OCP (DEBU)
 - b) GOURANDIH BEGUNIA
 - c) KHOIRABAD INCLINE

Annexure III

Annexure III
EASTERN COALFIELDS
LIMITED

1. CHITRA OCP
2. CHITRA (U.G.) - DAMAGORA INCLINE

Annexure IV

Annexure IV EASTERN COALFIELDS LIMITED

1. KUMARDHUBI (U/G)
2. BARMURI PROJECT
3. LAKHIMATA (U/G)
4. LAKHIMATA (NEW M.S.INCLINE)
5. KAPASARA (U.G.)
6. MANDMAN INCLINE
7. MANDMAN (B.P.INCLINE)
8. SHAMPUR ' B ' (U.G.)
9. RAJPURA OCP
10. NIRSHA OCP
11. KHOODIA (U.G.)
12. KHOODIA OCP
13. CHAPAPUR - II (U.G.)
14. BADIJNA (U.G.)
15. HARIAZAM
16. GOPINATHPUR 1A INCL

Annexure V

Annexure V EASTERN COALFIELDS LIMITED

1. RAJMAHAL OCP
2. SIMLONG

Annexure VI

Annexure VI CENTRAL COALFIELDS LIMITED

1. BACHRA
2. CHURI
3. BHURKUNDA (SANGAM PROJECT)
4. SAUNDA
5. SAUNDA - D , UG
6. ARGADA
7. SIRKA (NAKARI SEAM)

Annexure VII

Annexure VII CENTRAL COALFIELDS LIMITED

1. BHURKUNDA
2. CENTRAL SAUNDA
3. SAYAL - D
4. URIMARI
NORTH URIMARI (BIRSA
PROJECT)
6. HINDEGIR
7. SIRKA (EXCEPT NAKARI SEAM)
8. GIDI - A
9. GIDI - C
10. RELIGORA
11. RAJHARA
12. HURILONG
13. PIPARWAR
14. KARMA
15. KUJU
16. ROHINI COLLIERY (BELTHERWA DUMP)

Annexure VIII

Annexure VIII
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LIST OF COLLIERIES PRODUCING COKING COAL LINKED TO WASHERIES

- | | |
|---------------------|--|
| 1. MURLIDIH 20 / 21 | III (Moh T) |
| 2. BHATDEE | III (Moh T) |
| 3. MOONIDIH | XVIII
XVII T
XVII B
XVI T & B |
| 4. N. TISRA | IX / X(LOCAL X)
I(LOCAL O) |
| 5. JOYRAMPUR | VIII A(LOC. IX) |
| 6. LODNA | IX / X(LOC. X)
VIII A(LOC. IX)
XI / XII
VIII
VII |

7. BAGDIGI	IX / X(LOC. X) VIII
8. JEALGORA	XIIIA(LOC. XIII) XIIIB XI / XII XIV
9. BARAREE	XIIIA XI / XII / XIII IX / VIII
10. BHOWRAH (N)	VI (LOCAL VII) XII (LOCAL XI) X (LOCAL IX) XI / XII (LOC. XII)
11. BHOWRAH (S)	IX / X(LOC. X / XI) VIII(A)(LOC. IXB) IV T
12. BHOWRAH OCP	XIV / XV(XIII / XIV)

Annexure IX

Annexure IX

LIST OF COLLIERIES PRODUCING DIRECT FEED COAL

1. BHOWRAH (N)	XIV (LOC XIII) , XVIII T XVIII B , XVII , XIV , XIII
2. BHOWRAH (S)	XVII
3. BALIHARI	XI / XII , XV
4. P.B.PROJECT	XI / XII
5. BHAGABAND	XV
6. POOTKEE	XI / XII
7. KUSTORE	XI / XII

8. BURRAGARH	XIV
9. SIMLABAHAL	XI / XII
10. HURRILADIH	XIV , XI , XVI
11. BHALGORA	XI / XII
12. MADHUBAN	XVI C (LOC XV T)
13. BEGUNIA	CHANCH SEAM
14. VICTORIA WEST	LAIKDIH

Annexure X

Categorisation of Coal

<u>Sl No.</u>	<u>Class</u>	<u>Grade</u>	<u>Grade specification</u>
1	Non-coking coal	A	Useful heat value exceeding 6200 kilocalories per kilogram
		B	Useful heat value exceeding 5600 kilocalories per kilogram but not exceeding 6200 kilocalories per kilogram.
		C	Useful heat value exceeding 4940 kilocalories per kilogram but not exceeding 5600 kilocalories per kilogram
		D	Useful heat value exceeding 4200 kilocalories per kilogram but not exceeding 4940 kilocalories per kilogram
		E	Useful heat value exceeding 3360 kilocalories per kilogram but not exceeding 4200 kilocalories per kilogram
		F	Useful heat value exceeding 2400 kilocalories per kilogram but not exceeding 3360 kilocalories per kilogram
		G	Useful heat value exceeding 1300kilocalories per kilogram but not exceeding 2400 kilocalories per kilogram

2	Coking coal	Steel Grade I	Ash content not exceeding 15 percent
		Steel Grade II	Ash content exceeding 15 per cent but not exceeding 18 percent.
		Washery grade I	Ash content exceeding 18 per cent but not exceeding 21 per cent
		Washery Grade II	Ash content exceeding 21 per cent but not exceeding 24 per cent.
		Washery Grade III	Ash content exceeding 24 percent but not exceeding 28 percent.
		Washery Grade IV	Ash content exceeding 28 percent but not exceeding 35 percent.
3	Semi coking and weakly coking coals	Semi coking Gr. I	Ash plus moisture content not exceeding 19 percent
		Semi coking Gr. II	Ash plus moisture content exceeding 19 percent but not exceeding 24 percent.

Notes:

- 1 Coking Coals are such coals as have been classified as coking coals by the erstwhile Coal Board or such coals as have been declared or may be declared as coking coal by the Central Government.
- 2 'Semi coking coals' and 'weakly coking coals' are such coals as were classified as 'Blendable coals' by the erstwhile Coal Board or as may be declared as 'Semi coking' or 'weakly coking coals' by the Central Government.
- 3 Coals other than coking, semi coking or weakly coking coals are non-coking coals.
- 4 'Useful heat value' is defined by the following formula

$$HU = 8900 - 138 (A \text{ plus } M)$$

Where HU = Useful heat value in kilo calories per kilogram

A = Ash content in percentage

M = Moisture content in percentage.

In the case of coal having moisture less than 2 per cent and volatile content less than 19 per cent the useful heat value shall be the value arrived at as above reduced by 150 kilocalories per kilogram for each one percent reduction in volatile content below 19 percent fraction pro- rata.

Both moisture and ash shall be determined after equilibrating at 60 per cent relative humidity and 40 C temperature as per relevant clauses of Indian Standard Specification No.IS:1350 - 1959.

5. Ash percentage of coking coals shall be determined after air-drying as per IS: 1350-1959. If the moisture so determined is more than 2 percent, the determination shall be after equilibrating at 60 per cent relative humidity at 40 C temperature as per IS:1350-1959.
6. Run of Mine coal is coal comprising of all sizes comes out of the mine without any crushing or screening.
7. The fraction of the Run of Mine coal as is retained on a screen when subjected to screening or is picked out by a fork shovel during loading is called steam coal.
8. The fraction that remains after steam coal has been removed from the Run of Mine Coal is called slack coal.
9. If Run of Mine Coal is subjected to successive screening by two different screens of different apertures resulting in segregation into three different sizes, the fraction that is retained on the screen with the largest aperture, shall be termed Steam coal, the fraction passing through the screen but retained on the screen with the smaller aperture, shall be termed Rubble coal and the fraction passing through both the screens shall be termed Slack Coal.
10. Coking coal, weakly coking coal, semi coking coal which fall outside the categorisation shown above shall be treated as non coking coal for the purpose of pricing and classified accordingly.

11. ‘ Long Flame Coals ’ are defined by the parameters laid down in ‘ General classification of coals (Revised)’ of Indian Standard Specification No. IS: 770 – 1964. The relevant part is extracted below:

Group present (Mineral	Volatile Matter Present (Unit coal basis)	Range of gross CV in K.CAL / KG (Unit coal basis)	Range of dried Moisture at 60 % RH at 40 C Free Coal Basis).
B4	Over 32	8060 to 8440	3 to 7
B5	Over 32	7500 to 8060	7 to 14

The determination of volatile matter and moisture shall be carried out on coal samples as per procedure laid down in Indian Standard Specification No. IS: 1350 (Part - I) 1984. Determination of gross calorific value shall be carried out in accordance with procedure laid down in IS: 1350 (Part – II) 1970 dated April 1971 or any subsequent revision thereof.

This is as per the Govt. Notification No. S.O. 453 (E) dated 16.06.1994 as modified by Govt. Notifications Nos. S.O. 190 (E) dated 12.03.1997 and S.O. 136 (E) dated 24.02.1999.