

## MEENAKSHI BLOCK SUMMARY

### PART A

| Sr. No.   | Features                                | Details   |
|-----------|---|---|
| <b>1.</b> | <b>Location</b>                         |   |
|           | Coal Block                              | <b>MEENAKSHI</b>  |
|           | Latitude                                | 21° 58' 48" N-22° 0' 16" N (Provisional)  |
|           | Longitude                               | 83° 45' 26" E-83° 47' 11" E (Provisional)   |
|           | Topo Sheet No.                          | 64 N/16 & 64 O/13 in 1:50000 scale  |
|           | Coalfield                               | Ib Valley   |
|           | Villages                                | Kiripsira in the eastern part of the block  |
|           | Tehsil/Taluka                           | Hemagiri  |
|           | District                                | Sundergarh  |
|           | State                                   | Odisha  |
| <b>2.</b> | <b>Connectivity with Block</b>          |   |
|           | Nearest Rail Head                       | Nearest railway station is Hingir on Jharsuguda-Belpahar-Raigarh SE railway line about 20 km from the southern boundary of the block  |
|           | Road                                    | Connected by all weather metallic Sundergarh-Hemagir-Belpahar road in north, northwestern and western boundary of the block and Sundergarh-Raigarh major metallic road about 3 km from northern boundary of the block |
|           | Airport                                 | Nearest airport is Jharsuguda.  |
| <b>3.</b> | <b>Area</b>                             |   |
|           | Geological Block Area                   | 4.86 sq. km. (As per shape file, Refer note below)  |
|           | Green Cover                             | 1.97 sq. km.  |
|           | Area excluding green cover              | 2.95 sq. km.  |
| <b>4.</b> | <b>Climate and Topography</b>           |   |
|           | Average Annual Rainfall                 | Min 9.3 – Max 44.10 C   |
|           | Temperature (Min. — Max.)               | Min 1086 mm –Max 2382 mm  |
|           | Local Surface Drainage Channels         | The area is predominantly covered by soil and gently sloping towards Garia Nala in the south  |
|           | Rivers                                  | Main drainage controlled by southerly flowing Ib river.   |
| <b>5.</b> | <b>Exploration</b>                      |   |
|           | Status                                  | Explored  |
|           | Exploration Agency                      | CMPDI, GSI  |
|           | Total Number of Boreholes with meterage | GSI: 204.65 (1985-1987; 1 borehole)<br>CMPDI :4496.95 (1989-1992; 1 borehole)<br>5716.00 (1993-1997; 48 borehole)<br>6174.00 (1998-2001; 66 borehole)<br>Total: 155 Boreholes, 16591.60 m                             |
|           | Borehole Density                        | 31 boreholes per sq km  |

|            |   |   |                 |                |       |
|------------|---|---|-----------------|----------------|-------|
|            | General Dip of Seams                          | Towards south west (4 to 8 degree)  |                 |                |       |
|            | General Strike Direction                      | The general strike of the beds is NW-SE with minor swings.  |                 |                |       |
|            | Faults  | 6 faults with maximum throw up to 90m   |                 |                |       |
| <b>6.</b>  | <b>Coal Seams &amp; Reserve</b>               |   |                 |                |       |
|            | Coal Seams                                    | Thickness Range (m)   | Depth Range (m) | Resources (mt) | Grade |
|            | Lajkura IV                                    | 9.76-13.97  | 18.05-66.03     | 22.968         | E-F   |
|            | Lajkura III/II Top                            | 8.65-12.31  | 17.24-81.17     | 30.366         | E-G   |
|            | Lajkura III/II Mid                            | 14.24-22.91   | 23.18-98.36     | 62.813         | F-G   |
|            | Lajkura III/II Bot                            | 1.00-7.67   | 13.41-117.80    | 13.224         | F-G   |
|            | Lajkura I (Up)                                | 5.41-11.29  | 7.95-123.35     | 32.579         | F-G   |
|            | Lajkura I (Lr.)                               | 1.03-6.07   | 13.94-134.36    | 11.503         | E-G   |
|            | Lajkura I (Bot)                               | 0.51-2.34   | 11.86-140.00    | 4.859          | E-F   |
|            | Rampur V/IV Top                               | 0.41-9.17   | 14.12-168.85    | 24.136         | F-G   |
|            | Rampur V/IV Mid(UP)                           | 1.19-10.56  | 10.68-177.20    | 35.935         | F-G   |
|            | Rampur V/IV Mid (Lr)                          | 0.23-4.78   | 11.36-185.35    | 14.207         | F-G   |
|            | Rampur V/IV Bot                               | 0.39-9.54   | 10.58-193.50    | 25.040         | F-G   |
|            | Rampur III                                    | 0.26-7.91   | 11.50-205.20    | 7.618          | F-G   |
|            | Rampur II                                     | 0.19-1.32   | 15.50-212.19    |                | E-Ung |
|            | Rampur I                                      | 0.27-0.67   | 19.74-189.95    |                | G     |
|            | <b>Total</b>                                  |   |                 | <b>285.24</b>  |       |
| <b>7.</b>  | <b>Surface Constraints</b>                    | -   |                 |                |       |
| <b>8.</b>  | <b>Grade of coal</b>                          | G12 (Provisional) based on weighted average grade as per grade-wise data available in GR.   |                 |                |       |
| <b>9.</b>  | <b>Decision Support System (DSS) Analysis</b> | Hydrology info: The polygon touches wetland more than 10 hectare area<br>Description: Reservoirs. Area 21.25<br>Wildlife info: The polygon touches Wildlife Habitat(s)- Sloth Bear & Dhole  |                 |                |       |
| <b>10.</b> | <b>Eco Sensitive Zone (ESZ)</b>               | Southern boundary of the block is approx. 29 km from the boundary of ESZ of Debrigarh. SE boundary of the block is approx. 26 km from the boundary of ESZ of Sambalpur Elephant Region and NW boundary of the block is approx. 70 km from the boundary of buffer zone of unnotified Lemru Elephant Reserve. |                 |                |       |
| <b>11.</b> | <b>CBA Land Acquisition Status</b>            | Major part of the block is notified under CBA land acquisition Act by MCL.  |                 |                |       |

## PART B

| Sr. No. | Features                      | Details |
|---------|-------------------------------|---------|
| 1       | Tentative Peak rated Capacity | 12 Mty  |

**Note:**

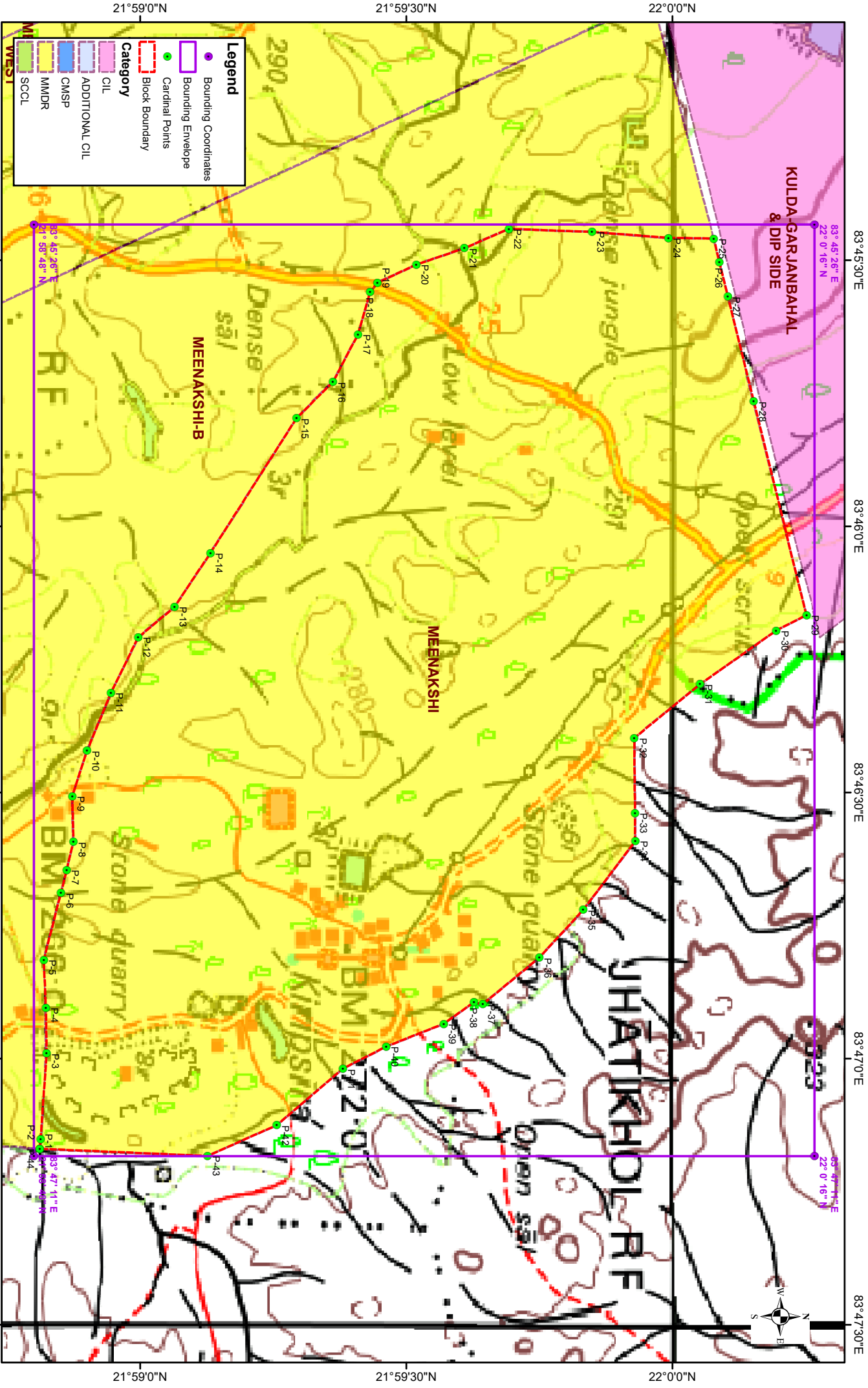
1. The summary has been compiled from ‘ Geological Report on Coal Exploration Meenakshi Block’
2. The boundary of the block has been taken from GR after conversion to WGS84 system by feature matching. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate.
3. There is a difference in area in the shape file and GR. Area in the shape file is based on feature mapped plan of the block as given in the GR. So, the area is tentative and field DGPS survey is required to ascertain the exact area.

**Disclaimer:**

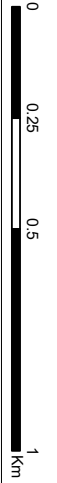
1. The analysis is done on Beta-version (Trial Version) of Decision Support System (DSS) of FSI / MOEF.
2. The Decision Rules for various parameters of this DSS System are controlled by FSI.
3. CMPDI only runs this DSS to obtain the status of any block based on these Decision Rules.
4. The database of the Decision Rules is updated by FSI from time to time.
5. CMPDI does not own any responsibility for variation in the results which are based on the Decision Rules of the FSI DSS in case of any updation of the database at FSI end.
6. ESZ analysis and tiger habitat/ corridor given here is based on the information available in public domain. Bidders are encouraged to verify this information and any other information additionally available.

**Meenakshi Block, Ib Valley Coalfield**

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Note: Data is in WGS84 coordinate system.



### **Provisional Cardinal Points for MEENAKSHI Block**

| POINT NO | Longitude (WGS84) | Latitude (WGS84)  |
|----------|-------------------|-------------------|
| P-1      | 83° 47' 10.155" E | 21° 58' 48.689" N |
| P-2      | 83° 47' 9.098" E  | 21° 58' 48.764" N |
| P-3      | 83° 46' 59.408" E | 21° 58' 49.446" N |
| P-4      | 83° 46' 54.244" E | 21° 58' 49.361" N |
| P-5      | 83° 46' 48.870" E | 21° 58' 49.130" N |
| P-6      | 83° 46' 41.325" E | 21° 58' 51.064" N |
| P-7      | 83° 46' 38.736" E | 21° 58' 51.697" N |
| P-8      | 83° 46' 35.568" E | 21° 58' 52.472" N |
| P-9      | 83° 46' 30.426" E | 21° 58' 52.344" N |
| P-10     | 83° 46' 25.296" E | 21° 58' 54.000" N |
| P-11     | 83° 46' 18.780" E | 21° 58' 56.690" N |
| P-12     | 83° 46' 12.524" E | 21° 58' 59.762" N |
| P-13     | 83° 46' 9.101" E  | 21° 59' 3.861" N  |
| P-14     | 83° 46' 3.025" E  | 21° 59' 7.897" N  |
| P-15     | 83° 45' 47.818" E | 21° 59' 17.612" N |
| P-16     | 83° 45' 43.726" E | 21° 59' 21.722" N |
| P-17     | 83° 45' 38.364" E | 21° 59' 24.542" N |
| P-18     | 83° 45' 33.596" E | 21° 59' 25.891" N |
| P-19     | 83° 45' 32.552" E | 21° 59' 26.725" N |
| P-20     | 83° 45' 30.516" E | 21° 59' 31.101" N |
| P-21     | 83° 45' 28.662" E | 21° 59' 36.528" N |
| P-22     | 83° 45' 26.477" E | 21° 59' 41.552" N |
| P-23     | 83° 45' 26.819" E | 21° 59' 50.897" N |
| P-24     | 83° 45' 27.493" E | 21° 59' 59.505" N |
| P-25     | 83° 45' 27.569" E | 22° 0' 4.641" N   |
| P-26     | 83° 45' 30.255" E | 22° 0' 5.262" N   |
| P-27     | 83° 45' 34.123" E | 22° 0' 6.229" N   |
| P-28     | 83° 45' 45.914" E | 22° 0' 9.139" N   |
| P-29     | 83° 46' 10.000" E | 22° 0' 15.082" N  |
| P-30     | 83° 46' 11.755" E | 22° 0' 11.677" N  |
| P-31     | 83° 46' 17.812" E | 22° 0' 3.084" N   |
| P-32     | 83° 46' 23.868" E | 21° 59' 55.673" N |
| P-33     | 83° 46' 32.329" E | 21° 59' 55.766" N |
| P-34     | 83° 46' 35.487" E | 21° 59' 55.777" N |
| P-35     | 83° 46' 43.233" E | 21° 59' 49.928" N |
| P-36     | 83° 46' 48.622" E | 21° 59' 44.958" N |
| P-37     | 83° 46' 53.868" E | 21° 59' 38.613" N |
| P-38     | 83° 46' 53.641" E | 21° 59' 37.607" N |
| P-39     | 83° 46' 56.064" E | 21° 59' 34.213" N |
| P-40     | 83° 46' 58.634" E | 21° 59' 27.720" N |
| P-41     | 83° 47' 1.143" E  | 21° 59' 22.820" N |
| P-42     | 83° 47' 7.497" E  | 21° 59' 15.382" N |
| P-43     | 83° 47' 10.963" E | 21° 59' 7.585" N  |

Note: The provisional cardinal points are in WGS84 coordinate system. These points are extracted through ArcGIS software after georeferencing of block boundary and onground DGPS survey is

**Provisional Cardinal Points for MEENAKSHI Block**

required to ascertain the exact location of the points.