

# Ash Compliance Report (for the period 1st April 2022 to 31st March 2023)

| SN. | Details   |   |  |  |
|-----|---|---|--|--|
| 1.  | Name of Power Plant   | Thermal Power Plant   |  |  |
| 2.  | Name of the company   | M/s KSK Mahanadi Power Company Ltd.   |  |  |
| 3.  | District  | Janjgir-Champa  |  |  |
| 4.  | State   | Chhattisgarh  |  |  |
| 5.  | Postal address for communication:   | M/s KSK Mahanadi Power Company Ltd., Village-<br>Nariyara, Tehsil-Akaltara, District- Janjgir,- Champa,<br>Chhattisgarh, Pin-495553 |  |  |
| 6.  | E-mail:   | acharyulu.m@ksk.co.in; env.kmpcl@ksk.co.in  |  |  |
| 7.  | Power Plant installed capacity (MW):  | 3x600 MW  |  |  |
| 8.  | Plant Load Factor (PLF):  | 66.83 %   |  |  |
| 9.  | No. of units generated (MWh):   | 10522345 MWh  |  |  |
| 10. | Total area under power plant (ha): (including area under ash ponds)                     | 828.46 Ha.  |  |  |
| 11. | Quantity of coal consumption during reporting period (Metric Tons per Annum):           | 68,23,056 MT  |  |  |
| 12. | Average ash content in percentage (per cent):   | 35.3 %  |  |  |
| 13. | Quantity of current ash generation during reporting period (Metric Tons per Annum):     | 24,05,591 MT  |  |  |
|     | Fly ash (Metric Tons per Annum):  | 21,65,031 MT  |  |  |
|     | Bottom ash (Metric Tons per Annum):   | 2,40,559 MT   |  |  |
| 14. | Capacity of dry fly ash storage silo(s) (Metric Tons):                                  | 2x3800 M3   |  |  |
|     | Details of utilisation of current ash generated during reporting period                 |   |  |  |
| 15. | (a) Total quantity of current ash utilised (MTPA) during reporting period: 24,05,591 MT |   |  |  |



| (b) Quantity of fly ash utilised (MTPA):   | 21,65,032 MT |
|--|--------------|
| (i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels)       | 20,188 MT    |
| (ii) Cement manufacturing:   | 13,61,096 MT |
| (iii) Ready mix concrete:  | -            |
| (iv) Ash and Geo-polymer based construction material:  |              |
| (v) Manufacturing of sintered or cold bonded ash aggregate:  |              |
| (vi) Construction of roads, road and fly over embankment:  | 11,275 MT    |
| (vii) Construction of dams:  |              |
| (viii) Filling up of low lying area:   | 5,84,406 MT  |
| (ix) Filling of mine voids:  | 1,88,067 MT  |
| (x) Use in overburden dumps:   |              |
| (xi) Agriculture:  | -            |
| (xii) Construction of shoreline protection structures in coastal districts;                                      |              |
| (xiii) Export of ash to other countries:   | -            |
| (xiv) Others (please specify):   |              |
| (c) Quantity of bottom ash utilised (MTPA):  | 2,40,559 MT  |
| (i) Fly ash based products (bricks or<br>blocks or tiles or fibre cement sheets<br>or pipes or boards or panels) |              |
| (ii) Cement manufacturing:   | -            |
| (iii) Ready mix concrete:  | -            |
| (iv) Ash and Geo-polymer based construction material:  | -            |
| (v) Manufacturing of sintered or cold  | - Adorgh     |

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|     | bonded ash aggregate:   |               |
|-----|---|---------------|
|     | (vi) Construction of roads, road and fly over embankment:   | 9,116 MT      |
|     | (vii) Construction of dams:   |               |
|     | (viii) Filling up of low lying area:  | 1,97,397 MT   |
|     | (ix) Filling of mine voids:   | 34,046 MT     |
|     | (x) Use in overburden dumps:  |               |
|     | (xi) Agriculture:   |               |
|     | (xii) Construction of shoreline protection structures in coastal districts;   |               |
|     | (xiii) Export of ash to other countries:  |               |
|     | (xiv) Others (please specify):  |               |
|     | Total quantity of current ash unutilised (MTPA) during reporting period:  | 0.0 MT        |
| 16. | Percentage utilisation of current ash generated during reporting period (per cent):                                 | 100 %         |
|     | Details of disposal of ash in ash ponds   |               |
|     | (a) Total quantity of ash disposed in ash pond(s) (Metric Tons) as on 31st March (excluding reporting period) 2022: | 3,04,996 MT   |
| 17. | (b) Quantity of ash disposed in ash pond(s) during reporting period (Metric Tons):                                  | 0.0 MT        |
|     | (c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m3):           | 58248 m3      |
|     | (d) Total number of ash ponds:  (i) Active:  (ii) Exhausted (yet to be reclaimed):                                  | 2 nos. Active |



| (iii) Reclaimed:  |   |   |
|---|---|---|
| (e) total area under ash ponds (ha):  | 66 Ha.  |   |
| Individual ash pond details   |   |   |
| Ash pond-1,2, etc. (please provide below mentioned details separately, if number of ash ponds is more than one)                               | Pond-1<br>(Fly ash storage)   | Pond-2<br>(Bottom ash storage)  |
| (a) Status: Under construction or Active or Exhausted or Reclaimed  | Active  | Active  |
| (b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY):   | 14.08.2013  | 14.08.2013  |
| (c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY): (Not applicable for active ash ponds) | Active<br>Not applicable  | Active<br>Not applicable  |
| (c) area (hectares):  | 32.5Ha 33.5Ha.  |   |
| (d) dyke height (m):  | 7.9m  | 11.3m   |
| (d) volume (m3):  | 13,84000 m3   | 46,67000 m3   |
| (e) quantity of ash disposed as on 31st March 2023 (Metric Tons):   | 49,227 MT   | 1,94,986 MT   |
| (f) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons):                                      | 98%<br>24,50,773 MT   | 96%<br>44,75,014 MT   |
| (g) expected life of ash pond (number of years and months):   | Not Applicable<br>100% fly ash utilization has<br>been achieved.                                    | Not Applicable 100% bottom ash utilization has been achieved.                                       |
| (e) co-ordinates (Lat and Long): (please specify minimum 4 co- ordinates)   | 21°57'17"N 21°57'33"N<br>82° 24'32"E 82°23'52"E<br>21°57'12"N 21°57'41"N<br>82° 23'13"E 82° 24'55"E | 21°57'46"N 21°57'42"N<br>82° 24'57"E 82°23'22"E<br>21°57'26"N 21°57'42"N<br>82° 23'15"E 82° 24'56"E |



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|     | (f) type of lining carried in ash pond:<br>HDPE lining or LDPE lining or clay<br>lining or No lining   | HDPE lining                                | HDPE lining                                |
|     | g) mode of disposal: Dry disposal or<br>wet slurry (in case of wet slurry<br>please specify whether HCSD or<br>MCSD or LCSD)   | High Concentration Slurry Disposal System  | Lean Slurry Disposal<br>System             |
|     | (h) Ratio of ash: water in slurry mix (1:):  | 1:0.538                                    | 1:2.3                                      |
|     | (i) Ash water recycling system<br>(AWRS) installed and functioning: Yes<br>or No   | Not available                              | Available and in-operation                 |
|     | (j) Quantity of wastewater from ash pond discharged into land or water body (m3):  | Nil  | Nil  |
|     | (k) Last date when the dyke stability study was conducted and name of the organisation who conducted the study:  | Not conducted as dyke commissioned in 2013 | Not conducted as dyke commissioned in 2013 |
|     | (I) Last date when the audit was conducted and name of the organisation who conducted the audit:   | <del></del>                                | <u>.</u>                                   |
|     | Quantity of legacy ash utilised (MTPA):  | 61,010 MT                                  |  |
|     | i. Fly ash based products (bricks or<br>blocks or tiles or fibre cement sheets<br>or pipes or boards or panels):   |  |  |
|     | ii. Cement manufacturing:  | -  |  |
| 18. | iii. Ready mix concrete:   | -  |  |
|     | iv. Ash and Geo-polymer based construction material:   |  |  |
|     | v. Manufacturing of sintered or cold bonded ash aggregate:   |  |  |
|     | vi. Construction of roads, road and flyover embankment:  | 1,556 MT A Clory 4                         |  |

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|     | vii. Construction o  | f dams:  |  |                        |
|-----|--|--|--|------------------------|
|     | viii. Filling up of low lying area:  ix. Filling of mine voids:  x. Use in overburden dumps:  xi. Agriculture:  xii. Construction of shoreline protection structures in coastal districts;  xiii. Export of ash to other countries:  xiv. Others (please specify): |  | 28,024 MT                                    |                        |
|     |  |  | 31,430 MT                                    |                        |
|     |  |  |  |                        |
|     |  |  |  |                        |
|     |  |  |  |                        |
|     |  |  |  |                        |
|     |  |  |  |                        |
|     | Summary:   |  |  |                        |
| 19. | Details  | Quantity<br>generated (MTP)  | Quantity utilised<br>(MTP) and (per<br>cent) | Balance quantity (MTP) |
|     | Current ash during reporting period  | 24,05,591 MT   | 24, 05,591 MT<br>(100%)                      | 0.0                    |
|     | Legacy ash   | 3,04,996 MT<br>(Balance stocked<br>as on 31 <sup>st</sup> Mar<br>2022) | 61,010 MT<br>(20%)                           | 2,43,986 MT            |
|     | Total  | 27,10,587 MT   | 24,66,601 MT<br>(102%)                       | 2,43,986 MT            |
|     | Any other information:   |  |  |                        |
| 20. | Soft copy of the annual compliance report, and shape files of power plant and ash ponds may be e-mailed to: moefcccoalash@gov.in   |  | Noted.                                       |                        |
| 21. | Signature of Authorised Signatory  |  | Achagaly                                     |                        |

Prof. M.Chandra Sekhar 24

Director

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Eluru District, A.P.-521 202,

For KSK Mahamadi Power Company Limited

Authorised Signatory