राष्ट्रीय प्रौद्योगिकी संस्थान
NATIONAL INSTITUTE OF TECHNOLOGY
राउरकेला, ROURKELA-769008, ओडिशा, ODISHA

RIGHT TO INFORMATION

No. NITR/CE/2024/L/2181

FTS/ 241110-6692
Date: 10/11/2023

To

The Member Secretary
The Ministry of Environment, Forest and Climate Change

Sub: Submission of Annual Ash Compliance Report (for the period of 1st April 2023-31st March 2024) of IND SYNERGY LIMITED, AFBC 10 MW POWER PLANT, Raigarh (C.G.)

Respected Sir,

With reference to the subjected cited above, I am submitting herewith the softcopy of Annual Ash Compliance Report along with month wise ash generation and utilization data of IND SYNERGY LIMITED, AFBC 10 MW POWER PLANT for the period of 1st April 2023-31st March 2024. The attachments also include the shapefiles of thermal power plant.

Kindly acknowledge the receipt of the same.

With warm regards,

Yours sincerely,

Spsingh
10/11/2024

Prof. Suresh Prasad Singh,
Department of Civil Engineering,
National Institute of Technology-Rourkela
Rourkela, Odisha

Cc: 1) The Member Secretary, Chhattisgarh Environment Conservation Board, (C.G.)
Email: hocecb@gmail.com
2) "power cpcb" <power.cpcb@gov.in>

Annual Ash Compliance Report (1st April 2023 to 31st March 2024)
IND Synergy Limited, AFBC (10 MW), Power Plant, Raigarh

Sr. No.	Details	
1.	Name of Power Plant	IND SYNERGY LIMITED, AFBC (10 MW), Power Plant
2.	Name of the company	IND SYNERGY LIMITED
3.	District	Raigarh
4.	State	Chhattisgarh
5.	Postal address for communication:	M/S Ind Synergy Limited, Village-Kotmar, and Mahuapali, Tehsil, Dist. Raigarh-469001, Chhattisgarh
6.	E-mail:	ehshead@ indsynergy.com jksoni@indsynergy.com
7.	Power Plant installed capacity (MW):	10 MW (AFBC)
8.	Plant Load Factor (PLF):	31.20%
9.	No. of units generated (MWh):	27405.9 MWh
10.	Total area under power plant (ha): (including area under ash ponds)	4.02 Ha
11.	Quantity of coal consumption during reporting period (Metric Tons per Annum):	Coal- 14966 MT Dolachar- 18888 MT Coal Fines- 4213 MT Washery Reject- 4799 MT Washery Slurry- 738 MT Total- 43604 MT
12.	Average ash content in percentage (percent):	58.32%
13.	Quantity of current ash generation during reporting period (Metric Tons per Annum i.e. MTPA): Fly ash (MTPA): Bottom ash (MTPA):	25428 MT 17799.6 MT 7628.4 MT
14.	Capacity of dry fly ash storage silo(s) (Metric Tons) :	150 MT
15.	Details of utilisation of current ash generated during reporting period (a) **Total quantity of current ash utilised (MTPA) during reporting period:**	25428 MT
	(b) **Quantity of fly ash utilised (MTPA):**	**25428 MT** (including bottom ash)
	(i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels)	7811 MT
	(ii) Cement manufacturing	-
	(iii) Ready mix concrete	-
	(iv) Ash and Geo-polymer based construction material	-

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	(v) Manufacturing of sintered or cold bonded ash aggregate	-
	(vi) Construction of roads, road and fly over embankment	10351 MT (used inside the plant premises)
	(vii) Construction of dams	-
	(viii) Filling up of low lying area	7266 MT (used inside the plant premises)
	(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)	-
	(c) Quantity of bottom ash utilised (MTPA):	Include in fly ash
	(i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets 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 bonded ash aggregate:	-
	(vi) Construction of roads, road and flyover embankment:	-
	(vii) Construction of 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):	-
	Total quantity of current ash unutilised (MTPA) during reporting period:	Nil
16.	Percentage utilisation of current ash generated during reporting period (per cent):	100%
17.	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):	No ash pond
	(b) Quantity of ash disposed in ash pond(s) during reporting period (Metric Tons):	NA

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	(c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m^3)	NA
	(d) Total number of ash ponds: (i) Active: (ii) Exhausted (yet to be reclaimed): (iii) Reclaimed:	NA
	(e) Total area under ash ponds (ha):	NA
18.	Individual ash pond details: *Ash pond-1, 2, etc. (please provide below mentioned details separately, if number of ash ponds is more than one)*	NA
	(a) Status: Under construction or Active or Exhausted or Reclaimed	NA
	(b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY):	NA
	(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)	NA
	(d) Area (hectares):	NA
	(e) Dyke height (m):	NA
	(f) Volume (m^3):	NA
	(g) Quantity of ash disposed as on 31st March (Metric Tons)	NA
	(h) Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons):	NA
	(i) Expected life of ash pond (number of years and months):	NA
	(j) Co-ordinates (Lat. and Long): (please specify minimum 4 co-ordinates)	NA
	(k) Type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining	NA
	(l) Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD/MCSD/LCSD)	NA
	(m)Ratio of ash: water in slurry mix (1:___):	NA
	(n) Ash water recycling system (AWRS) installed and functioning: Yes, or No	NA
	(o) Quantity of wastewater from ash pond discharged into land or water body (m^3):	NA
	(p) Last date when the dyke stability study was conducted and name of the organisation who conducted the study:	NA
	(q) Last date when the audit was conducted and name of the organisation who conducted the audit:	Prof. S. P. Singh, NIT Rourkela in the month of November 2023
19.	**Quantity of legacy ash utilised (MTPA):** i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels):	**Nil**

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	ii. Cement manufacturing:	-
	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:	-
	vii. Construction of 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):	-

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Details	Quantity Generated (MT)	Quantity Utilized (MT) & (percent)	Balance Quantity (MT)
Current ash during reporting period	25428 MT	25428 MT & (100 %)	Nil
Legacy ash	Nil	Nil	Nil
Total	**25428 MT**	**25428 MT & (100 %)**	**Nil**

21.	Any other information: Soft copy of the annual compliance report, and shape files of power plant and ash ponds may be e-mailed to : - **moefcccoalash@gov.in**	The generated ash in the current reporting period has been utilised within the premises of the power plant for filling and road construction, which has not been properly covered with soil. The power plant may explore other better ways of utilisation of generated ash. 1. Annual ash audit report 2. Monthwise ash utilisation data 3. Shapefiles
22.	Signature of Authorised Signatory	SPsingh 10/11/2024 Prof. Suresh Prasad Singh **Prof. Suresh Prasad Singh** Professor & Head Department of Civil Engineering National Institute of Technology Rourkela Rourkela-769008, Odisha

Monthwise Ash Generation and Utilization Report for FY 2023-24 IND Synergy Limited, AFBC (10 MW), Power Plant, Raigarh										
Month	Ash generated	Ash utilization (MT)								
		Supply to cement plant	Brick making	Over-burden dumps	Land-filling inside the plant	Road construction inside the plant	Others (specify)	Total utilization	Utilization (%)	Remarks
April-23	872	-	728	-	-	144	-	872	100	-
May-23	432.5	-	432.5	-	-	-	-	432.5	100	-
June-23	1123	-	742	-	-	381	-	1123	100	-
July-23	1512	-	748	-	-	764	-	1512	100	-
Aug-23	1701	-	915	-	-	786	-	1701	100	-
Sept-23	1365	-	589	-	-	776	-	1365	100	-
Oct-23	1861.34	-	502.95	-	226.74	1131.65	-	1861.34	100	-
Nov-23	2415.51	-	652.49	-	813.95	949.07	-	2415.51	100	-
Dec-23	2703.26	-	619.88	-	1230.9	852.48	-	2703.26	100	-
Jan-24	3066.24	-	466.36	-	1807.1	792.8	-	3066.24	100	-
Feb-24	3627	-	673	-	1877	1077	-	3627	100	-
Mar-24	4750	-	742	-	1311	2697	-	4750	100	-
Total	**25428.85**	**-**	**7811.18**	**-**	**7266.69**	**10351**	**-**	**25428.85**	**100**	**-**

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10/11/2024

Prof. Suresh Prasad Singh

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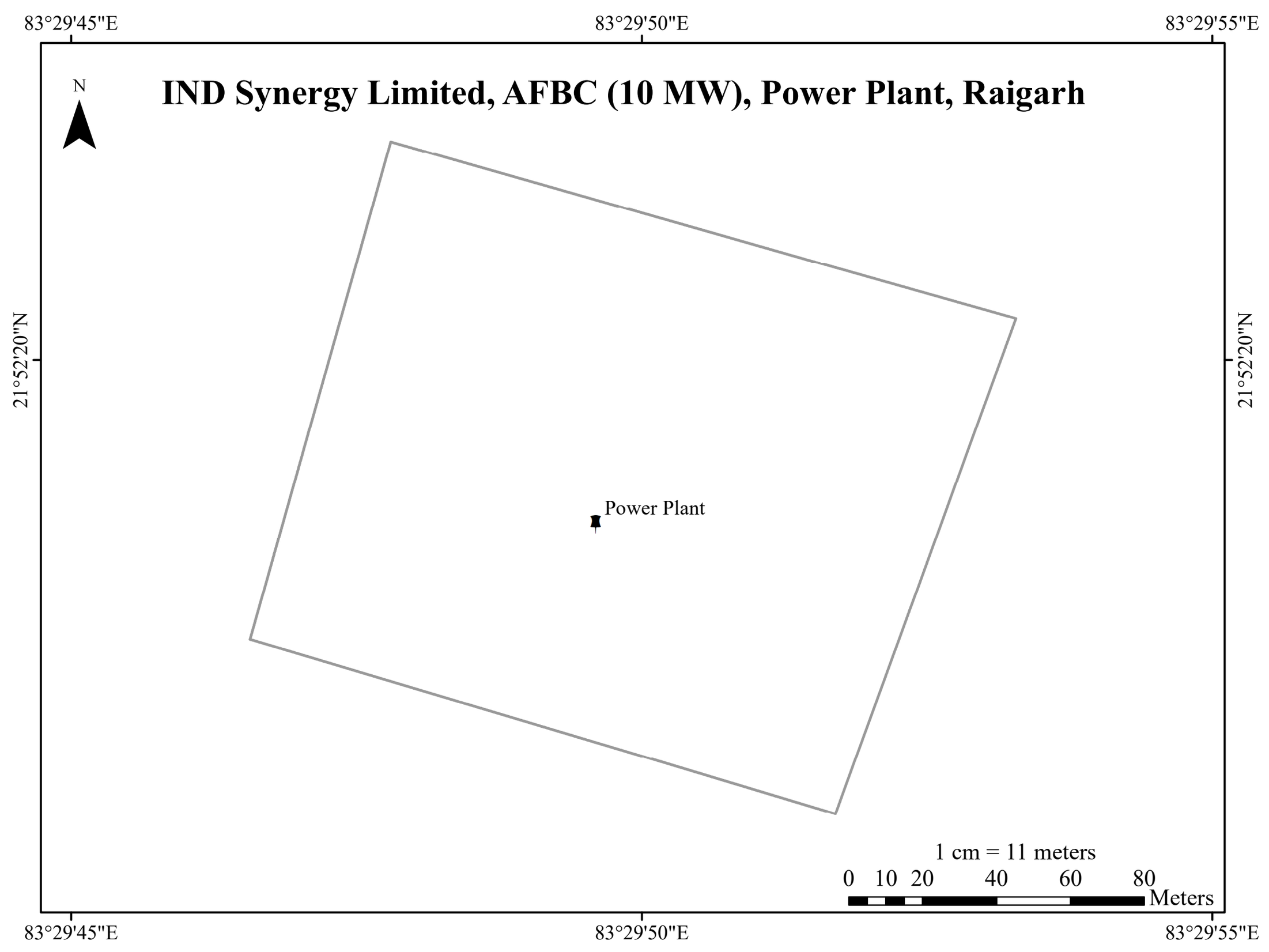
Rourkela-769008, Odisha


83°29'45"E
83°29'50"E
83°29'55"E
N
IND Synergy Limited, AFBC (10 MW), Power Plant, Raigarh
21°52'20"N
Power Plant
1 cm = 11 meters
0 10 20 40 60 80
Meters