ମହାନଦୀ କୋଲ୍ ଫିଲ୍ଡ୍ସ୍ ଲିମିଟେଡ୍ महानदी कोलफील्डस लिमिटेड Mahanadi Coalfields Limited

(A subsidiary of Coal India Limited)

OFFICE OF THE PROJECT OFFICER (T&D) TALCHER COLLIERY AT/PO: DERA, TALCHER, DIST: ANGUL (ODISHA), PIN:759103

E_mail: potalcher2016@gmail.com aeotalmel@gmail.com



Ref.No: PO(T&H/D)/TAL/EC Compliance/2023-24/166

Dt 0 | .11.2023

To

The Additional Director,

Ministry of Environment Forest & Climate Change,

Eastern Zonal Office,

A-3, Chandrashekharpur,

Bhubaneswar - 751 023

REGD. POST

Sub:-Submission of Half Yearly Compliance Report of Environmental Clearance condition in respect of TALCHER U/G Mine (0.27 MTY)

Dear Sir,

Enclosed please find herewith Half Yearly Compliance Report along with Form-I, II & III and abstract of the monitoring report of Ambient Air, Noise level & Water Effluent quality in respect of TALCHER U/G Mine (0.27 MTY) for the period from APRIL'2023 to SEPTEMBER'2023

This is for your kind information & necessary action.

Encl: As above.

Yours faithfully

01.12.202

Copy for Kind information to:-

1. The Director, E.I.A Monitoring Cell, Ministry of Environment & Forest, Paryavaran Bhawan, C.G.O.Complex, New Delhi-100003 (With Encl.)

2. The Member Secretary, State Pollution Control Board (Odisha), A/118, Nilakanthanagar, Unit-VIII, BBSR-751012. (With Encl.)

3. The Regional Officer, SPCB (Odisha), Regional Office, Industrial Estate, Angul. (With Encl.)

Copy to:-

- 1. The General Manager, MCL, Talcher Area.
- 2. The General Manager (Environment.) MCL HQ, Burla, Sambalpur.
- 3. The Colliery Manager, Talcher Colliery.
- 4. The Area Environment Officer, Talcher Area (with Encl.)
- 5. The Nodal Officer (Envt.), Talcher Colliery (with Encl.)

PROJECT OFFICER (T&H/D)
TALCHER COLLIERY

HALF YEARLY PROGRESS REPORT OF COMPLIANCE WITH ENVIROMENTAL CLEARANCE CONDITIONS

(APRIL-2023 TO SEPTEMBER-2023)

TALCHER U/G MINE (0.27MTY)



MAHANADI COALFIELDS LIMITED
TALCHER AREA
AT/PO: DERA, TALCHER, ODISHA
PIN-759103.

Present Status of the Project

The coal production in Talcher Colliery is temporarily suspended since dt.24.02.2018 due to access restriction as per Clause No.158 of CMR Act'2017.

COMPLIANCE OF EC CONDITIONS OF TALCHER COLLIERY

SI. No	EC Conditions			(Comp	liance	Status	S .	
1.	The SPM level in the ambient air should not exceed 500 µg/m at any observation point within the mine leasehold. The emissions or SO2, NO and CO should be maintained below the levels prescribed by the	Coal production in the mine has been suspended sin 24.02.2018. However, all parameters viz. SPM, SO NOx, PM ₁₀ , PM _{2.5} are being monitored on fortnigh basis. The values of all parameters are found to be with the prescribed limits. The average value of the same							PM, SO2, fortnightly be within
	competent authority.	Location	Parai ers	met	SPM (μg/m³)	PM ₁₀ (μg/m³)	PM _{2.5} (μg/m³)	SO ₂ (μg/m³)	NO _x (μg/m³)
		Officer's Club, TA	Avg.		191.14	98.86	42.71	14.31	16.50
		Canteen, Talcher colliery	Avg.		200.93	102.07	45.86	13.77	15.18
2.	The quality of effluent finally discharged into the main water course shall conform to the standard prescribed under notification No.0511 919(II) dated 12.09.1988.	Coal production in the mine has been suspended si 24.02.2018. However, mine discharge water is be properly treated at Treatment plant and quality of effluences.					is being of effluent meters are e detailed are-II. The		
3.	The likely subsided area should be brought back to the original land use pattern to the maximum extent possible the reclamation of subsided area and subsequent plantation /agricultural activity should be carried out as per the Environmental management plan. The ultimate area of agricultural land after mining operation should be 694 hectares.	There is n land use p							ne original peration.

4.	The coal Handling Plant and Fan House should be designed to minimize noise and polymers including rubber and polyurethane should not exceed the norms prescribed by the competent authority.	mining activities except dewatering takes place. However, noise level is being regularly monitored and it is found within the prescribed standard. Noise Level Measurement (dBA) Contain Day Night Day Day					
5.	Regular monitoring of ambient air and water quality and noise levels should be done and recorded data should be furnished to this Department once in three months.	Regular mo	onitoring of a data of a	of air, water of water of	er and noise within p	e level are b rescribed I uality are b regular inter	imit. eing
6.	No change methodology of working and the scope of working should be made without the approval of this Ministry.	dewatering	. At prese to fulfill	nt there is the deman	s no mining ad of surrou	the mine s g activity ex anding villag methodolog	cept gers.
7.	The green belt around associated industrial complete residential colony should be provided as per the Environmental Management plan. The afforestation scheme should lay on mixed culture rather than monoculture	As per EMP, adequate plantation has already been done in the mine leasehold area of the mine. Moreover, considerable amount of plantation is being done every year by departmental as well as through Agencies like OFDC, DFO, CGRVVNL etc. over the free spaces wherever available. No, of plantation done in the recent					ver, very like aces
8.	The project authority should submit to this Ministry a quarterly in respect of environmental control measures.	2023-24: 55 Environmer terms of cor	ntal contro	ol measure report on F	es report i Ialf-yearly	s being sen basis.	t in
9.	Separate Environmental management cell with suitably qualified personal to carry out various functions relating to Environmental management should be set up under the control of senior technical person who will directly report to chief Executive of the area. A laboratory facility should be set up for collection and analysis of samples.	A separate qualified posenior technomen Manager of Environmen CMPDIL haby SPCB.	ersonal is nical perso the area. ntal monit	s establish on who car oring wor	ned under n directly re ks is being	the control eport to Gen	of eral

10.	The funds (Both capital and revenue) earmarked for environmental control measures should not be diverted for any other	are being utilized and it is not used for any other pur Expenditure of Environmental protection in the					
	purpose.	Year Expenditure for Environment Protection					
		2019-20 28.00 Lakhs					
		2020-21 31.95 Lakhs					
		2021-22 53.58 Lakhs					
	·	2022-23 144.49 Lakhs					
11.	The Ministry may additional conditions if so necessitated either by in scope of the project or on the basis of feedback on impacts.						

PROJECT OFFICER (T&H/D)
TALCHER COLLIERY

FORM -1 MINISTRY OF ENVIRONMENT & FOREST REGIONAL OFFICE MONITORING PROFORMA PART – I (DATA SHEET)

1	Project type: River-Valley / Mining / Industry /	Mining
2	Thermal / Nuclear / Other (Specify)	Talahan Calliam (UC)
3	Name of the Project Clearance letter(s) OM No. & dt.	Talcher Colliery (UG) J – 11015/5/91.1A-11 dated. 22.6.1992
4	Location:	Angul, Odisha
4	a) District(s), State(s)	Aligui, Odisila
	b) Address of concerned project Chief Engineer (with pin code & Telephone/Telex/Fax Nos.) c) Address of Executive Project Engineer Manager with Pin code and Telephone/Telex/Fax Nos.)	Sri D.Sahoo, Project Officer (T&H), Talcher Colliery, Dist-Angul (Odisha), Ph: 06760-269955 (O)
5	Salient Features: a) Of the Project b) Of the Environment Manager plan	It is an underground project was produced coal with help of SDL's & loco etc. EMP of 0.27 MTY as per EMP
6	Breakup of the Project Area a) Submergence area (forest & non-forest) b) Others	NA NA
7	Breakup of the Project affected population with enumeration of those losing houses\dwelling units only agricultural lands only, both dwelling units and agricultural land and less laborers/artisans. a) SC/ST Advises b) Others	NA NA
8	 a) Project costs as originally planned and subsequent revised estimates and the years of price reference. b) Allocation made for environment management plans, with item wise and year wise breakup. c) Benefit cost ratio/interest rate of return and year assessment. d) Whether © includes the cost of environment management as shown in (B) above. e) Actual expenditure incurred on the Project so far f) Actual expenditure incurred on the environment management plans 	Allocation made for EMP – 31.54 lakhs a) Afforestation cost: 2.8 lakhs; b) Pollution measuring cost: 12.32 lakhs; c) Envt. Quality data gen. cost: 16.42 lakhs Yes 47.43 Crores 144.49 Lakhs (2022-23)

Forest and requirements	
a) A status of approval of diversion of forest	Obtained Stage-II FC for the entire
and non-forestry use.	forest land for UG mining operation.
b) A status of clean filling in forest and non-	
forest lands	Nil
c) Comments on availability and	
sustainability compensatory afforestation	Nil
program in the light of actual fell experience	
so far.	
Status of Construction.	
a) Date of commencement (actual and/or	1926
planned)	
b) Date of completion (actual and/or planned)	1928
Reason for the delay if the project is yet to start.	NA
Date of site visit	
a) The dated on which the project was	22.09.2023
previous occasions if.	
b) Date of site for the monitoring report.	22.09.2023
	NA
status of compliance to safeguards.	
	a) A status of approval of diversion of forest and non-forestry use. b) A status of clean filling in forest and non-forest lands c) Comments on availability and sustainability compensatory afforestation program in the light of actual fell experience so far. Status of Construction. a) Date of commencement (actual and/or planned) b) Date of completion (actual and/or planned) Reason for the delay if the project is yet to start. Date of site visit a) The dated on which the project was monitored by the Regional Officer on the previous occasions if. b) Date of site for the monitoring report. Details of correspondence with Project Authorities for obtaining action plans information and

01.12.2025

PROJECT OFFICER (T&H/D)
FALCHER COLLIERY

FORM-II

PROFORMA FOR PROVIDING INFORMATION ON REHABILITATION

1	No. of Villages Affected	Nil
2	Families Affected	Nil
3	Compensation package offered per family	Nil
	State/Centre Norms Project package	
	As per State Government R&R policy	
4	Budget Estimate for rehabilitation a) Total Outlay b) Amount Paid/used	Nil
5	Employment Details Total Employment to be provided Employment given So far	Nil
6	Rehabilitation /Resettlement details a) No. of Families rehabilitated Name of the site Families Rehabilitated b) Families yet to be rehabilitated Name of the site No. of families	Nil
7	Any other Information	Nil

01.12.702

PROJECT OFFICER (T&H/D)

C + TALCHER COLLIERY

FORM-III

FORMAT FOR PROVIDING PARTICULARS ON GREEN BELT/PLANTATION UNDER FC ACT 1980 AND E (P) ACT 1986

1. a. Name of Organization

: MAHANADI COALFIELDS LTD.

b. Envt clearance order No.

: J - 11015/5/91.1A-11 dated. 22.6.1992

2. Location, Block/Sub Division/

District./State.

: Dera, Talcher, Dist-Angul/Odisha

3. Address for communication

: Project Officer, Talcher Colliery,

Po-Dera, Dist – Angul, Odisha, Pin-759103

4. Existing vegetation in the area/region

a. Species (Trees/shrub/Grasses/climbers.)

: Sal, Bargad, Kendu, Mango, Pattas & grass etc

b. major prevalent species of each type

· ___

5. Land coverage by the project

a. Total Area under the project

: 1140 Ha.

b. Area covered for basic infrastructure

(road, building/factory etc.)

: 119.8 Ha.

6. Details about natural vegetation

a. Name and number of tree/species felled

: Nil

b. Name and number of plants species still

: Sal, Bargad, Kendu, Mango, Pattas & grass etc

available in the area

: 1,13,350 Nos

c. By protecting the area will indigenous

: Nil : ---

d. Extent of green belt developed.7. Plantation required to be carried out as per.

a. Condition of Environment

(Clearance in Ha/No.s plants/Ha)

: 2500 Nos.plants/Ha

b. A condition of forest © Act

Forest clearance in Ha/No.

: 1600 Nos.plants/Ha

c. Voluntarily in Ha. /Nos.

: 2500 Nos./Ha.

8. Details about plantation.

Total area available for plantation in 2023-24 in each category

	- the distribution of plantation in 2025 2 in each category.								
Green	Ext	B/F Area	Road sides	Block	Remarks				
belt	dump			plantations					
Nil	Nil	Nil	Nil	500	Fruit bearing plants and forestry				
					species were planted				

Plantation details (Category wise & methodology used)

	<u> </u>		8,	300)			
i .	Species	Spacing	Height	Total	area	Propose	plantation
plantation	planted		attained	covered	till	program in 1	2024-25
				Sept'23			
1990-91 to	Indigenous	2m x 2m	5 to 8 meter	50.16 Ha	-	500 nos	
2023-24	species						

Survival % of plantation (for last five years) : 80 - 85 % after 3 years of plantation.

9. Agency carrying out plantation and maintenance: Departmental

10. Financial Details. (Year wise and item wise)

SI No	Year	Fund allocated (In Lakh Rs. For 3/5 years	NO. OF PLANTS	Average cost each surviving plants (in Rs.) plantation scheme valid for 3/5 years)
	1000.01	1.64	12000	17.08 for 9600 plants
1	1990-91	1.77	12500	17.7 for 10000 plants
2	1991-92	2.0	15000	16.67 for 12000 plants
3	1992-93	1.6	13000	15.38 for 10400 plants
4,	1993-94	3.75	29000	16.16 for 23200 plants
5	1994-95	6.55	20500	39.93 for 16400 plants
6	1995-96	2.46	3100 & 793	78.99 for 3114 plants
7.	1996-97		Nil	Nil
8.	1997-98	Nil	Nil	Nil
9.	1998-99	Nil		Nil
10.	1999-2000	Nil	Nil	Nil
11.	2000-01	Nil	Nil	Nil
12.	2002-03	Nil	Nil	Nil
13.	2003-04	Nil	Nil	Nil
14.	2003-04	Nil	Nil	Nil
15.	2003-04	Nil	Nil	Nil
16.	2004-05	Nil	Nil	Nil
17.	2005-06	Nil	Nil	Nil
18.	2006-07	Nil	Nil	Nil
19.	2007-08	Nil	Nil	Nil
20.	2008-09	Nil	Nil	109.18 for 2940 plants
21	2009-10	3.21	3675	109.18 for 2940 plants Nil
22	2010-11	Nil	Nil	
23	2011-12	Nil	Nil	Nil
24	2012-13	Nil	Nil	Nil
25	2013-14	Nil	Nil	Nil
26	2014-15	Nil	Nil	Nil
1	2015-16	Nil	Nil	Nil
27	2015-10	5.90	2000	295
28	2017-18	Nil	Nil	Nil
29	2017-18	Nil	Nil	Nil
30	2019-20	0.40	1000	40
31	2020-21	1.0	2000	50
32	2021-22	23.0	3950	582.28
33	2022-23	24.0	4400	545.45
34		Nil	500	-
35	2023-24 Total	77.28	1,22,918	-

Plant Distribution:

SI No	Year	Fund allocated 1 distribution of plants	or Expenditure made	Average cost for each plants
	 	0.26 lakhs	0.26 lakhs	Rs.26.2/plant
1	2014-15		0.46 lakhs	Rs.23.0/plant
2	2015-16	0.46 lakhs	3.24 lakhs	Rs.32.4/plant
3	2016-17	3.24 lakhs		Rs.31.5/plant
4	2017-18	3.15 Lakhs	3.15 lakhs	
	2019-20	3.35 Lakhs	3.35 Lakhs	Rs.33.5/plant
5		3.10 Lakhs	3.10 Lakhs	Rs.31.0/plant
6	2020-21		0.70 Lakhs	Rs.30.0/plant
7	2021-22	0.75 Lakhs		Rs.34.55/plant
8	2022-23	0.95 Lakhs	0.95 Lakhs	Rs.34.21/plant
9	2023-24	1.95 Lakhs	1.95 Lakhs	K\$.54.217 plant

10. Inspection of plantation by fields Experts and their comments and Follow up action.

11. Remarks /any other information

: Inspected & found satisfactory

- Nil -

ANNEXURĖ - I

AMBIENT AIR QUALITY REPORT (APRIL' 2023 TO SEPTEMBER' 2023) TALCHER UNDER GROUND MINE

1) MONITORING STATION: Officer's Club, Talcher Area

DATE	SPM	PM ₁₀	PM _{2.5}	SO ₂	NOx	Remarks
15.04.2023	188	94	42	10.52	16.54	
28.04.2023	150	94	45	11.53	19.85	
15.05.2023	191	90	42	13.56	12.24	
29.05.2023	178	89	38	12.58	17.56	
15.06.2023	190	92	41	11.52	15.1	1
28.06.2023	198	94	45	13.56	17.58	
15.07.2023	189	94	42	16.85	18.54	1
31.07.2023	178	88	37	14.56	13.52	
12.08.2023	186	92	42	12.52	15.23	
29.08.2023	161	79	30	12.52	16.45	
15.09.2023	194	94	43	13.15	14.21	1
23.09.2023	193	93	41	23.19	19.19	7
Max (µg/m³)	245	156	62	23.19	19.85	
Min (μg/m³)	150	79	30	10.52	12.24	
Avg. (μg/m³)	191.14	98.86	42.71	14.31	16.50	

2) MONITORING STATION: Near Canteen, Talcher Colliery

DATE	SPM	PM ₁₀	PM _{2.5}	SO ₂	NOx	Remarks
15.04.2023	202	97	46	12.45	13.56	
28.04.2023	155	92	43	11	15.57	1
15.05.2023	184	87	39	12.52	13.52	
29.05.2023	198	95	44	13.54	18.54]
15.06.2023	197	96	44	15.96	14.13	
28.06.2023	208	97	48	10.56	14.59	
15.07.2023	175	88	36	13.12	12.25]
31.07.2023	203	96	45	10.52	17.58	
12.08.2023	197	96	45	17.59	14.58	
29.08.2023	153	71	27	11.52	14.58	1
15.09.2023	188	92	41	11.13	12.16	
23.09.2023	212	98	47	22.26	17.88]
Max (µg/m³)	276	168	75	22.26	20.56	
Min (µg/m³)	153	71	27	10.52	12.16	
Avg. (µg/m³)	200.93	102.07	45.86	13.77	15.18	

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ANNEXURE - II

MINE STRATA WATER DISCHARGE REPORT

(APRIL' 2023 TO SEPTEMBER' 2023)

Location: Sedimentation Tank Discharge Water

DATE	РН	O&G	TSS	COD
10.04.2023	7.37	<4.0	34	36
24.04.2023	7.44	<4.0	28	32
09.05.2023	7.71	<4.0	24	20
23.05.2023	7.79	<4.0	30	12
08.06.2023	7.86	<4.0	36	28
22.06.2023	7.53	<4.0	38	20
10.07.2023	7.59	<4.0	46	28
27.07.2023	7.66	<4.0	52	36
10.08.2023	6.55	<4.0	74	44
24.08.2023	7.54	<4.0	64	48
06.09.2023	8.21	<4.0	52	36
25.09.2023	8.24	<4.0	44	40
Max (mg/L)	8.24	<4.0	74	48
Min (mg/L)	6.55	<4.0	24	12
Avg. (mg/L)	7.62	<4.0	43.50	31.67

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ANNEXURE - III

NOISE LEVEL REPORT

(APRIL' 2023 TO SEPTEMBER' 2023

Monitoring Station: GM OFFICE & Near Canteen, TC

Date of Monitoring	1) GM Office		2) Near Canteen	
	DAY (dBA)	NIGHT (dBA)	DAY (dBA)	NIGHT (dBA)
03.04.2023	57.1	53.8	56.3	52.7
17.04.2023	59.4	55.3	57.6	54.5
08.05.2023	65.6	60.1	66.7	62.9
22.05.2023	63.4	59.7	64.8	60.1
08.06.2023	58.0	55.3	59.4	56
22.06.2023	60.4	56.9	58.7	55.4
10.07.2023	59.2	57.4	65.3	63.2
27.07.2023	59.7	57.9	65.9	63.7
10.08.2023	69.7	60.1	67.2	59.6
24.08.2023	60.2	58.5	65.9	63.7
09.09.2023	68.9	68.4	64.3	62.3
28.09.20203	65.6	62.5	65.9	63.2
Max. (dBA)	69.7	68.4	67.2	63.7
Min. (dBA)	57.1	53.8	56.3	52.7
Avg. (dBA)	62.27	58.83	63.17	59.78

ANNEXURE - IV

WELL WATER LEVEL MONITORING DATA

(APRIL' 2023 TO SEPTEMBER' 2023)

Date of sampling	Name of the station	Depth from GL (in Meter)
22.05.2023	Dera village well (Reported	3.80
21.08.2023	Dera village well (Reported	1.55

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ANNEXURE - V PLANTATION DETAILS

S.No	PLANTATION YEAR	NO. OF PLANTS	No of plants survived Survival rate: 80 %	Average cost each surviving plants in Rs. (3 years scheme)
1	1990-91	12000	9600	17.08
2	1990-91	12500	10000	17.7
3	1992-93	15000	12000	16.67
4	1993-94	13000	10400	15.38
5	1994-95	29000	23200	16.16
6	1995-96	20500	16400	39.93
7	1996-97	3893	3114	78.99
8	1997-98	Nil	Nil	Nil
10	1998-99	Nil	Nil	Nil
11	1999-2000	Nil	Nil	Nil
12	2000-01	Nil	Nil	Nil
13	2002-03	Nil	Nil	Nil
14	2003-04	Nil	Nil	Nil
15	2003-04	Nil	Nil	Nil
16	2003-04	Nil	Nil	Nil
17	2004-05	Nil	Nil	Nil
18	2005-06	Nil	Nil	Nil
19	2006-07	Nil	Nil	Nil
20	2007-08	Nil	Nil	Nil
21	2008-09	Nil	Nil	Nil
22	2009-10	3675	2940	109.18
23	2010-11	Nil	Nil	Nil
24	2011-12	Nil	Nil	Nil
25	2012-13	Nil	Nil	Nil
26	2013-14	Nil	Nil	Nil
27	2014-15	Nil	Nil	Nil
28	2015-16	Nil	Nil	Nil
29	2016-17	2000	1600 (Min)	295
30	2017-18	Nil	Nil	Nil
31	2019-20	1000	900	40
32	2020-21	2000	1600	50
33	2021-22	3950	3650	582.28
34	2022-23	4400	4050	545.45
35	2023-24	500	450	Nil

PLANT DISTRIBUTION DETAILS

I DINI DISTINIDO TION DETINES				
Sl No	Year	No of Plants distributed	Average cost for each plants	
1	2014-15	1000 plants	Rs.20.0/plant	
2	2015-16	2000 plants	Rs.23.0/plant	
3	2016-17	10000 plants	Rs.32.4/Plant	
4	2017-18	10000 plants	Rs.31.5/plant	
5	2019-20	5000 plants	Rs.33.5/Plant	
6	2020-21	5000 plants	Rs.31.0/plant	
7	2021-22	2500 Plants	Rs.30.0/plant	
8	2022-23	2750 plants	Rs.34.55/plant	
9	2023-24	5750 plants	Rs.34.21/plant	

