## সহাদি কালদীল্ডন নিদিই Mahanadi Coalfields Limited

(A subsidiary of Coal India Limited)

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

E\_mail: potalcher2016@gmail.com aeotalmcl@gmail.com



Date: 0 \/11/2023

То

The Additional Director.

Ministry of Environment Forest & Climate Change,

No.PO(T&H)/Talcher/Half-yrly/EC Compliance report/2023-24/ 167

Eastern Zonal Office,

A-3, Chandrashekharpur,

Bhubaneswar-751023

Sub:-Submission of Half Yearly Compliance Report of Environmental Clearance condition in respect of DEULBERA U/G Mine.

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 **DEULBERA U/G Mine (0.20 MTY)** for the period from April'2023 to September'2023.

This is for your kind information & necessary action.

Encl: As above.

Yours faithfully

PROJECT OFFICER (T&H/D)

L DEULBERA COLLIERY

#### **Copy for Kind information:**

- 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.)
- 4. The General Manager, MCL, Talcher Area.
- 5. The General Manager (Environment,) MCL HQ, Burla, Sambalpur.

#### Copy to:

- 1. The Colliery Manager, Deulbera Colliery.
- 2. The Area Environment Officer, Talcher Area (with Encl.)
- 3. The Nodal Officer (Envt.), Talcher Colliery (with Encl.)

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY

# HALF YEARLY PROGRESS REPORT OF COMPLIANCE WITH ENVIRONMENTAL CLEARANCE CONDITIONS

(APRIL-2023 TO SEPTEMBER-2023)

DEULBERA U/G MINE (0.20 MTY)



MAHANADI COALFIELDS LIMITED

TALCHER AREA

AT/PO: DEULBERA, TALCHER, ODISHA
PIN-759102.

## Present Status of the Project

The production of the Mine was suspended from dt.19.7.2006 as the Executive Engineer, Right Main Canal Division, had intimated the Project Officer, Deulbera Colliery; in regard to release of water vide his letter dtd: 15.07.2006.

Hence there is no production from the mine since 19.07.2006 due to passage of Right Main Canal over the Underground working and Director, Mine safety, Bhubaneswar region prohibited allowing the persons below ground due to unsafe conditions. All men and machineries were withdrawn from underground. Therefore, there is no generation of pollution in the ambient air from mining activity. It is further informed that the mine would be officially declare about its closure after mine closure plan is prepared and approved by the concerned authority and completion of stabilization work.

As advised by Director of Mines Safety, Bhubaneswar, hydro-pneumatic Sand stowing in conventional method from surface has been undertaken by M.C.L. from dt.27.11.2006 in the Panels, namely, R-0, R-1, R-1B & TT-1 identified by him.

The status of compliance to environmental conditions applicable at present are provided below:

## COMPLIANCE OF EC CONDITIONS OF DEULBERA COLLIERY

SL.	EC Conditions	Con	ıpliance Sı	tatus				
1.	The SPM level in the ambient air should not exceed 500 µg/m <sup>3</sup> at any observation point within the mine leasehold. The emissions or SO2, NO	Ambient air quality is being monitored on fortnightly basis and all the parameters are found within the permissible limits and the detailed report is given in <b>Annexure</b> – <b>I.</b> The average values of the same is given below:-						
	and CO should be maintained below the levels prescribed by the	Location/	Paramet ers	PM <sub>2,5</sub>	SPM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>X</sub>
	competent authority.	IWSS, Talcher	Avg.	187.25	90.58	40.58	14.29	16.35
		Manager's Office	Avg.	181	102.33	39.33	13.31	16.63
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.	As the coal production discontinued in 2006, there is no effluent generation. Only the mine discharge water which is utilized for sand stowing/industrial purposes is being monitored regularly. All the parameters within the permissible limits and average values are as follows and the detailed report is given in <b>Annexure – II.</b>						
		Location	on/ Par	rameters	pН	O&G	TSS	COD
 1		Pit top P outle	- I	Avg.	7.31	< 4.0	37.67	25.67
		Ranipa Submer pum	sible	Avg.	7.35	< 4.0	34.50	30.08

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 no record of subsidence so far, so the original land us pattern is not disturbed due to mining operation. After minin operation, the ultimate land of agricultural land will be more that 694 hectares.				
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	There is no CHP, as However regular mon level found within the provided in <b>Annexure</b> –I	itoring of Noise ne prescribed st	e is being don tandard. Detail	e and noise	
	authority.		asurement in dB	T		
		Location	DAY	NIGHT		
		Near Gopinathpur village	62.99	59.33		
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.	are being carried out and found within prescribed limit. Record data are being furnished in the Half-yearly compliance report				
6.	No change methodology of working and the scope of working should be made without the approval of this Ministry.	There is no change working. There is no co				
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	industrial complete residential colony as per the EMP and afforestation has been done based on mixed culture (Indigenous species) Eg. Chankunda, Mango, Nima, Jack, Kendu, Tamraid,				
8.	The project authority should submit to this Ministry a quarterly in respect of environmental control measures.	Half yearly compliance	report is being s	ent on regular l	oasis.	
9.	A 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.	Half yearly compliance report is being sent on regular basis.  A separate environment management cell with suitably qualified personal is established under the control of Senior technical person who directly reports to General Manager of the area/HQ.  Environmental monitoring works is being done through CMPDIL having adequate laboratory facilities as required by SPCB.				

	10.	The funds (Both capital and revenue) earmarked for environmental control measures should not be diverted for any other purpose.	being utilize	earmarked for environmental controlled and it is not used for any other purpovironmental protection during the last 3	ose. Expenditure
ŀ			Year	Expenditure for Environment Protection	
			2018-19	22.776 Lakhs	
*			2019-20	13.00 Lakhs	
			2020-21	12.50 Lakhs	
			2021-22	15.07 Lakhs	
			2022-23	15.02 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.	NA.		

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY

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

01.12.2023

PROJECT OFFICER (T&H/D)

LL DEULBERA COLLIERY

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

		L ·
1	Project type: River-Valley / Mining / Industry / Thermal / Nuclear / Other (Specify)	Mining
	\ 1	D. H. C. H. (HC)
2	Name of the Project	Deulbera Colliery (UG)
3	Clearance letter(s) OM No. & dt.	J – 11015/5/91.1A-11 dated. 22.6.1992
4	Location:	Angul, Odisha
	a) District(s), State(s)	
	b) Address of concerned project Chief Engineer	Sri D Sahoo, Project Officer
	(with pin code & Telephone/Telex/Fax Nos.)	(T&H/D), Deulbera Colliery, Dist-
	c) Address of Executive Project Engineer	Angul (Odisha), Ph: 06760-269955
	Manager with Pin code and Telephone/Telex/Fax	(O)
	Nos.)	
5	Salient Features:	It is an underground mine, where
	a) Of the Project	coal production discontinued since
	b) Of the Environment Manager plan	19.07.2006
6	Breakup of the Project Area	
	a) Submergence area (forest & non-forest)	954.101
,	b) Others	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.	NA
	a) SC/ST Advises	NA
	b) Others	
8	Financial Details:	
	a) Project costs as originally planned and	1496 Lakhs
	subsequent revised estimates and the	
	years of price reference.	
	b) Allocation made for environment	Allocation made for EMP – 4.81
	management plans, with item wise and year	lakhs
	wise breakup.	a) Afforestation cost: 3.5 lakhs;
	c) Benefit cost ratio/interest rate of return	b) Pollution measuring cost: 0.58
	and year assessment.	lakhs;
		c) Envt. Quality data gen. cost: 0.73
		lakhs
	d) Whether © includes the cost of	
	environment management as shown in (B)	Yes
	above.	
	e) Actual expenditure incurred on the Project	1591.77 Lakhs (till 2022-23)
	so far	
	f) Actual expenditure incurred on the	81.02 Lakhs (2022-23)
	environment management plans	

### 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

Nil

a) Total Outlay

b) Amount Paid/used : Nil

5. Employment Details

Total Employment to be provided : Nil

Employment given So far

6. Rehabilitation / Resettlement details

a) No. of Families rehabilitated : Nil

Name of the site Families Rehabilitated

b) Families yet to be rehabilitated : Nil

i) Name of the site

ii) No. of families

7. Any other Information : Nil

01-12-202

### **FORM-III** FORMAT FOR PROVIDING PARTICULARS ON GREEN BELT/PLANTATION UNDER F©ACT 1980 AND E (P) ACT 1986

1. a. Name of Organization

b. Envt clearance order No.

: MAHANADI COALFIELDS LTD.

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

2. Location, Block/Sub Division/

District./State.

: Talcher, Dist-Angul/Odisha

3. Address for communication

: Project Officer, Deulbera Colliery,

Po-Deulbera Colliery, Dist – Angul, Odisha,

Pin-759102

4. Existing vegetation in the area/region

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

: Trees, Shrubs

b. major prevalent species of each type

: Chakunda, Mango, Jack, Debadaru, Nima, Ukalipu, Kendu, Guava, Tamraid, Appie

5. Land coverage by the project

a. Total Area under the project

: 954.101 Ha

b. Area covered for basic infrastructure

(road, building/factory etc.)

: 172.472 Ha

6. Details about natural vegetation

a. Name and number of tree/species felled

: Nil b. Name and number of plants species still

available in the area

: Chakunda, Mango, Jack, Debadaru, Nima, etc : 7.680 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 2022-23 in each category.

Green	Ext	B/F Area	Road sides	Block	Remarks
belt	dump			plantations	
Nil	Nil	Nil	Nil	0.10	Around 50 nos. plantation done in
					2022-23

## a) Plantation details (Category wise & methodology used)

Year of plantation	Species planted	Spacing	Height attained	Total area covered till Sept'2023	Proposed plantation program in 2023-24
1990-91 to 2022- 23	As mentioned above	2m x 2m	6 to 9 meter	4.34 Ha	100

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

9. Agency carrying out plantation and maintenance: Orissa Forest Development Corporation Ltd., Angul (C-KL) Division.

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

SI No	Year	Fund allocated (In Lakh Rs. For 3 years.	Expenditure made in lakh Rs. For 3 years.	Average cost each surviving plants in Rs (plantation scheme valid for 3 years)
1,	1990-91	Nil	Nil	Nil
2.	1991-92	Nil	Nil	Nil
3.	1992-93	Nil	Nil	Nil
4,	1993-94	Nil	Nil	Nil
5.	1994-95	Nil	Nil	Nil
6.	1995-96	Nil	Nil	Nil
7.	1996-97	Nil .	Nil	Nil
8.	1997-98	Nil ·	Nil	Nil
9.	1998-99	Nil :	Nil	Nil
10.	1999-2000	Nil	Nil	, Nil
11.	2000-01	Nil	Nil	Nil
12.	2002-03	Nil	Nil	Nil
13.	2003-04	6.08 lakhs	6.08 lakhs	79.17
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	Nil
21	2009-10	Nil	Nil	Nil
22	2010-11	Nil	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
27	2014-15	Nil	Nil	Nil
28	2015-16	Nil	Nil	Nil
29	2016-17	Nil	Nil	Nil
30	2017-18	Nil	Nil	Nil
31	2018-19	Nil	Nil	Nil
32	2019-20	Nil	Nil	Nil
33	2020-21	30	2000	66.67
34	2021-22	200	6000	33.33
35	2022-23			
36	2023-24*	-		

SI No	Year	Fund allocated for distribution of plants	Expenditure made	Average cost for each plants
. 1	2015-16	0.46 lakhs	0.46 lakhs	Rs.23/- for 2000 no. of plants
2	2016-17	1.29	1.29	Rs.32.25/- for 4000 no. of plants
3	2017-18	1.26	1.26	Rs.31.5/- for 4000 no. of plants
4	2018-19	Nil	Nil	Nil
5	2019-20	0.67	0.67	Rs.33.5/- for 2000 no. of plants
6	2020-21	0.61	0.61	Rs.31.0/- for 2000 no. of plants
7	2021-22	0.09	0.09	Rs.30/plant for 300 no. of plants
8	2022-23	0.10	0.10	Rs.30/plant for 333 no. of plants
9 .	2023-24			

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

12. Remarks /any other information

Yes

-NA

PROJECT OFFICER (T&D/H)
DEULBERA COLLIERY

#### ANNEXURE - I

## AMBIENT AIR QUALITY REPORT (APRIL' 2023 TO SEPTEMBER' 2023) DEULBERA UNDERGROUND MINE

## **MONITORING STATION: IWSS, Talcher**

DATE	SPM	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	Remarks
08.04.2023	195	95	44	10.52	14.52	
21.04.2023	199	94	45	12.56	17.58	
12.05.2023	193	91	43	13.56	18.12	·
26.05.2023	186	91	40	12.52	16.54	
07.06.2023	180	90	38	14.58	15.58	
21.06.2023	163	80	32	17.58	13.52	
07.07.2023	182	90	39	19.58	12.25	
22.07.2023	189	94	42	14.52	16.21	
11.08.2023	192	91 .	40	13.58	16.52	
22.08.2023	195	91	43	12.25	16.58	
07.09.2023	187	89	41	13.55	20.03	
29.09.2023	186	91	40	16.69	18.69	
Max (μg/m³)	199	95	45	19.58	20.03	
Min (μg/m³)	163	80	32	10.52	12.25	
Avg. (μg/m <sup>3</sup> )	187.25	90.58	40.58	14.29	16.35	

## **MONITORING STATION: Manager's Office**

DATE	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	Remarks
15.04.2023	157	79	29	12.56	16.56	
29.04.2023	193	91	41	11.69	13.58	1
06.05.2023	193	314	58	13.21	17.32	1
26.05.2023	185	76	40	15.54	18.52	
15.06.2023	181	87	38	16.52	18.45	
28.06.2023	195	94	43	13.12	18.74	
15.07.2023	192	91	43	10.52	17.58	
22.07.2023	180	60	38	11.36	18.97	-
12.08.2023	181	87	38	13.25	14.58	-
30.08.2023	143	67	24	11.52	14.58	
13.09.2023	186	91	40	18.39	11.44	-
30.09.2023	186	91	40	12.06	19.19	
Max (μg/m³)	195	314	58	18.39	19.19	
Min (μg/m <sup>3</sup> )	143	60	24	10.52	11.44	
Avg. (μg/m <sup>3</sup> )	181.00	102.33	39.33	13.31	16.63	

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## ANNEXURE - II

## MINE STRATA WATER QUALITY REPORT DEULBERA U/G MINE (APRIL' 2023 TO SEPTEMBER' 2023)

## 1) Pit Top Pump Outlet:

DATE	pН	O & G	TSS	COD
10.04.2023	7.29	<4.0	28	20
24.04.2023	7.21	<4.0	34	20
09.05.2023	7.33	<4.0	40	12
23.05.2023	7.46	<4.0	34	24
08.06.2023	7.61	<4.0	38	32
22.06.2023	7.37	<4.0	40	36
10.07.2023	7.43	<4.0	48	40
27.07.2023	7.55	<4.0	42	36
10.08.2023	5.7	<4.0	32	24
24.08.2023	7.03	<4.0	38	12
06.09.2023	7.79	<4.0	36	24
25.09.2023	7.93	<4.0	42	28
Max (mg/L)	7.93	<4.0	48	40
Min (mg/L)	5.7	<4.0	28	12
Avg. (mg/L)	7.31	<4.0	37.67	25.67

## 2) Ranipark Pump Outlet:

DATE	pН	O & G	TSS	COD
10.04.2023	7.34	<4.0	24	16
24.04.2023	7.41	<4.0	30	24
09.05.2023	7.53	<4.0	38	41
23.05.2023	7.46	<4.0	34	24
08.06.2023	7.79	<4.0	34	28
22.06.2023	7.62	<4.0	26	40
10.07.2023	7.57	<4.0	36	32
27.07.2023	7.69	<4.0	34	40
10.08.2023	6.36	<4.0	38	20
24.08.2023	5.82	<4.0	46	28
06.09.2023	7.92	<4.0	40	32
25.09.2023	7.63	<4.0	34	36
Max (mg/L)	7.92	<4.0	46	41
Min (mg/L)	5.82	<4.0	24	16
Avg. (mg/L)	7.35	<4.0	34.50	30.08



### **ANNEXURE - III**

## NOISE LEVEL REPORT (APRIL' 2023 TO SEPTEMBER' 2023) DEULBERA U/G MINE

#### NOISE LEVEL MEASUREMENT IN dB(A)

DATE	1) Manager's Office		
DATE	Day dB(A)	Night dB(A)	
03.04.2023	58.4	55	
17.04.2023	60.3	56.4	
08.05.2023	63.4	57.6	
22.05.2023	60.8	56.3	
08.06.2023	60.6	58.4	
22.06.2023	63.4	57.3	
10.07.2023	62.3	60.2	
27.07.2023	62.1	60.1	
10.08.2023	69.7	61.9	
24.08.2023	62.1	60.1	
09.09.2023	66.3	65.7	
28.09.2023	66.5	62.9	
Max (dBA)	69.7	65.7	
Min (dBA)	58.4	55	
Avg. (dBA)	62.99	59.33	

#### **ANNEXURE-IV**

## WELL WATER LEVEL MONITORING DATA (APRIL' 2023 TO SEPTEMBER' 2023)

Date of sampling	Name of the station	Depth from GL (in Meter)	
23.05.2023	Deulbera village well	1.80	
22.08.2023	Deulbera village well	1.65	

Limbr