

ମହାନଦୀ କୋଲ ଫିଲ୍ଡସ୍ ଲିମିଟେଡ୍
महानदी कोलफील्डस लिमिटेड
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



No.PO(T&H)/Talcher/Half-yrly/EC Compliance report/2022-23/64

Date: 30/04/2022

To

The Additional Director,
Ministry of Environment Forest & Climate Change,
Eastern Zonal Office,
A-3, Chandrashekharapur,
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 Oct'2021 to Mar'2022.

This is for your kind information & necessary action.

Encl: As above.

Yours faithfully

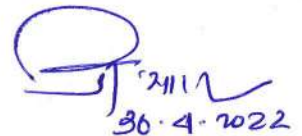
PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY

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.)


30.4.2022

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY



HALF YEARLY PROGRESS REPORT OF
COMPLIANCE WITH ENVIROMENTAL
CLEARANCE CONDITIONS

(OCTOBER-2021 TO MARCH-2022)

DEULBERA U/G MINE (0.20 MTY)



MCL

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	Compliance Status																		
1.	The SPM level in the ambient air should not exceed 500 µg/m ³ at any observation point within the mine leasehold. The emissions of SO ₂ , NO and CO should be maintained below the levels prescribed by the competent authority.	<p>Ambient air quality is being monitored once in a fortnight and all the parameters are found within the permissible limits and the detailed report is given in Annexure – I. The average values of the same is given below:-</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Location/</th> <th style="text-align: center;">Parameters</th> <th style="text-align: center;">PM_{2.5}</th> <th style="text-align: center;">PM₁₀</th> <th style="text-align: center;">SO₂</th> <th style="text-align: center;">NO_x</th> <th style="text-align: center;">SPM</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Manager's Office</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">50.03</td> <td style="text-align: center;">132.83</td> <td style="text-align: center;">15.81</td> <td style="text-align: center;">25.60</td> <td style="text-align: center;">228.08</td> </tr> </tbody> </table>	Location/	Parameters	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Manager's Office	Avg.	50.03	132.83	15.81	25.60	228.08				
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Manager's Office	Avg.	50.03	132.83	15.81	25.60	228.08														
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.	<p>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 Annexure – II.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Location/</th> <th style="text-align: center;">Parameters</th> <th style="text-align: center;">pH</th> <th style="text-align: center;">O&G</th> <th style="text-align: center;">TSS</th> <th style="text-align: center;">COD</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Pit top Pump outlet</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">7.04</td> <td style="text-align: center;">< 4.0</td> <td style="text-align: center;">32.67</td> <td style="text-align: center;">31.33</td> </tr> <tr> <td style="text-align: center;">Ranipark Submersible pump</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">7.31</td> <td style="text-align: center;">< 4.0</td> <td style="text-align: center;">37.50</td> <td style="text-align: center;">27.00</td> </tr> </tbody> </table>	Location/	Parameters	pH	O&G	TSS	COD	Pit top Pump outlet	Avg.	7.04	< 4.0	32.67	31.33	Ranipark Submersible pump	Avg.	7.31	< 4.0	37.50	27.00
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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 use pattern is not disturbed due to mining operation. After mining operation, the ultimate land of agricultural land will be more than 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 authority.	<p>There is no CHP, as the production stopped since 19.07.2006. However regular monitoring of Noise is being done and noise level found within the prescribed standard. Detailed report is provided in Annexure –III</p> <table border="1" data-bbox="654 694 1364 828"> <thead> <tr> <th colspan="3">Noise Measurement in dBA</th> </tr> <tr> <th>Location</th> <th>DAY</th> <th>NIGHT</th> </tr> </thead> <tbody> <tr> <td>Manager's Office</td> <td>50.98</td> <td>47.48</td> </tr> </tbody> </table>	Noise Measurement in dBA			Location	DAY	NIGHT	Manager's Office	50.98	47.48
Noise Measurement in dBA											
Location	DAY	NIGHT									
Manager's Office	50.98	47.48									
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 monitoring of Air quality, Water quality and Noise level are being carried out and found within prescribed limit. Recorded data are being furnished in the Half-yearly compliance report in Annexure-I, II & III									
6.	No change methodology of working and the scope of working should be made without the approval of this Ministry.	There is no change in the mining technology and scope of working. There is no coal production since 19.07.2006.									
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 mono-culture	Adequate plantation has been done already around associated 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, Debadaru, Guava etc. Detailed report is provided in Form – III.									
8.	The project authority should submit to this Ministry a quarterly in respect of environmental control measures.	Half yearly compliance report is being sent on regular basis.									
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.	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									

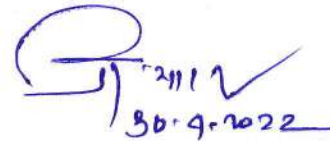
10.	The funds (Both capital and revenue) earmarked for environmental control measures should not be diverted for any other purpose.	<p>The funds earmarked for environmental control measures are being utilized and it is not used for any other purpose. Expenditure towards Environmental protection during the last 3 years are given below;</p> <table border="1" data-bbox="690 257 1388 481"> <thead> <tr> <th>Year</th> <th>Expenditure for Environment Protection</th> </tr> </thead> <tbody> <tr> <td>2017-18</td> <td>19.33 Lakhs</td> </tr> <tr> <td>2018-19</td> <td>22.776 Lakhs</td> </tr> <tr> <td>2019-20</td> <td>13.00 Lakhs</td> </tr> <tr> <td>2020-21</td> <td>12.50 Lakhs</td> </tr> <tr> <td>2021-22</td> <td>15.07 Lakhs</td> </tr> </tbody> </table>	Year	Expenditure for Environment Protection	2017-18	19.33 Lakhs	2018-19	22.776 Lakhs	2019-20	13.00 Lakhs	2020-21	12.50 Lakhs	2021-22	15.07 Lakhs
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2019-20	13.00 Lakhs													
2020-21	12.50 Lakhs													
2021-22	15.07 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.												


 30.4.2022
PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY


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

1	Project type: River-Valley / Mining / Industry / Thermal / Nuclear / Other (Specify)	Mining
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: a) District(s), State(s)	Angul, Odisha
	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/D), Deulbera 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 mine, where coal production discontinued since 19.07.2006
6	Breakup of the Project Area a) Submergence area (forest & non-forest) b) Others	954.101 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	Financial Details: 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	1496 Lakhs Allocation made for EMP – 4.81 lakhs a) Afforestation cost: 3.5 lakhs; b) Pollution measuring cost: 0.58 lakhs; c) Env't. Quality data gen. cost: 0.73 lakhs Yes 1510.75 Lakhs (till 2021-22) 15.07 Lakhs (2021-22)

9	<p>Forest and requirements</p> <p>a) A status of approval of diversion of forest and non-forestry use.</p> <p>b) A status of clean filling in forest and non-forest lands</p> <p>c) Comments on availability and sustainability compensatory afforestation program in the light of actual fell experience so far.</p>	<p>Nil</p> <p>Nil</p> <p>Nil</p>
10	<p>Status of Construction.</p> <p>a) Date of commencement (actual and/or planned)</p> <p>b) Date of completion (actual and/or planned)</p>	<p>1926</p> <p>1928</p>
11	Reason for the delay if the project is yet to start.	NA
12	<p>Date of site visit</p> <p>a) The dated on which the project was monitored by the Regional Officer on the previous occasions if.</p> <p>b) Date of site for the monitoring report.</p>	<p>02.02.2022</p> <p>02.02.2022</p>
13	Details of correspondence with Project Authorities for obtaining action plans information and status of compliance to safeguards.	NA


30.9.2022

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY



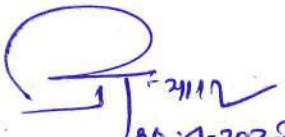
FORM-II

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 : 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


30-4-2022

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY



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

1. a. Name of Organization : MAHANADI COALFIELDS LTD.
b. Env't clearance order No. : 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 : 172.472 Ha
(road, building/factory etc.)
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 2021-22 in each category.

Green belt	Ext dump	B/F Area	Road sides	Block plantations	Remarks
Nil	Nil	Nil	Nil	0.3	Around 200 nos. plantation done in 2021-22

a) Plantation details (Category wise & methodology used)

Year of plantation	Species planted	Spacing	Height attained	Total area covered till Mar'22	Proposed plantation program in 2022-23
1990-91 to 2021-22	As mentioned above	2m x 2m	6 to 9 meter	4.24 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

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

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

12. Remarks /any other information : -NA-

 30/4/2022

**PROJECT OFFICER (T&D/H)
DEULBERA COLLIERY**



ANNEXURE - I

AMBIENT AIR QUALITY REPORT (OCTOBER' 2021 TO MARCH' 2022) DEULBERA UNDERGROUND MINE

MONITORING STATION: IWSS, Talcher

DATE	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
06.10.2021	236	151	46	15.24	26.23	LOCP Railway sidings, Mining activities, local transportation
20.10.2021	291	177	56	16.21	21.58	
08.11.2021	367	226	77	14.94	24.50	
22.11.2021	373	208	69	10.27	14.44	
06.12.2021	126	53	26	24.96	23.15	
20.12.2021	237	156	69	10.90	28.53	
04.01.2022	148	78	36	16.37	27.75	
18.01.2022	133	70	30	18.44	34.31	
03.02.2022	198	133	55	13.69	31.27	
17.02.2022	181	126	48	16.62	27.32	
03.03.2022	165	96	45	18.91	24.40	
16.03.2022	210	120	44	13.20	23.69	
Max (µg/m³)	373	226	77	24.96	34.31	
Min (µg/m³)	126	53	26	10.27	14.44	
Avg. (µg/m³)	222.08	132.83	50.08	15.81	25.60	

ANNEXURE - II

MINE STRATA WATER QUALITY REPORT (OCTOBER' 2021 TO MARCH' 2022)

1) Pit Top Pump Outlet:

DATE	pH	O & G	TSS	COD
12.10.2021	7.62	<4.0	70	56
30.10.2021	6.67	<4.0	56	48
13.11.2021	6.33	<4.0	28	20
30.11.2021	7.30	<4.0	22	20
14.12.2021	7.26	<4.0	34	48
29.12.2021	6.47	<4.0	24	48
14.01.2022	6.62	<4.0	16	28
28.02.2021	7.57	<4.0	18	12
14.02.2022	7.32	<4.0	26	16
26.02.2022	7.26	<4.0	38	20
14.03.2022	7.09	<4.0	26	32
30.03.2022	7.01	<4.0	34	28
Max (mg/L)	7.62	<4.0	70	56
Min (mg/L)	6.33	<4.0	16	12
Avg. (mg/L)	7.04	<4.0	32.67	31.33

2) Ranipark Pump Outlet:

DATE	pH	O & G	TSS	COD
12.10.2021	7.67	<4.0	76	68
30.10.2021	7.12	<4.0	64	52
13.11.2021	6.41	<4.0	24	16
30.11.2021	7.58	<4.0	26	28
14.12.2021	7.63	<4.0	62	36
29.12.2021	6.56	<4.0	16	8
14.01.2022	7.28	<4.0	32	20
28.01.2022	7.45	<4.0	22	8
14.02.2022	7.55	<4.0	28	24
26.02.2022	7.68	<4.0	44	28
14.03.2022	7.34	<4.0	24	20
30.03.2022	7.45	<4.0	32	16
Max (mg/L)	7.68	<4.0	76	68
Min (mg/L)	6.41	<4.0	16	8
Avg. (mg/L)	7.31	<4.0	37.50	27.00

ANNEXURE - III

NOISE LEVEL REPORT (OCTOBER' 2021 TO MARCH' 2022) DEULBERA U/G MINE

NOISE LEVEL MEASUREMENT IN dB(A)

DATE	1) Manager's Office	
	Day dB(A)	Night dB(A)
13.10.2021	51.8	50.3
29.10.2021	55.0	51.6
13.11.2021	51.8	50.3
29.11.2021	55.0	51.6
13.12.2021	48.7	45.6
28.12.2021	52.1	47.3
08.01.2022	44.0	41.1
22.01.2022	56.5	50.0
09.02.2022	47.8	45.1
23.02.2022	51.2	47.5
09.03.2022	52.3	48.2
23.03.2022	45.6	41.2
Max (dBA)	56.5	51.6
Min (dBA)	44	41.1
Avg. (dBA)	50.98	47.48

ANNEXURE-IV

WELL WATER LEVEL MONITORING DATA (OCTOBER' 2021 TO MARCH' 2022)

Date of sampling	Name of the station	Depth from GL (in Meter)
27.11.2021	Deulbera village well	1.81
24.01.2022	Deulbera village well	1.81

