

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/2020-21/ 1380

Date: 25/11/2020

To
The Additional Director,
Ministry of Environment Forest & Climate Change,
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'2020 to September'2020.

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.)

25.11.2020

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY

HALF YEARLY PROGRESS REPORT OF
COMPLIANCE WITH ENVIROMENTAL
CLEARANCE CONDITIONS

(APRIL-2020 TO SEPTEMBER-2020)

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</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;">25.62</td> <td style="text-align: center;">77.5</td> <td style="text-align: center;">10.63</td> <td style="text-align: center;">17.46</td> <td style="text-align: center;">131.5</td> </tr> </tbody> </table>	Location/	Parameters	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Manager's Office	Avg.	25.62	77.5	10.63	17.46	131.5
Location/	Parameters	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM										
Manager's Office	Avg.	25.62	77.5	10.63	17.46	131.5										
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;">Ranipark Submersible pump</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">7.26</td> <td style="text-align: center;">< 4.0</td> <td style="text-align: center;">34.18</td> <td style="text-align: center;">36.72</td> </tr> </tbody> </table>	Location/	Parameters	pH	O&G	TSS	COD	Ranipark Submersible pump	Avg.	7.26	< 4.0	34.18	36.72		
Location/	Parameters	pH	O&G	TSS	COD											
Ranipark Submersible pump	Avg.	7.26	< 4.0	34.18	36.72											

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="651 712 1353 833"> <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>60.10</td> <td>56.38</td> </tr> </tbody> </table>	Noise Measurement in dBA			Location	DAY	NIGHT	Manager's Office	60.10	56.38
Noise Measurement in dBA											
Location	DAY	NIGHT									
Manager's Office	60.10	56.38									
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, Tamarind, 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="691 264 1233 450"> <thead> <tr> <th data-bbox="691 264 879 324">Year</th> <th data-bbox="879 264 1233 324">Expenditure for Environment Protection</th> </tr> </thead> <tbody> <tr> <td data-bbox="691 324 879 365">2017-18</td> <td data-bbox="879 324 1233 365">19.33 Lakhs</td> </tr> <tr> <td data-bbox="691 365 879 405">2018-19</td> <td data-bbox="879 365 1233 405">22.776 Lakhs</td> </tr> <tr> <td data-bbox="691 405 879 450">2019-20</td> <td data-bbox="879 405 1233 450">16.28 Lakhs</td> </tr> </tbody> </table>	Year	Expenditure for Environment Protection	2017-18	19.33 Lakhs	2018-19	22.776 Lakhs	2019-20	16.28 Lakhs
Year	Expenditure for Environment Protection									
2017-18	19.33 Lakhs									
2018-19	22.776 Lakhs									
2019-20	16.28 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.								

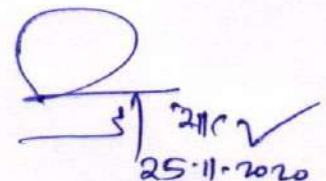

 28.11.2020 ✓


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
: Deulbera Colliery (UG) |
| 2. Name of the Project | : J – 11015/5/91.1A-1D, dated. 22.6.1992 |
| 3. Clearance letter(s) OM No. & dt. | |
| 4. Location: | : Angul, Odisha |
| a) District(s), State(s) | : Sri D.Sahoo, Project Officer, (T&H/D)
Deulbera Colliery, Dist-Angul (Odisha),
Ph.06760-269955 (O) |
| 5. a) Address of concerned project Chief Engineer
(with pin code & Telephone/Telex/Fax Nos.) | |
| b) Address of Executive Project Engineer Manager
with Pin code and Telephone/Telex/Fax Nos.) | : It is a discontinued underground coal
mine project |
| 6. Salient Features: | |
| a) Of the Project | |
| b) Of the Environment Manager plans | No Production since Aug'2006 |
| 7. Breakup of the Project Area | |
| a) Submergence area (forest & non-forest) | : - NA - |
| b) Others | : - NA - |
| 8. 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 | : - NA - |
| b) Others | : - NA - |
| 9. <i>Financial Details</i> | |
| a) Project costs as originally planned and
subsequent revised estimates and the years of price
reference. | : 1496 Lakhs |
| b) Allocation made for environment management
plans, with item wise and year wise breakup. | : Allocation made for EMP – 4.81 lakhs |
| c) Benefit cost ratio/interest rate of return and year
assessment. | a) Afforestation cost: 3.5 lakhs;
b) Pollution measuring cost: 0.58 lakhs;
c) Env't. Quality data gen. cost: 0.73 lakhs |
| d) Whether © includes the cost of environment
management as shown in (B) above. | : Yes |
| e) Actual expenditure incurred on the Project so
far | : 1479.75 lakhs |
| f) Actual expenditure incurred on the environment
management plans | : 16.28 Lakhs (2019-20) |

- | | |
|---|------------|
| 10. Forest and requirements | |
| a) A status of approval of diversion of forest and non-forestry use. | -NA- |
| b) A status of clean filling in forest and non-forest lands | -NA- |
| c) Comments on availability and sustainability compensatory afforestation program in the light of actual fell experience so far. | -NA- |
| 11. Status of Construction. | |
| a) Date of commencement (actual and/or planned) | 1928 |
| b) Date of completion (actual and/or planned) | -NA- |
| 12. Reason for the delay if the project is yet to start. | -NA- |
| 13. Date of site visit | |
| a) The dated on which the project was monitored by the Regional Officer on the previous occasions if. | 04.03.2020 |
| b) Date of site for the monitoring report. | 04.03.2020 |
| 14. Details of correspondence with Project Authorities for obtaining action plans information and status of compliance to safeguards. | -NA- |


 25.11.2020

PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY



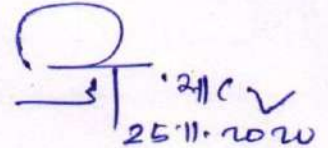
FORM-II

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


25.11.2020



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
(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 2020-21 in each category.

Green belt	Ext dump	B/F Area	Road sides	Block plantations	Remarks
Nil	Nil	Nil	Nil	0.02	-

a) Plantation details (Category wise & methodology used)

Year of plantation	Species planted	Spacing	Height attained	Total area covered till Sep'20	Plantation done in 2020-21
1990 - to- 2020	As mentioned above	2m x 2m	6 to 9 meter	3.86 Ha	50

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	0.05	0.05	100

SI No	Year	Fund allocated for distribution of plants	Expenditure made	Average cost for each plants
1	2014-15	0.26 lakhs	0.26 lakhs	Rs.26.2/plant
2	2015-16	0.46 lakhs	0.46 lakhs	Rs.23.0/plant
3	2016-17	3.24 lakhs	3.24 lakhs	Rs.32.4/plant
4	2017-18	3.15 Lakhs	3.15 lakhs	Rs.31.5/plant
5	2018-19	-	-	-
6	2019-20	3.35 Lakhs	3.35 Lakhs	Rs.33.5/plant
7	2020-21	3.07 Lakhs	3.07 Lakhs	Rs.30.7/plant

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

12. Remarks /any other information : -NA-

ANNEXURE - I

AMBIENT AIR QUALITY REPORT (APRIL' 2020 TO SEPTEMBER' 2020) DEULBERA UNDERGROUND MINE

MONITORING STATION: MANAGER'S OFFICE

DATE	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
16.04.2020						Monitoring was not done amidst COVID-19
30.04.2020						
15.05.2020						
29.05.2020						
12.06.2020	35	98	11.68	17.23	155	
29.06.2020	19	96	13.87	17.62	162	
11.07.2020	21	82	11.31	16.35	183	
25.07.2020	20	55	11.12	16.75	99	
13.08.2020	38	107	10.57	14.17	157	
28.08.2020	28	66	7.73	20.11	107	
04.09.2020	20	57	9.30	15.43	96	
17.09.2020	24	59	9.49	22.05	93	
Avg. (µg/m³)	25.62	77.50	10.63	17.46	131.5	


PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY

ANNEXURE - II

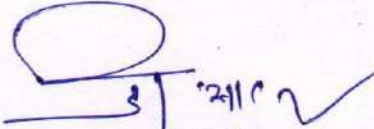
MINE STRATA WATER QUALITY REPORT (APRIL' 2020 TO SEPT' 2020) DEULBERA U/G MINE


1) Rani Park Submersible Pump Outlet:

DATE	pH	O & G	TSS	COD
11.04.2020	-	-	-	-
28.04.2020	7.60	-	32	48
11.05.2020	7.17	< 4.0	30	48
21.05.2020	7.66	< 4.0	28	36
11.06.2020	7.42	< 4.0	20	44
29.06.2020	7.64	< 4.0	18	36
13.07.2020	7.24	< 4.0	28	20
22.07.2020	6.53	< 4.0	58	40
14.08.2020	6.98	< 4.0	24	32
24.08.2020	7.54	< 4.0	74	64
14.09.2020	7.10	< 4.0	28	16
24.09.2020	6.98	< 4.0	36	20
Avg. (mg/L)	7.51	< 4.0	24.72	30.54

2) Pit top Mine discharge water:

DATE	pH	O & G	TSS	COD
11.04.2020	-	--	-	-
28.04.2020	7.67	< 4.0	20	44
11.05.2020	7.81	< 4.0	20	52
21.05.2020	7.87	< 4.0	18	48
11.06.2020	7.63	< 4.0	22	36
29.06.2020	7.64	< 4.0	18	36
13.07.2020	7.24	< 4.0	28	20
22.07.2020	7.66	< 4.0	22	16
14.08.2020	7.67	< 4.0	26	16
24.08.2020	7.36	< 4.0	32	24
14.09.2020	7.06	< 4.0	42	32
24.09.2020	7.05	< 4.0	24	12
Avg. (mg/L)	7.26	< 4.0	34.18	36.72


25.11.2020

 PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY

ANNEXURE - III

NOISE LEVEL REPORT (APRIL' 2020 TO SEPTEMBER' 2020) DEULBERA U/G MINE

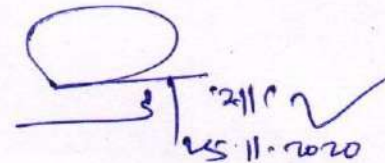
NOISE LEVEL MEASUREMENT IN dB(A)


DATE	1) Manager's Office	
	Day dB(A)	Night dB(A)
11.04.2020	-	-
28.04.2020	67.5	65.2
09.05.2020	56.2	55.2
29.05.2020	61.2	60.0
12.06.2020	62.6	51.0
22.06.2020	63.5	60.0
13.07.2020	59.2	53.6
22.07.2020	66.0	60.1
07.08.2020	57.4	55.3
25.08.2020	55.01	50.07
04.09.2020	57.3	57.1
17.09.2020	55.2	52.7
Avg. (in dBA)	60.10	56.38

ANNEXURE-IV

WELL WATER LEVEL MONITORING DATA LOCATION: DEULBERA VILLAGE WELL

Date of sampling	Name of the station	Depth from GL (in Meter)
23.05.2020	Deulbera village well	4.30
14.08.2020	Deulbera village well	3.00


25.11.2020

 PROJECT OFFICER (T&H/D)
DEULBERA COLLIERY