



**Mahanadi  
Coalfields  
Limited**  
(A Subsidiary of Coal India Limited)  
A Mini Ratna Company

# MAHANADI COALFIELDS LIMITED

(A Subsidiary of Coal India Limited)

OFFICE OF THE PROJECT OFFICER (T&H)/DLB  
TALCHER COLLIERY

PO: DERA, DIST :-ANGUL (O) PIN-759 103  
Tel:-06760 269955, Email -potalcher@gmail.com

No.PO(T&H)/Talcher/Half-yrly/EC Compliance report/2021-22/ 18

Date: 20 /05/2021

To

The Additional Director,  
Ministry of Environment Forest & Climate Change,  
Eastern Zonal Office,  
A-3, Chandrashekharapur,  
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 Oct'2020 to Mar'2021.

This is for your kind information & necessary action.

Encl: As above.

Yours faithfully

20.5.2021.

PROJECT OFFICER (T&H/D)  
TALCHER COLLIERY

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

**Copy to:-**

1. The Colliery Manager, Talcher Colliery.
2. The Area Environment Officer, Talcher Area (with Encl.)
3. 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**

**(OCTOBER-2020 TO MARCH-2021)**

**TALCHER U/G MINE (0.27MTY)**



**MCL**

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

# Present Status of the Project

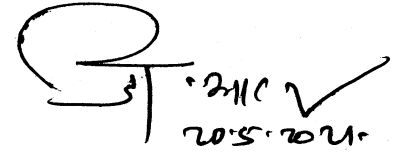
*The coal production in Talcher Colliery is temporarily suspended since dt.24.02.2018 due to access restriction as per Clause No.158 of CMR Act'2017.*

## COMPLIANCE OF EC CONDITIONS OF TALCHER COLLIERY

Sl. No	EC Conditions	Compliance Status																					
1.	The SPM level in the ambient air should not exceed 500 µg/m at any observation point within the mine leasehold. The emissions of SO <sub>2</sub> , NO and CO should be maintained below the levels prescribed by the competent authority.	<p>SPM, SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> are being monitored on fortnightly basis and mitigative measures are being taken. The average values of parameters are given below which are found to be within the prescribed limits.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="width: 15%;">Location</th> <th style="width: 10%;">Parameters</th> <th style="width: 15%;">PM<sub>2.5</sub> (µg/m<sup>3</sup>)</th> <th style="width: 15%;">PM<sub>10</sub> (µg/m<sup>3</sup>)</th> <th style="width: 15%;">SO<sub>2</sub> (µg/m<sup>3</sup>)</th> <th style="width: 15%;">NO<sub>x</sub> (µg/m<sup>3</sup>)</th> <th style="width: 15%;">SPM (µg/m<sup>3</sup>)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">GM Office</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">44.0</td> <td style="text-align: center;">139.41</td> <td style="text-align: center;">16.64</td> <td style="text-align: center;">28.83</td> <td style="text-align: center;">242.83</td> </tr> <tr> <td style="text-align: center;">Canteen, Talcher colliery</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">49.08</td> <td style="text-align: center;">142.50</td> <td style="text-align: center;">16.44</td> <td style="text-align: center;">30.47</td> <td style="text-align: center;">232.50</td> </tr> </tbody> </table> <p>Detailed data of Ambient Air Quality are provided in <b>Annexure – I</b></p>	Location	Parameters	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	SPM (µg/m <sup>3</sup> )	GM Office	Avg.	44.0	139.41	16.64	28.83	242.83	Canteen, Talcher colliery	Avg.	49.08	142.50	16.44	30.47	232.50
Location	Parameters	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	SPM (µg/m <sup>3</sup> )																	
GM Office	Avg.	44.0	139.41	16.64	28.83	242.83																	
Canteen, Talcher colliery	Avg.	49.08	142.50	16.44	30.47	232.50																	
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 is being treated at Treatment plant and quality of effluent is regularly monitored. The average values of parameters are given below which are found to be within the prescribed limits.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="width: 15%;">Location</th> <th style="width: 10%;">Parameters</th> <th style="width: 15%;">pH</th> <th style="width: 15%;">O&amp;G</th> <th style="width: 15%;">TSS</th> <th style="width: 15%;">COD</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Mine Discharge water</td> <td style="text-align: center;">Avg.</td> <td style="text-align: center;">7.32</td> <td style="text-align: center;">&lt; 4.0</td> <td style="text-align: center;">27.16</td> <td style="text-align: center;">34.67</td> </tr> </tbody> </table> <p>Detailed data of Effluent Quality are provided in <b>Annexure – II</b></p>	Location	Parameters	pH	O&G	TSS	COD	Mine Discharge water	Avg.	7.32	< 4.0	27.16	34.67									
Location	Parameters	pH	O&G	TSS	COD																		
Mine Discharge water	Avg.	7.32	< 4.0	27.16	34.67																		
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.	<p>There is no occurrence of subsidence so far, so the original land use pattern is not disturbed due to mining operation.</p>																					

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. Necessary arrangement for noise reduction has been provided at fan house. Regular monitoring of noise is being done and noise level found within the prescribed standard.</p> <table border="1" data-bbox="759 219 1465 432"> <thead> <tr> <th colspan="5">Noise Level Measurement (dBA)</th> </tr> <tr> <th rowspan="2">Location</th> <th colspan="2">1) GM Office</th> <th colspan="2">2) Canteen, Talcher Colliery</th> </tr> <tr> <th>Day</th> <th>Night</th> <th>Day</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>Avg.</td> <td>60.66</td> <td>56.56</td> <td>60.97</td> <td>57.57</td> </tr> </tbody> </table> <p>Detailed data of Noise level are provided in <b>Annexure – III</b></p>	Noise Level Measurement (dBA)					Location	1) GM Office		2) Canteen, Talcher Colliery		Day	Night	Day	Night	Avg.	60.66	56.56	60.97	57.57
Noise Level Measurement (dBA)																					
Location	1) GM Office		2) Canteen, Talcher Colliery																		
	Day	Night	Day	Night																	
Avg.	60.66	56.56	60.97	57.57																	
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, water and noise level are being carried out and are found within prescribed limit. Recorded data of air, water & noise quality are being furnished in the Annexure-I, II & III respectively.																			
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 methodology of working.																			
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	<p>As per EMP, adequate plantation has been done around associated industrial complete residential colony. Thus afforestation scheme has been done based on mixed culture especially indigenous species. Details of total plantation done are as follows;</p> <table border="1" data-bbox="759 1155 1433 1272"> <thead> <tr> <th>Year of plantation</th> <th>Total area covered</th> <th>No of Plants</th> <th>Expenditure</th> </tr> </thead> <tbody> <tr> <td>1990-2020</td> <td>42.5 Ha</td> <td>1,05,568 Nos</td> <td>35.05 Lakhs</td> </tr> </tbody> </table> <p>Detailed data of plantation are provided in <b>Annexure – V</b></p>	Year of plantation	Total area covered	No of Plants	Expenditure	1990-2020	42.5 Ha	1,05,568 Nos	35.05 Lakhs											
Year of plantation	Total area covered	No of Plants	Expenditure																		
1990-2020	42.5 Ha	1,05,568 Nos	35.05 Lakhs																		
8.	The project authority should submit to this Ministry a quarterly in respect of environmental control measures.	Environmental control measures report is being sent in terms of compliance report on Half-yearly basis.																			
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 environment management cell with suitably qualified personal is established under the control of Senior technical person who can directly report to General Manager of the area. 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.</p> <p>Expenditure of Environmental protection in the last 3 years are given below:</p> <table border="1" data-bbox="850 331 1441 528"> <thead> <tr> <th>Year</th> <th>Expenditure for Environment Protection</th> </tr> </thead> <tbody> <tr> <td>2018-19</td> <td>26.28 Lakhs</td> </tr> <tr> <td>2019-20</td> <td>28.00 Lakhs</td> </tr> <tr> <td>2020-21</td> <td>31.95 Lakhs</td> </tr> </tbody> </table>	Year	Expenditure for Environment Protection	2018-19	26.28 Lakhs	2019-20	28.00 Lakhs	2020-21	31.95 Lakhs
Year	Expenditure for Environment Protection									
2018-19	26.28 Lakhs									
2019-20	28.00 Lakhs									
2020-21	31.95 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.								

  
 20.5.2021 ✓

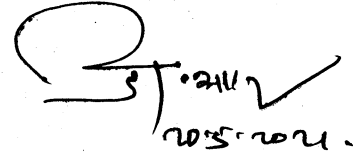
**PROJECT OFFICER (T&H/D)**  
**TALCHER COLLIERY**



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

1	Project type: River-Valley / Mining / Industry / Thermal / Nuclear / Other (Specify)	Mining
2	Name of the Project	Talcher 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), 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 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	<b>Financial Details:</b> 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	3869 Lakhs  Allocation made for EMP – 31.54 lakhs a) Afforestation cost: 2.8 lakhs; b) Pollution measuring cost: 12.32 lakhs; c) Env't. Quality data gen. cost: 16.42 lakhs  Yes  47.43 Crores  31.95 Lakhs (2020-21)
9	Forest and requirements 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.	Nil Nil Nil

10	Status of Construction. a) Date of commencement (actual and/or planned) b) Date of completion (actual and/or planned)	1926 1928
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 monitored by the Regional Officer on the previous occasions if. b) Date of site for the monitoring report.	22.01.2021 22.01.2021
13	Details of correspondence with Project Authorities for obtaining action plans information and status of compliance to safeguards.	NA

  
20.05.2021

**PROJECT OFFICER (T&H/D)**  
**TALCHER 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 <table border="1"><tr><td>State/Centre Norms</td><td>Project package</td></tr><tr><td colspan="2">As per State Government R&amp;R policy</td></tr></table>	State/Centre Norms	Project package	As per State Government R&R policy		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				

  
20.05.2021  
PROJECT OFFICER (T&H/D)  
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. Env't 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, 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  
available in the area : Sal, Kendu, Mango, Pattas & grass etc  
: 1,01,568 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 Noc.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
1.0 Ha	Nil	Nil	Nil	2000	Fruit bearing plants and forestry species were planted

0) Plantation details (Category wise & methodology used)

Year of plantation	Species planted	Spacing	Height attained	Total covered area till Mar'21	Propose plantation program in 2021-22
1990-91 to 2020-21	Indigenous species	2m x 2m	5 to 8 meter	42.5 Ha	500 nos

0) 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)