



**STATE FOREST HEADQUARTERS
OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS, ODISHA,
BHUBANESWAR**

No. **18581** /9F (MG) - 35/2021
Dated, Bhubaneswar the **03-11-2021**

From

Uma Nanduri, IFS
Additional Principal CCF (FD & NO, FC Act)
O/o the PCCF & HoFF, Odisha, Bhubaneswar

To

The Assistant Inspector General of Forests (FC)
Government of India
Ministry of Environment, Forests & Climate Change (F.C. Division)
Indira Paryavaran Bhawan, Aliganj, Jor Bagh Road
New Delhi-110003



Sub:- **Diversion of 349.709 ha. of forest land within total mining lease area of 2290.449 ha in Siarmal Open Cast Coal Mining Project by Mahanadi Coalfields Ltd. (MCL) in Sundargarh District, Odisha - Compliance regarding.**

Ref:- Govt. of India MoEF & CC, New Delhi Letter F.No.8-25/2021-FC dated 05.10.2021

Sir,

In inviting a reference to the aforementioned subject, the compliance to the observations of Govt. of India, MoEF & CC, New Delhi dated 05.10.2021 is furnished below basing on the reports of DFO, Sundargarh Forest Division and RCCF, Rourkela Circle.

- 1) DSS analysis of the degraded forest land proposed for CA land revealed that out of total area of 712.477 ha proposed for CA, an area of 128 falls under MDF category, 556 under OF category, 1 ha under water body and 27 ha as non-wooded area. Suitability of 128 ha of degraded forest land revealed as MDF needs to be re-visited by the State.**

In compliance to the above, the RCCF, Rourkela Circle has reported that in Dec'2019, a patch of Satparlia RF was identified & demarcated after due DSS verification. A snapshot of the DSS map then taken, is as shown in Fig 01:-

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KSP
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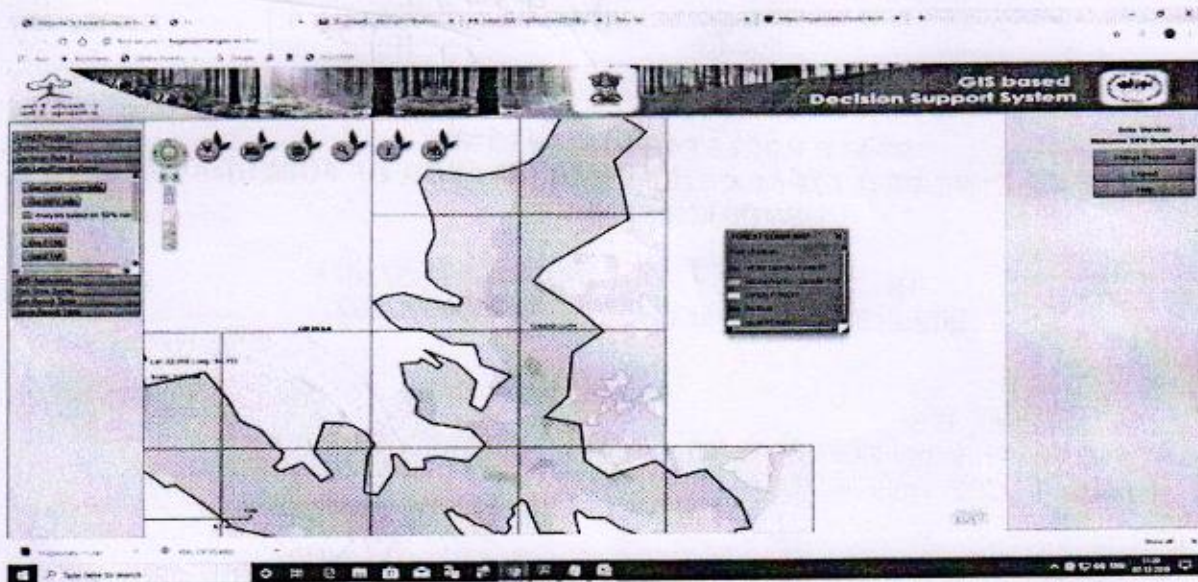


Fig 01: DSS map of Satparlia RF identified for CA as on Dec'2019.

Accordingly, the DFO, Sundargarh Forest Division has prepared the compensatory afforestation scheme over 581 ha excluding MDF area and water body. The CA Scheme has been prepared to take up ANR plantation @800 seedlings per ha over 581 ha which has been enclosed in the Diversion Proposal. Soil and moisture conservation will be taken up in MDF area.

- 2) Important wild life species reported in the area include hyena, porcupines, black bear, spotted deer, wild boar, barking deer, Jackal, mongoose, etc. The State Government may therefore comment on the requirement of mitigating measures, if any, required to be undertaken for the protection and conservation of the species.**

In compliance to the above, the RCCF, Rourkela Circle has reported that as per site inspection report, the wildlife species reported in the area are hyena, porcupines, black bear, spotted deer, wild boar, barking deer, Jackal, mongoose, etc. & hence mitigating measures are required to be undertaken for protection and conservation of the wildlife. The user agency has submitted an undertaking to pay the cost towards Site Specific Wildlife Conservation Plan which is enclosed at Page 798 of the DP. The mitigative measures will be taken up basing on the latest guidelines issued by the Govt. of Odisha, FE&CC Department vide Letter No. 16250/FE&CC dated 13.09.2021.

- 3) As per justification, submitted online, it is indicated that project under extant coal block also covers other areas viz. Siarmal Extension and Banapatra. State Government, may therefore, inform the status of additional forest land, if any, involved in these additional areas and status of approval, if any obtained or being obtained may also be intimated.**

In compliance to the above, the RCCF, Rourkela Circle has reported that the Siarmal OCP has been formulated taking the complete Siarmal & Siarmal Extension block and Banapatra block in the Gopalpur Sector of Ib-valley coalfield, thereby Siarmal Extension

and Banapatra coal block are also integral part of Siarmal OCP Project. Accordingly, the proposal is for complete Forest Diversion of 349.709 ha of forest land involved in Siarmal Open Cast Coal Mining Project of Mahanadi Coalfields Ltd and no additional forest land is involved beyond the stated lease hold boundary of the project for coal mining purpose. The above details have been mentioned in summarised data of the Mine Plan enclosed in the Diversion Proposal at Page 245/DP. Hence, no additional forest land is required in this project.

- 4) Cost benefits analysis submitted along with the proposal appears to be a economical analysis carried out for the project. Cost benefits Analysis, taking into consideration, the ecological parameters, as envisaged in the guidelines dated 29.01.2018 have not been estimated. Therefore, Cost benefit analysis in accordance with the relevant guidelines taking into account all specified parameters needs to be estimated and submitted by the State.**

In compliance to the above, the RCCF, Rourkela Circle has reported that the Cost Benefit Analysis has been duly prepared as per guidelines of forest manual circulated on 28.03.2019 and has been attached at Page No.198-202/DP. It is seen that, the guidelines dated 29/01/2018 does not mention anything in relation to Cost Benefit Analysis.

- 5) With regards to drainage system of the area, it is reported that Basundhara River, Telendra/ Chaturdhara & Chattajor nullah flows around periphery of block. Measure proposed to be undertaken by the User Agency to mitigate the impact of mining on the local drainage system may be intimated by the State.**

In compliance to the above, the RCCF, Rourkela Circle has reported that the assessment of impact and control measures on hydrology & hydro-geology has been provided in the Chapter-4, Para 4.2 of the EIA-EMP of Siarmal OCP uploaded in the Parivesh portal of MoEF&CC, GOI.

Basundhara river/nala & Chaturdhara nala, flow along the northern boundary of the Block and Chattajor nala towards eastern boundary of the block. The drainage system of the area will remain undisturbed as there is no proposed nalla diversion. However, straightening of Chattajor is proposed.

As reported by the DFO, Sundargarh Division, it is proposed by the User Agency to construct an embankment with a height of 3 m above HFL against Basundhara river, Chaturdhara & Chattajor Nala. The embankment will be constructed during the initial years i.e. soon after the commencement of OB removal, the embankment work will start with the OB material of the mine. A quantity of 1.51 Mm³ OB will be accommodated in the embankment work. A provision of Rs. 42.51 Crs is kept for embankment work. A part of Chhattajor nala will be straightened at the cost of Rs.6.52 crs covering a length of 500m. The HFL will again be ascertained & precautions will be taken before taking up during the mining activities.

As reported by the DFO, Sundargarh Division, adequate numbers of vegetation will be grown on the top surface and slopes of the dumps & embankments by the User Agency in order to arrest the erosion of soil and it will also reduce surface runoff, which will help in averting siltation of natural watercourses. In order to arrest siltation from dumps, catch drains and garland drains of adequate size will be constructed around the periphery of Overburden Dumps. Also, garland drains of adequate size will be provided around the quarry edges. These drains will be regularly de-silted before onset of every monsoon.

During working stage, the run-off will be collected from internal dump by foot drain for diverting to mine sump for pumping and further industrial use.

In the post-mining period, the drainage pattern of the reclaimed area will be such that the run-off will be diverted to final void of the quarry which will be developed as a water reservoir for water harvesting and also recharging the aquifer in the surrounding area.

In this context, the user agency has submitted an undertaking for the proposed measures which is enclosed as **Annexure "I"**.

- 6) In addition to land use proposed in the Mining Plan, an area of 823 ha has also been proposed to be acquired outside the lease/project area for infrastructure and dumping facilities. Detail of forest land, if any involved in the area proposed to be acquired outside the lease may be intimated by the State.**

In compliance to the above, the RCCF, Rourkela Circle has reported that the total lease hold area of 2290.449 comprises the said area of 823 ha & accordingly the total forest land of 349.709 ha proposed for diversion under Forest Conservation Act, 1980 includes forest land for mining, infrastructure, dumping and other required activities essential for the project within the total lease hold area of 2290.449 ha. So, there is no proposal to acquire land outside the lease hold area.

- 7) Detail of coal evacuation plan from the mine to nearest railway siding is not available in the proposal. The same needs to be intimated by the State.**

In compliance to the above, the RCCF, Rourkela Circle has reported that the detailed coal evacuation plan taking into consideration of the nearest railway siding and the Rapid loading systems/ SILO which are planned to be constructed at Barapali in the future and is expected to be commissioned during 2025-26 which is enclosed as **Annexure "II"**.

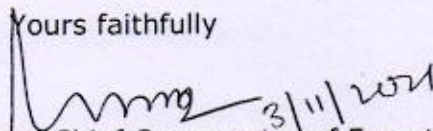
- 8) As per the relevant guidelines issued by the MoEF & CC, compliance of Forest Rights Act, 2006 is to be ensured by the Ministry at the time of Stage-II approval, however, an undertaking informing the initiation of process has to be submitted along with the proposal. Status of initiation of process of settlement of rights under the Forest Right Act, 2006 may be intimated by the State.**

In compliance to the above, the user agency has furnished an undertaking regarding the initiation of process of obtaining NOC under FRA and the current status which is attached herewith in **Annexure "III"**.

In view of the above, it is requested to kindly convey the Stage-I approval under Section 2(ii) of Forest (Conservation) Act, 1980 for diversion of 349.709 ha. of forest land within total mining lease area of 2290.449 ha in Siarmal Open Cast Coal Mining Project by Mahanadi Coalfields Ltd. (MCL) in Sundargarh District, Odisha

Encl-Annexure I to III (in one set)

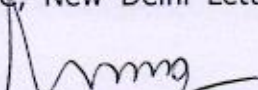
Yours faithfully


Addl. Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. 18582 / Dt. 03-11-2021

Copy alongwith its enclosures forwarded to the the Deputy Director General of Forests (Central), Government of India, Ministry of Environment, Forest & Climate Change, Integrated Regional Office, A/3, Chandrasekharpur, Bhubaneswar-751023 for information and necessary action with reference to GoI, MoEF & CC, New Delhi Letter issued vide F.No.8-25/2021-FC dated 05.10.2021.

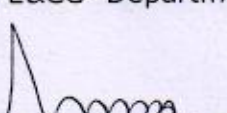
Encl-Annexure I to III (in one set)


Addl. Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. 18583 / Dt. 03-11-2021

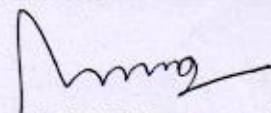
Copy alongwith its enclosures forwarded to the Additional Chief Secretary to Government, Forest, Environment & Climate Change Department, Odisha, Bhubaneswar for information and necessary action with reference to FE&CC Department Memo No. 18189/FE&CC dated 08.10.2021.

Encl-Annexure I to III (in one set)


Addl. Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

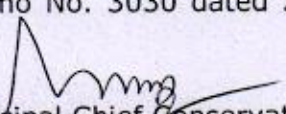
Memo No. /Dt.

Copy forwarded to the RCCF, Rourkela Circle for information and necessary action with reference to his Memo No. 3029 dated 27.10.2021.


Addl. Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

Memo No. /Dt.

Copy forwarded to the Divisional Forest Officer, Sundargarh Forest Division for information and necessary action with reference to Memo No. 3030 dated 27.10.2021 of RCCF, Rourkela Circle.


Addl. Principal Chief Conservator of Forests
Forest Diversion & Nodal Officer, FC Act

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महानदी कोलफील्ड्स लिमिटेड
Mahanadi Coalfields Limited
(subsidiary of Coal India Limited)

Office of the General Manager
Mahalaxmi-Area
AT/PO:-Basundhara-770076
Dist:-Sundargarh (Orissa)

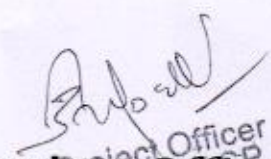


MCL

UNDERTAKING

It is hereby undertaken that all measures will be taken to mitigate the impact of mining within Siarmal OCP on the local drainage system.

It is also undertaken that an embankment against Basundhara river, Chaturdhara & Chattajhor Nala will be constructed during the initial years i.e. soon after the commencement of OB removal. A quantity of 1.51 Mm³ OB will be accommodated in the embankment work. A provision of Rs. 42.51 Crs has been kept for the embankment work. A part of Chhattajhor nala will be straightened at the cost of Rs.6.52 crs covering a length of 500m. The HFL will again be ascertained & precautions will be taken before taking up the mining activities.


Project Officer
Siarmal OCP

COAL EVACUATION PLAN

1.1 Justification of opening the Project

There is huge gap between demand & availability of coal at present & may continue unless capacity addition by way of bringing new projects are taken up. New coal linkages have been given to MCL for which MCL has already issued LOA. The proposed Siarmal project will meet the coal demand from the coalfields, especially to the new consumers & reduce the gap between demand & supply.

1.2 Utility or Market for the Coal from Mine/Project

The coal produced from the proposed project will be linked to various Thermal Power Stations for power generation, both within state & outside state.

1.3 Available linkage or firm fuel supply agreement (FSA)

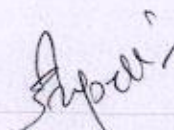
There is high demand of coal for throughout the country, especially power grade coal. So there will be no dearth of consumers for the project.

As per the data collected from MCL, LOA issued for around 33.70 MTY of coal to various new consumers, may be supplied coal from IB Valley Coalfields, Siarmal OCP will meet the demand of 40 MT. The consumer wise quantity may be known after signing of FSA, which are to be executed after achieving the desired milestones as per the guidelines of NCDP-2007

1.4 Description of Coal Flow

As an interim arrangement for initial 5 years till commissioning of Barpalli loop, the coal will be dispatched through nearby Sardega Siding.

The coal shall be delivered into railway wagons by means of road transport to the 20 MTPA RLS being constructed near Sardega Railway Siding / Pay loader loading at Sardega Railway Siding until the 5th year from the date of commissioning of the project until Barpali Loop is commissioned.


Project Officer
Siarmal OCP

Production Year	Coal Offtake in Mt	Mode of Dispatch towards Sardega Railway Siding	
		Road (in km)	Conveyor belt (in km) (through 20 MPTA RLS at Sardega)
1	1.50	8.20	---
2	4.00	8.20	---
3	7.00	6.60	1.6
4	10.00	6.60	1.6
5	15.00	6.60	1.6

- From above table it can be observed that for initial 2 years the coal will be dispatched by road to the nearest Sardega Railway Siding only, till the commissioning of 20 MPTA RLS at Sardega.
- However after 2 years lead distance of road will be 6.6 km and remaining 1.6 will be dispatched through belt.

After commissioning of Barpali Loop, the coal shall be delivered into the Railway Wagons at Rapid Loading System (RLS)/ SILO to be constructed at Barpali Loop. The acquisition of land & rail connectivity at Barpali loop is being taken up by SE Railways and is expected to be commissioned in 2025-26.

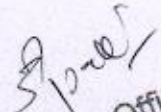
- ON SURFACE NEAR FIRST ACCESS TRENCH** Initially, the blast free coal from the quarry will be transported by dumpers and loaded onto the Reclaim feeder installed on surface. For conventional ROM coal of (-) 1200 mm brought by dumpers from the quarry shall be unloaded into the two stage feeder breaker. The coal fed to hoppers of the Primary crusher unit

[Signature]
Project Officer
Sirmal OCP

for the output size (-) 250mm. To get (-) 100mm size of coal, the coal have to be fed into the Secondary crusher units. The feeder breaker will be of integrated unit consisting primary crusher, Chain Conveyor to transfer coal and Secondary Crusher to further crush coal up to (-)100mm. The sized and blast free coal will be collected by a 1600mm wide belt conveyor C1A/B/C/D (Main stream) from the sizers as well as from the reclaim feeders via two conveyors (S1, S2, P7 & P8) and transported through a system of belt conveyors up to the proposed Bunker. From the Ground Bunker, the coal will be transported through the 4 nos of 1800 mm wide belt conveyors to Rapid Load out system located at a Barpalli Bulb/MGR loop. All the conveyors up to Bunkers are 1600 mm wide and after Bunker are 1800mm wide.

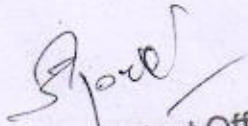
- ii) **INTERMEDIATE INPIT SYSTEM** Blast free coal brought by dumpers from the quarry shall be unloaded over to the reclaim feeders. From intermediate Inpit the coal will be transported to the surface by a set of belt conveyors like, P7, P8, P9, P10, P11 & P12 installed inside the quarry benches and loaded to the main stream on surface. All the conveyors are 1800mm wide.
- iii) **FLOOR INPIT SYSTEM** Blast free coal brought by dumpers from the quarry shall be unloaded over to the reclaim feeders. From the floor Inpit the coal will be transported to the surface by a set of belt conveyors like P1, P2, P3, P4, P5, P6, P7 & P8 installed inside the quarry benches and loaded to the main stream on surface. All the conveyors are 1600mm wide except P7&P8 which are 1800mm wide. Based on the production schedule and the advancement of the mine the reclaim feeder units will be shifted inside the quarry. To handle the coal from the western side of the quarry (Banapatra block), the surface as well as Inpit system will be shifted towards the western. At later stage the major production will be from the Banapatra side and the present Inpit conveyors will be utilized gainfully.

1.5 BUNKERAGE AND RECLAMATION OF COAL Two numbers of 25,000 Te Ground Bunker is proposed near Barpalli Bulb. Coal will be reclaimed by


Project Officer
Sarmal OCP

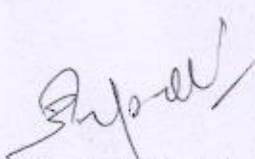
3600tph Plough feeder on of 1800 mm wide belt conveyors for loading in to RLS.

1.6 RAPID LOAD OUT SYSTEM Four Numbers of RLS located on Barpalli Bulb/MGR loop will be used for dispatch of coal through rail. The reclaim conveyors from the Ground Bunkers will discharge coal onto the 1000 te hopper of this RLS system. There will be 4 nos of RLS system consisting with an approx. 1000te surge bin over the pre-weigh hoppers. The bridge conveyors for loading other two nos 2nd RLS hoppers will be provided. Each system shall have pre-weighment facility with the help of pre-weigh hopper. The pre-weigh hopper shall have one opening provided with telescopic chute and gate. The whole loading operation will be automatic. The load out system will be complete with hydraulic power pack, logic circuits etc. Facilities like passenger lift, electric hoist, chain-pulley blocks, pressurisation system for MCC rooms etc. shall also be provided. Project report of Siarmal OCP was approved with provision of washery. As per the advisory issued to Ministry of Coal by Principal Advisor to Hon'ble PM on coal Washeries held on 22.11.2019, the construction of Washery will not be considered now, this has been communicated by MCL vide G-PnP/16/15/0010/2020-PnP/E 234884. So provision of coal washery has been excluded from coal transport network.


Project Officer
Siarmal OCP

UNDERTAKING

It is hereby undertaken that, the process of settlement of rights under the Forest Right Act, 2006 has already been initiated for all the villages covered in Siarmal OCP viz. Siarmal, Gopalpur, Ratansara, Kulda, Jhupruna & Tumulia and accordingly NOC under FRA has also been issued by the District Collector, Sundargarh vide Ref no. 6216 dt. 14.07.2021. However, as there is a slight difference of 0.002 ha in the total area, arrived due to conversion of data, the same will be submitted after needful rectifications to MoEF&CC.


Project Officer
Siarmal OCP
Siarmal OCP