



**Mahanadi Coalfields Limited**  
(A Subsidiary of Coal India Limited)

Ref.No. MCL/GM/BA/KOCP/2024-25/ 914

Date: 12.10.2024

To,  
Divisional Forest Officer  
Sundargarh Forest Division  
Sundargarh, Odisha.

**Subject: Compliance Report Regarding EDS Raised on 20.09.2024 for Kulda Expansion Project**

Ref : Your letter no. 5152/4F(Misc)/Dated 20.09.2024

Dear Sir,

This is in reference to the EDS raised by your esteemed office on 20.09.2024 vide your letter ref.no. 5152/4F(Misc) concerning the proposed diversion of 134.69 hectares of forest land for Kulda Expansion Project of Mahanadi Coalfields Limited (MCL).

We acknowledge your suggestion for provisioning of Revenue non-forest land or lands accredited under the ACA in lieu of compensatory afforestation. However, in light of the new Gazette notifications issued by the Government of India on 20.09.2024 (Copy enclosed), which relaxes the requirements for Central Public Sector Undertakings regarding the use of Degraded Reserve Forest Land for Compensatory Afforestation, we request that the CA Scheme already approved by the Principal Chief Conservator of Forests (PCCF) Nodal may kindly be considered for this project. This CA Scheme has been vetted and recommended by the State Government of Odisha and subsequently submitted to MoEF&CC as well.

As per the dispensation provided in Forest (Conservation) Rules 2003, i.e. CA shall be raised and maintained at the cost of the user agency on degraded forest land twice in extent of the forest area diverted in the cases of projects implemented by the Central Government/PSUs, the CA land for Kulda Expansion OCP was identified and allotted in four patches of Degraded Reserve Forest Land at Gopalpur Range of Sundargarh Forest Division.

Further as per Guidelines dated 18.07.2022, it was deliberated that the Provisions of Forest (Conservation) Rules, 2003 shall apply to the proposals submitted online through Parivesh Portal and which have been accepted by the Nodal Officer before 28.06.2022 and as the forest diversion proposal of Kulda was accepted by Nodal on 19.04.2021 prior to 28.06.2022, the provisions of CA was made as per

Forest (Conservation) Rules 2003. Accordingly, the Forest Diversion Proposal was submitted by the State Government of Odisha to the Ministry of Environment, Forest and Climate Change (MoEF&CC) on 25.04.2024 which already included an approved Compensatory Afforestation (CA) scheme. The letter no. FE-DIV-FLD-0033-2024-10F-(Cons)-23/2024 – 7679/FE&CC dated 25.04.2024 of OSD cum Special Secretary to Government & Letter no. 7712/9F(MG)-49/2023 dated 08.03.2024 of Principle Chief Conservator of Forest & HoFF, Odisha stating the approval of Scheme at point no. 09 in both the letters are attached herewith for needful reference.

Given that MCL is a Government of India, Central Public Sector Undertaking, we believe that the approval of the aforementioned CA scheme should suffice to address the compensatory requirements for the proposed forest diversion.

The CA scheme entails a capital outlay of ₹9.02 crores for afforestation efforts across four distinct patches of Degraded Reserve Forest Land, covering a total area of 305.59 hectares, with an effective area of 286.96 hectares identified in the Gopalpur Range of Sundargarh Division. The specific Reserve Forests involved are:


1. Pandripani RF
2. Sidarmunda RF
3. Panikholia RF
4. Punjipahar RF

We respectfully request that the Compensatory Afforestation scheme already approved in lieu of forest diversion for the Kulda Expansion Project may kindly be considered on the basis of the new Gazette notification, and sent to MoEF&CC for further needful approval of Stage-I as Kulda is already running low on coal reserves and the FC process has to be expedited for continuing the mining operations critical for maintaining coal supply to the nation.

Thank you for your understanding and support. We look forward to your positive response.

Yours sincerely,

Enclosed : a/a.

  
Project Officer <sup>12/10/24</sup>  
Kulda OCP,  
Basundhara Area, MCL





# भारत का राजपत्र The Gazette of India

सी.जी.-डी.एल.-अ.-20092024-257289  
CG-DL-E-20092024-257289

असाधारण  
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)  
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

सं. 540]

नई दिल्ली, शुक्रवार, सितम्बर 20, 2024/भाद्र 29, 1946

No. 540]

NEW DELHI, FRIDAY, SEPTEMBER 20, 2024/BHADRA 29, 1946

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 20 सितम्बर, 2024

सा.का.नि. 582(अ).— वन (संरक्षण एवं संवर्धन) अधिनियम, 1980 (1980 का 69) की धारा 4 की उपधारा

(1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केन्द्रीय सरकार वन (संरक्षण एवं संवर्धन) नियम, 2023 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात्:-

1. संक्षिप्त नाम, विस्तार और प्रारंभ.-(1) इन नियमों का संक्षिप्त नाम वन (संरक्षण एवं संवर्धन) संशोधन नियम, 2024 है।

(2) ये राजपत्र में उनके प्रकाशन की तारीख से प्रवृत्त होंगे।

2. वन (संरक्षण एवं संवर्धन) नियम, 2023 (जिसे इसमें इसके पश्चात् उक्त नियम कहा गया है) के नियम 13 में, उपनियम

(1) के तीसरे, चौथे और पांचवें परंतुक के स्थान पर निम्नलिखित परंतुक रखा जाएगा, अर्थात्, -

"परंतु यह भी कि, अपवादात्मक परिस्थितियों में, जब इस उप-नियम के अधीन प्रतिपूरक वनीकरण के लिए अपेक्षित उपयुक्त भूमि उपलब्ध नहीं है, तो प्रतिपूरक वनीकरण के लिए अवक्रमित वन भूमि पर विचार किया जा सकता है, जिसका विस्तार, मामला दर मामला आधार पर, केन्द्रीय सरकार की एजेंसियों या केन्द्रीय सार्वजनिक

क्षेत्र के उपक्रमों या राज्य सार्वजनिक क्षेत्र के उपक्रमों के कैप्टिव कोयला ब्लॉकों के मामले में, प्रस्तावित क्षेत्र के दुगुने क्षेत्र के बराबर हो।

3. उक्त नियमों की अनुसूची-II में, सारणी में, -

- (i) क्रम संख्या 2 के सामने कोष्ठक और शब्दों के अधीन "(केंद्रीय सरकार तथा राज्य सरकार/संघ राज्यक्षेत्र प्रशासन के प्रस्तावों पर ही यह विधान अनुज्ञात है)" प्रविष्टियों का लोप किया जाएगा;
- (ii) क्रम संख्या 3 के सामने कोष्ठक और शब्दों के अधीन "(यह वितरण मामला-दर-मामला आधार पर कैप्टिव कोयला ब्लॉक्स के लिए राज्य के सार्वजनिक के उपक्रम और मामला-दर-मामला आधार पर केन्द्रीय सरकार के अभिकरणों/केन्द्रीय सार्वजनिक उपक्रम के मामले में है)" प्रविष्टियों का लोप किया जाएगा।

[फा. सं. एफसी-11/111/2024-एफसी]

रमेश कुमार पांडेय, वन महानिरीक्षक

**नोट:** मूल नियम भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (i) में संख्या सा.का.नि. 869(अ), तारीख 29 नवंबर, 2023 द्वारा प्रकाशित किए गए थे।

## MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

### NOTIFICATION

New Delhi, the 20th September, 2024

**G.S.R. 582(E).**— In exercise of the powers conferred by sub-section (1) of section 4 of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 (69 of 1980), the Central Government hereby makes the following rules to further amend the Van (Sanrakshan Evam Samvardhan) Rules, 2023, namely: —

**1. Short title, extent and commencement.**— (1) These rules may be called the Van (Sanrakshan Evam Samvardhan) Amendment Rules, 2024.

(2) They shall come into force on the date of their publication in the Official Gazette.

**2.** In rule 13 of the Van (Sanrakshan Evam Samvardhan) Rules, 2023 (hereinafter referred to as the said rules), in sub-rule (1), for the third, fourth, and fifth proviso, the following proviso, shall be substituted, namely : —

“Provided also in exceptional circumstances when the suitable land required for compensatory afforestation under this sub-rule is not available, the compensatory afforestation may be considered on degraded forest land which is twice in extent to the area proposed to be diverted in case of the Central Government agencies or Central Public Sector Undertakings or captive coal blocks of State Public Sector Undertakings on a case to case basis”.

**3.** In Schedule-II to the said rules, in the table, —

- (i) The entries against serial number 2, under the brackets and words “(This dispensation is allowed to certain proposals of Central Government and State Government or Union territory Administration only.)” shall be omitted;
- (ii) The entries against serial number 3, under the brackets and words “(This dispensation is in case of State Public Sector Undertakings for captive coal blocks on case to case basis and Central Government Agencies/Central Public Sector Undertakings on case to case basis involving no acquisition of non-forest land)” shall be omitted.

[F. No. FC- 11/111/2024-FC]

RAMESH KUMAR PANDEY, Inspector General of Forests

**Note :** The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number G.S.R. 869(E), dated the 29<sup>th</sup> November, 2023.



**GOVERNMENT OF ODISHA  
FOREST, ENVIRONMENT & CLIMATE CHANGE DEPARTMENT**

\*\*\*\*\*


No.FE-DIV-FLD-0033-2024- 7679 /FE&CC, Date 25.04.24  
10F-(Cons)-23/2024

From

Shri Lingaraj Otta,  
OSD-cum-Special Secretary to Government

To

The Assistant Inspector General of Forests,  
Govt. of India, MoEF&CC (F.C. Division),  
Indira Paryavaran Bhawan, Jor Bagh Road,  
Aliganj, New Delhi-110003.

  
 Received by CR Section  
 Ministry of Environment, Forest & Climate Change  
 Govt. of India  
 Indira Paryavaran Bhawan  
 Jor Bagh Road, Aliganj  
 New Delhi-110003

Sub: Diversion of 134.69 ha of forest land for Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District under Sundargarh Forest Division.

(Proposal No: FP/OR/MIN/50293/2020, State Serial No.OR-050/2021 dated 08.07.2021)

Sir,

I am directed to send herewith a proposal for diversion of 134.69 ha of forest land for Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District submitted by the user agency as per approved mining plan as received from the PCCF & HoFF, Odisha for consideration and approval of Government of India, Ministry of Environment, Forest & Climate Change, New Delhi under Section-2 (1) (ii) of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

**1. Brief Description:**

Kulda Open Cast Coal Mining Project in Sundargarh District is a project of Mahanadi Coal Fields Ltd. (MCL), a Government of India Public Sector Undertaking company dedicated to extract coal from different coal mines located in Odisha. Kulda geological block is located in the north-western part of Ib Valley Coal Field in Sundargarh District in the State of Odisha. It is situated between latitudes 22°01'02" to 22°03'03" North and longitudes 83°43'28" to 83°45'35" East. The block boundary is defined by the followings:

1. North – Basundhara river,
2. West – Chattjhor nallah, tributary of Basundhara River,
3. East – Metamorphic exposure,
4. South & South East – Line joining boreholes CMHG-103,129,123,139, 138 & adjacent to Garjanbahal block.

The location of the site for coal mining operation fully depends upon nature's deposit of minerals and geological structure of the coal seam.

The district headquarters Sundargarh, on the State Highway-10 (Sambalpur to Rourkela), is at a distance about 46 km from the Coal blocks. The Sundargarh (Odisha)-Raigarh (Chhattisgarh) all weather road passes through these blocks. The blocks are also connected by black top road with two important towns of Odisha namely Rourkela at a distance of 145 km and Jharsuguda at 75 km. The blocks come under Hemgir Tahsil and Balinga Police Station in the district of



Sundargarh, Odisha. The blocks are around 6 km. south west of Basundhara West Colliery and are connected by part metallic road. The blocks are connected by road to the capital city of Bhubaneswar through State Highway-10 and National Highway-42, with a total distance of around 450 km. The blocks are well connected with MCL HQ at Sambalpur situated at a distance of about 100 km.

**Lease Deed/ Agreement/ Letter of Intent (LoI):**

As reported by PCCF&HoFF, Odisha, Kulda OCP is coming under CIL block and has been dispensed by the Government of India. The complete land coming under the project in the villages of Kulda, Bankibahal, Balinga, Siarmal (P), Tumulia & Lalma R.F. in the district of Sundargarh, Odisha, stands acquired by the Central Government and the ownership is vested with MCL. The details of notification against which the land was acquired under CBA (A&D) is mentioned below:

Sl. No.	Particulars	Block details	Date
1	Date of notification under section 4 (i) of CBA (A&D) Act, 1957	Ib block - XI	24.07.1987
2	Date of notification under section 7 (i) of CBA (A&D) Act, 1957	Ib block - XI	25.09.1989
3	Date of notification under section 9 (i) of CBA (A&D) Act, 1957	Ib block - XI	29.10.1990
4	Date of notification under section 11 (i) of CBA (A&D) Act, 1957	Ib block - XI	30.03.1993

AS stated by PCCF&HoFF, Odisha, the village-wise land acquired by Central Govt. & vested with MCL are as follows:

Ib Block-XI : Tiklipara (1743.85 Ac), Siarmal (852.34 Ac), Gopalpur (part)(140.67 Ac), Tumulia (2381.32 Ac), Karlikachhar (511.94 Ac), Kulda (542.85 Ac), Bankibahal (836.33 Ac), Balinga (1234.64 Ac), Garjanbahal (798.35 Ac), Kiripsira (1680.11 Ac) & Japti Jungle (Lalma RF) (420.00 Ac). Villages falling in Kulda OCP: Kulda, Bankibahal, Balinga, Tumulia, Siarmal (P) & Lalma R.F.

The User Agency has provided the copies of Gazette Notification under Section 9(i) & 11(i), which have been enclosed at **Page No.12-23/DP (Vol-I)**.

As reported by the DFO, Sundargarh Division, nearest rail-tail head is the Sardega Railway Siding, situated between **Latitude 22°04'06.83" to 22°04'12.08" North and Longitude 83°42'41.01" to 83°43'08.38" East (Page No.49/DP) (Vol-I)**.

The total length of the track line from Jharsuguda to Sardega Railway siding is 53.1 kms and the distance of Barpali yard from Sardega railway siding is 8.72 kms. The nearest port at Bay of Bengal is Paradip which is situated at a distance of about 600 km from the block. The Jharsuguda airport is the nearest airport from the block (Approx. 45 KM).

As reported by the DFO, Sundargarh Division, the project covers 05 (Five) villages viz. Kulda, Bankibahal, Balinga, Tumulia, Siarmal under Hemgiri Tahasil of Sundargarh Forest Division in Sundargarh District and stands acquired by the Central Government and the ownership is vested with MCL. It also includes one Reserved Forest viz. Lalma RF. Out of several coal mines, Kulda Open Cast Coal Mining Project has a rated capacity of 21.00 MTY. The user agency has applied for diversion of 134.69 ha of forest land under Forest (Conservation) Act, 1980.

*h*



As reported by the DFO, Sundargarh Forest Division in his part-II and Site Inspection Report at **Page No.40-42/DP (Vol-I)** & **43-44/DP (Vol-I)** respectively, the proposed area does not form part of any National Park/ Wild life Sanctuary/ Biosphere reserve/ Tiger reserve/ elephant corridor etc. Also, the applied area is not forming part of any eco-sensitive zone of any protected area. No archaeological monument/ Heritage site/ Defence establishment etc. are located in the applied area. The total cost of this project is **Rs.31925 Lakhs (Page-25/DP) (Vol-I)**. This project will generate permanent employment to 870 persons and temporary employment to 54,900 persons (**Page No.28/DP) (Vol-I)**. The letter of authorization for filing this diversion proposal is enclosed at **Page No.24/DP (Vol-I)**. The sanction order/ approval order of the project is enclosed at **Page No.12-23/DP (Vol-I)**.

**2. Justification for locating the project in Forest Area:**

Gopalpur sector of Ib-valley coalfield forms the north western part of Ib River coalfield which is a greenfield area with huge mining potential. Detailed exploration was undertaken by CMPDI, a Public Sector Undertaking of Govt. of India to assess the quarriable potentiality of coal seams with primary view of opening up of new mining projects to the extent possible. This sector has high potential for opencast mining operations including the proposed project namely Kulda Expansion Opencast Project.

The Ib River coalfield lies in between latitude 21°31'00" to 22°14'00" North and longitude 83°32'00" to 84°10'00" East and falls mainly in Sundargarh, Jharsuguda and Sambalpur districts of Odisha (**Page No.50/DP) (Vol-I)**. Kulda geological block is located in the north-western part of Ib valley coalfield in Sundargarh district in the state of Odisha. It is situated between latitudes 22°01'02" to 22°03'03" North and longitudes 83°43'28" to 83°45'35" (**Page No.50/DP) (Vol-I)**.

Kulda is a potential block having mineable reserves of about 266.49 million tonnes. Kulda Expansion OCP is a running project and has obtained all statutory clearances. Kulda OCP started its mining operations since 2007-08. Coal extracted is 86.70 Mt and OB removed is 54.90 Mcum till 31.03.2020.

In earlier approved Mining Plan of Kulda Expansion OCP (Revision-1) (10 Mty to 15 Mty), mining operation was carried out in two phases. In Phase-1, surface boundary was restricted within notified lease area for which forest clearance has been obtained i.e. excluding Lalma Reserve Forest. In Phase-II, remaining part of the block was to be worked after obtaining forest clearance for this area. With the increase in demand, MCL now wants to expand the mine in Lalma Reserve forest area so as to enhance the production capacity to 18.75 Mty from this mine. As per the report of DFO, Sundargarh Forest Division in his Part-II (**Page No.40-42/DP) (Vol-I)**, the production capacity has been revised from 18.75 Mty to 21 Mty.

Earlier, the GoI, MoEF&CC (FC Division), New Delhi agreed for in-principle for diversion of 50.72 ha of forest land (45.71 ha of revenue forest land & 5.01 ha of Lalma R/F land) for Kulda Open Cast Mines vide letter dt.24/25.07.2001 and remaining additional forest land of 177.17 ha in addition to already granted 50.72 ha (total 227.89 ha) for Kulda OCP of M/s MCL vide letter dt.22.01.2002 for a period of 20 years in two stages respectively. Further, the GoI, MoEF&CC



granted approval for diversion of 227.89 ha of forest land (as against initially proposed 280.86 ha) for Kulda OCP of MCL in Sundargarh District of Odisha **Page No.493 (A-E) (Vol-I)**.

Coal demand from Ib-valley coalfield has increased many folds due to its strategic location with Howrah-Mumbai railway line passing through the coalfield. Coal of this coalfield is suitable for thermal power plant.

The location of the site for Coal Mine operation is fully depending upon nature's deposit of mineral & geological structure of the coal seams. Hence, question of exploring alternative site for the purpose does not arise.

The Coal bearing Area of the Project with Reserves of about 266.49 M Te (Mineable reserves) partially falls under the above forest land. The Opencast method of Mining has been chosen due to geo mining conditions for extraction of coal to meet the heavy demand of coal.

The Mining Plan and method of working had been prepared by Central Mine Planning and Development Institute a Public Sector Undertaking of Govt. of India. As per the Mining Plan of Kulda Expansion OCP, 134.69 Ha of forest land to be diverted for working of the mine. The justification for locating the project in forest area is enclosed at **Page No.49-51/DP (Vol-I)**.

### 3. Maps:

The PCCF & HoFF, Odisha has intimated that the User Agency has furnished the following maps, duly authenticated by all concerned which are enclosed at **Volume-II/DP**.

Sl. No.	Particulars	Scale	Plate No.
1	Toposheet showing location of Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL)	1:50000	1
2	Safety Zone area Plan Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	2
3	Land Use Plan Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	3
4	Surface layout Plan of Kulda Expansion OCP	1:5000	4
5	ORSAC vetted DGPS Surveyed plan of whole forest patches of Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:10,000	5
6	ORSAC vetted DGPS Surveyed map of village Bankibahal of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	6
7	ORSAC vetted DGPS Surveyed map of village Kulda of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	7
8	ORSAC vetted DGPS Surveyed map of village Kulda of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	8
9	ORSAC vetted DGPS Surveyed map of village Tumulia of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	9
10	ORSAC vetted DGPS Surveyed map of village Siarmal of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	10
11	ORSAC vetted DGPS Surveyed map of Lalma RF of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	11
12	Milan Sheet of Kulda Village (2 Nos) of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	12
13	Milan Sheet of Bankibahal Village of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	13
14	Milan Sheet of Bankibahal Village of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	14
15	Milan Sheet of Balinga Village of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	15



16	Milan Sheet of Siarmal Village (2 Nos) of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	16
17	Milan Sheet of Tumulia Village (1 No) of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	17
18	Final Stage Excavation Plan (Reduced) copy	1:4000	18
19	Mining Stage Plan during 1 <sup>st</sup> Year (Reduced) copy	1:4000	19
20	Mining Stage Plan during 3 <sup>rd</sup> Year (Reduced) copy	1:4000	20
21	Mining Stage Plan during 5 <sup>th</sup> Year (Reduced) copy	1:4000	21
22	Final Stage dumping plan (Reduced) copy	1:4000	22
23	Final Mining Closure Plan (Reduced) copy	1:4000	23
24	ORSAC vetted DGPS Surveyed map showing compensatory afforestation areas in Panikholia RF, Pandripani RF, Sidarmunda RF and Punjipahar RF in Sundargarh Range in lieu of forest area proposed for diversion in Kulda OCP, Basundhara Area of M/s MCL, Sundargarh district.	1:10000	24
25	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Panikholia RF (effective DFL area=56.1 ha) with co-ordinates	1:4000	25
26	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Pandripani RF (effective DFL area=56.30 ha)	1:4000	26
27	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Sidarmunda RF (effective DFL area=53.56 ha)	1:4000	27
28	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Punjipahar RF (effective DFL area=121.0 ha)	1:5000	28
29	Toposheet showing location of Compensatory Afforestation Land for Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:50,000	29

#### 4. Forest Land:

As reported by the DFO, Sundargarh Division in his Site Inspection Report (**Page No.43-44/DP**) (**Vol.-I**) and Part-II (**Page No.40-42/DP**) (**Vol.-I**) respectively, the proposed Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District involves total land of 295.62 ha, out of which 134.69 ha is of forest land (RF land 83.24 ha + Revenue Forest land 51.45 ha).

The certificate regarding the land schedule proposed to be diverted as on 25.10.1980 has been furnished by the Tahasildar, Hemgir Tahasil and countersigned by DFO, Sundargarh Forest Division are enclosed at **Page No.95-130/DP(Vol-I)** respectively.

The detail village wise abstract of land schedule involving Forest land required for the project duly authenticated by the DFO, Sundargarh Division and Tahasildar, Hemgir Tahasil are enclosed at **Page No.95-99/DP (Vol-I)**.

As intimated by the PCCF & HoFF, Odisha, the detailed village wise abstract of Forest land involved in this project are furnished below:

Village - Kulda												
Sl. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	32	57	P. Jungle	1.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	Revenue
2	32	64	P. Jungle	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.30	Revenue
3	32	263 (P)	P. Jungle	8.22	4.18	0.00	0.00	0.00	0.00	0.00	4.18	Revenue
4	32	267	P. Jungle	0.36	0.36	0.00	0.00	0.00	0.00	0.00	0.36	Revenue
5	32	272	P. Jungle	10.93	9.03	0.00	0.00	0.00	0.00	0.00	9.03	Revenue
6	32	374	P. Jungle	1.08	1.04	0.00	0.00	0.00	0.00	0.00	1.04	Revenue



7	32	375	P. Jungle	0.29	0.29	0.00	0.00	0.00	0.00	0.00	0.29	Revenue
8	32	379	P. Jungle	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.33	Revenue
9	32	381	P. Jungle	1.06	0.90	0.16	0.00	0.00	0.00	0.00	1.06	Revenue
10	32	428	P. Jungle	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.84	Revenue
11	32	434	P. Jungle	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.30	Revenue
12	32	439	P. Jungle	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.80	Revenue
13	32	441	P. Jungle	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.04	Revenue
14	32	443	P. Jungle	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.05	Revenue
15	32	446	P. Jungle	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.40	Revenue
16	32	448	P. Jungle	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.60	Revenue
17	32	261	P. Jungle	9.44	1.35	0.00	0.00	0.00	0.00	0.00	1.35	Revenue
<b>Total in Ac.</b>				<b>36.04</b>	<b>21.81</b>	<b>0.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>21.97</b>	
<b>Total in Ha.</b>				<b>14.59</b>	<b>8.83</b>	<b>0.06</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>8.89</b>	

<b>Reserved Forest Land</b>										
	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
Lalma RF	R.F.	205.69	182.43	0.00	0.00	0.00	0.00	23.26	205.69	R.F.
<b>Total in Ac.</b>		<b>205.69</b>	<b>182.43</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>23.26</b>	<b>205.69</b>	
<b>Total in Ha.</b>		<b>83.24</b>	<b>73.83</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9.41</b>	<b>83.24</b>	

<b>Village - Bankibahal</b>												
Sl. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	57	72	Jungle	8.83	1.48	0.00	0.00	0.00	0.00	0.00	1.48	Revenue
2	57	75	Jungle	9.30	9.30	0.00	0.00	0.00	0.00	0.00	9.30	Revenue
3	57	82	Jungle	0.58	0.58	0.00	0.00	0.00	0.00	0.00	0.58	Revenue
4	57	83	Jungle	1.35	1.35	0.00	0.00	0.00	0.00	0.00	1.35	Revenue
<b>Total in Ac.</b>				<b>20.06</b>	<b>12.71</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>12.71</b>	
<b>Total in Ha.</b>				<b>8.12</b>	<b>5.14</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5.14</b>	

<b>Village - Tumulia</b>												
Sl. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	260	2103 (P)	Jungle	1.49	1.39	0.00	0.00	0.00	0.10	0.00	1.49	Revenue
2	260	2125 (P)	Jungle	1.72	0.25	0.00	0.00	0.00	1.47	0.00	1.72	Revenue
3	258	2095	G. Jungle	15.00	15.00	0.00	0.00	0.00	0.00	0.00	15.00	Revenue
4	260	2097 (P)	Jungle	7.38	6.00	0.00	0.00	0.00	1.38	0.00	7.38	Revenue
5	260	2177 (P)	Jungle	6.20	5.20	0.00	0.00	0.00	1.00	0.00	6.20	Revenue
6	258	2169 (P)	G. Jungle	32.05	13.00	0.00	0.00	0.00	19.05	0.00	32.05	Revenue
7	260	2166	Jungle	11.42	0.00	0.00	0.00	0.00	11.42	0.00	11.42	Revenue
8	260	2240	Jungle	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.90	Revenue
9	258	2136	G. Jungle	9.36	8.22	0.00	0.00	0.00	0.00	0.00	8.22	Revenue
10	260	2233	Jungle	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.96	Revenue
11	260	2235	Jungle	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.37	Revenue
12	260	2264	Jungle	0.88	0.88	0.00	0.00	0.00	0.00	0.00	0.88	Revenue
13	260	2217	Jungle	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.46	Revenue
14	260	2188	Jungle	1.44	1.44	0.00	0.00	0.00	0.00	0.00	1.44	Revenue
<b>Total in Ac.</b>				<b>89.63</b>	<b>53.17</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>34.42</b>	<b>0.00</b>	<b>88.49</b>	
<b>Total in Ha.</b>				<b>36.27</b>	<b>21.52</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>13.93</b>	<b>0.00</b>	<b>35.81</b>	

<b>Village - Siarmal</b>												
Sl. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	53	103 (P)	Jungle	9.20	2.15	0.00	0.00	0.00	0.00	0.00	2.15	Revenue



2	53	588 (P)	Jungle	0.40	0.09	0.00	0.00	0.00	0.00	0.00	0.09	Revenue
3	53	587 (P)	Jungle	2.50	1.34	0.00	0.00	0.00	0.00	0.00	1.34	Revenue
4	53	568 (P)	S. Jungle	0.17	0.10	0.00	0.00	0.00	0.00	0.00	0.10	Revenue
5	53	786 (P)	Jungle	0.78	0.29	0.00	0.00	0.00	0.00	0.00	0.29	Revenue
<b>Total in Ac.</b>				<b>13.05</b>	<b>3.97</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.97</b>	
<b>Total in Ha.</b>				<b>5.28</b>	<b>1.61</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.61</b>	
<b>Grand Total in Ha.</b>											<b>134.69</b>	

The total non-forest land involved in the project is 160.93 ha, out of which 64.69 ha is Govt. non-forest land and 96.24 ha is tenancy land. The detailed village wise abstract of land schedule involving non-forest land required for the project duly authenticated by the DFO, Sundargarh Division and Tahasildar, Hemgir Tahasil has been enclosed at **Page No.100-121/DP (Vol-I)**.

The detailed village wise abstract of Non-forest land involved in this project are furnished below:

Sl. No.	Division	Village	Non-Forest land (ha)		Total (in ha)
			Govt. Land	Tenancy Land	
1.	Sundargarh	Kulda	28.88	44.88	73.76
2.		Bankibahal	10.80	21.29	32.09
3.		Balinga	8.60	1.15	9.75
4.		Tumulia	16.41	28.92	45.33
5.		Siarmal	0	0	0
Grand Total (in ha)			64.69	96.24	160.93

The certificate for minimum use of forest land furnished by the UA duly countersigned by DFO, Sundargarh Forest Division is enclosed at **Page No.131/DP (Vol-I)**.

The purpose wise break-up of forest and non-forest land required duly authenticated by all concerned is enclosed at **Page No.93/DP (Vol-I)**. The village wise summarized data of land schedule component wise and village wise duly authenticated by all concerned which is enclosed as **Page No.94/DP (Vol-I)**. As reported by the PCCF & HoFF, Odisha, the details of breakup of forest and non-forest land are as follows:

Component wise land abstract - Kulda Expansion OCP (Ph-II)								
Sl. No.	Component	Forest				Govt. Non-Forest Land (in Ac)	Tenancy (in Ac)	Total Area (in Ac)
		Reserve (in Ac)	Revenue (in Ac)	Total (in Ac)	Total (in Ha.)			
1	Mining	182.43	91.66	274.09	110.92	105.36	159.42	538.87
2	7.5m Safety Zone	23.26	0.90	24.16	9.78	43.36	77.99	145.51
3	Embankment	0.00	0.16	0.16	0.06	11.13	0.41	11.70
4	OB Dump	0.00	34.42	34.42	13.93	0.00	0.00	34.42
	<b>Total in Ac</b>	<b>205.69</b>	<b>127.14</b>	<b>332.83</b>		<b>159.85</b>	<b>237.82</b>	<b>730.50</b>
	<b>Total in Ha</b>	<b>83.24</b>	<b>51.45</b>	<b>134.69</b>	<b>134.69</b>	<b>64.69</b>	<b>96.24</b>	<b>295.62</b>

The DGPS map of the forest land of the project proposed to be diverted authenticated by ORSAC and countersigned by DFO, Sundargarh Forest Division and Tahasildar, Hemgir Tahasil is enclosed at **Plate No.5/DP(Vol-II)**. The soft copy of shape & KML file in CD form is appended to the DP.

*Handwritten signature*



## 5. Safety Zone:

### Details of Safety Zone Area over Forest, Government Non-Forest, Private Land.

As per report of PCCF & HoFF, Odisha, the details of safety zone involved in the Kulda expansion mining project are furnished below which is enclosed as **Page No.94/DP (Vol-I)**.

Sl. No.	Village	Type of Land	Area (Ha)	Total
1	Kulda	Forest	Nil	11.92
		Govt. Non-Forest	6.147	
		Tenancy	5.775	
2	Bankibahal	Forest	Nil	3.32
		Govt. Non-Forest	Nil	
		Tenancy	3.323	
3	Tumulia	Forest	0.364	34.23
		Govt. Non-Forest	11.400	
		Tenancy	22.465	
4	Siarmal	Forest	Nil	Nil
		Govt. Non-Forest	Nil	
		Tenancy	Nil	
5	Balinga	Forest	Nil	Nil
		Govt. Non-Forest	Nil	
		Tenancy	Nil	
6	Lalma R.F.	Forest	9.413	9.41
<b>Total area for safety zone (in Ha)</b>				<b>58.89</b>

The total area required for safety zone is 58.89 Ha in which 9.78 Ha is falling in the Forest Land. The user agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to bear the cost of maintenance of safety zone for greenbelt and bear the cost of afforestation over 1.5 times of the safety zone area on degraded forest land identified elsewhere, which are enclosed at **Page No.274-276/DP (Vol-I)** respectively.

## 6. Flora & Fauna:

In the Part-II and Site Inspection report of the DFO, Sundargarh Forest Division enclosed at **Page No.40-42/DP & 43-44/DP (Vol-I)**, the forest land proposed for diversion has been put under **Eco-Value Class-III** (Tropical Dry Deciduous Forests) with **canopy density 0.5** vide his Memo No.2548 Dtd.15.05.2023 (**Page No.492/DP (Vol-I)**). The prevailing vegetation found in the proposed area comprises of *Acacia auriculiformis* (Sunajhari), *Terminalia arjuna* (Arjuna), *Phyllanthus emblica* (Amla), *Ficus benghalensis* (Bara), *Terminalia belerica* (Bahada), *Aegle marmelos* (Bela), *Ziziphus mauritiana* (Bara Koli), *Ficus racemose* (Dimiri), *Gmelina arborea* (Gambhar), *Terminalia chebula* (Harida), *Syzygium cumini* L (Jamun), *Neolamarckia cadamba* (Kadamba), *Anacardium occidentale* (Kaju), *Adina cordifolia* (Haldu), *Diospyros melanoxylon* (Kendu), *Acacia Catechu* (Khair), *Careya arborea* (Kumbhi), *Schleichera oleosa* (Kusum), *Azadirachta indica* (Neem), *Mangifera indica* (Amba), *Butea monosperma* (Palas), *Artocarpus heterophyllus* (Panasa), *Ficus religiosa* (Aswastha), *Albizia lebbeck* (Sirisa), *Tectona grandis* (Teak), *Terminalia tomentosa* (Asana), *Shorea robusta* (Sal), *Bombax ceiba* (Simili), *Dalbergia sissoo* (Sissoo), *Cassia fistula* (Sunari) & *Tamarindus indica* (Tentuli) etc. No rare and endangered species are available in



the forest area applied for diversion and there is no archaeologically important monument situated in the area. The Fauna like Fox (*Vulpes vulpes*), Wild Boar (*Sus scrofa*), Indian Hare (*Oryctolagus cuniculus*), Jungle cat (*Felis chaus*), Jungle fowl (*Gallus gallus*) etc. are seen in the applied area (Page No.47/DP) (Vol-I).

**7. Wildlife Management:**

**(a) Regional Wildlife Management Plan:**

The user Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to pay the cost of Regional Wildlife Management Plan for the total project area as per the present rate which is enclosed at **Page No.228/DP (Vol-I)**.

**(b) Site Specific Wildlife Conservation Plan:**

The user Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to pay the cost of SSWLCP after due approval of the same by the PCCF (WL) & CWLW, Odisha which is enclosed at **Page No.229/DP (Vol-I)**.

**8. Tree Enumeration:**

In the Part-II and Site Inspection report of the DFO, Sundargarh Forest Division enclosed at **Page No.40-42/DP & 43-44/DP(Vol-I)**, the total tree enumeration has been taken up over the total project area of 295.62 ha. (Forest-134.69 ha. + Non-Forest-160.93 ha.) are as follows:

Lalma RF – Total no. of trees enumerated	- 20912 Trees
Tumulia Village Revenue Forest Land	- 1050 Trees
Kulda Village Revenue Forest Land	- 807 Trees
Bankibahal Village Revenue Forest Land	- 866 Trees
<b>Total</b>	<b>- 23635 Trees (P. No.87-88/DP) (Vol-I)</b>
Kulda Village Non-Forest Govt. land	- 363 Trees (P. No.91/DP) (Vol-I)
Kulda Village Tenancy Non-forest land	- 2013 Trees
Tumulia Village Tenancy Non-forest land	- 2632 Trees
Bankibahal Village Tenancy Non-forest land	- 1798 Trees
<b>Total</b>	<b>- 6443 Trees (P.No.601-608/DP) (Vol-II)</b>
<b>Grand Total</b>	<b>- 30441 Trees</b>

The tree enumeration list and village wise, species wise summary of trees in forest land of Kulda expansion OCP have been enclosed at Page No. **625-1027/DP (Vol-II)** and Page No. **484- 485** respectively.

**9. Compensatory Afforestation:**

Compensatory Afforestation scheme has been prepared by the DFO, Sundargarh over 305.59 ha (Effective area-286.96 ha) of degraded forest land identified in Pandripani R.F., Sidarmunda R.F., Punjipahar R.F. & Panikholia R.F. under Gopalpur Range of Sundargarh Forest Division i.e. over twice the extent of forest land over 134.69 ha proposed for diversion under Parivesh-I.

The detailed Degraded Forest Land status for CA is furnished below which is enclosed at **Page No.144/DP (Vol-I)**.

Sl. No.	Name of the Reserve Forest	Legal Status	Area (in ha)	Effective area (in ha)
---------	----------------------------	--------------	--------------	------------------------



Gopalpur Forest Range				
1.	Pandripani RF	Reserve Forest /p	64.10	56.30
2.	Sidarmunda RF	Reserve Forest /p	53.56	53.56
3.	Punjipahar RF	Reserve Forest /p	131.54	121.00
4.	Panikholia RF	Reserve Forest /p	56.39	56.10
		<b>Total</b>	<b>305.59</b>	<b>286.96</b>

Accordingly, the DFO, Sundargarh Forest Division has prepared the Site Specific CA scheme as per approved one time cost norm basis an average of 500 seedlings/ha with 18 month old seedlings to be planted thereof with a provision of required soil moisture conservation activities, watering and fencing etc with maintenance upto 10 years. The DSS analysis report furnished by the DFO, Sundargarh and countersigned by the RCCF, Rourkela Circle is enclosed at **Page No.147-155/DP (Vol-I)**. The indigenous species which has been preferred to be planted considering the adverse soil and moisture condition are Neem (*Azadirachta indica*), Karanja (*Derris indica*), Amla (*Embllica officinalis*), Asana (*Terminalia tomentosa*), Jamun (*Syzygium cumini*), Khair (*Acacia catechu*), Harida (*Terminalia chebula*), *Dalbergia sissoo* (Sissoo) etc (**Page No.140/DP (Vol-I)**). A copy of the Compensatory Afforestation scheme is enclosed at **Page No.132-173/DP(Vol-I)**.

The CA scheme has been approved by the PCCF (FD & NO, FC Act) with a financial outlay of **Rs.9,02,61,000/-** (Rupees nine crores two lakhs sixty-one thousand) only which is enclosed at **Page No.143/DP (Vol-I)**.

The CA land suitability certificate has been furnished by the DFO, Sundargarh Forest Division which is enclosed at **Page No.144/DP**. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to bear the cost of CA, Penal CA, Additional CA, Soil and Moisture Conservation Measures and any other cost of Site Specific activities as mentioned in the financial outlay of CA, if required as per prevailing wage rate at the time of plantation which is enclosed at **Page No.146 & 227/DP (Vol-I)** resp. The DGPS map and the location of CA land has been shown in SoI Toposheet No.64N/12, 64N/16, 64O/9, 64O/13 of scale 1:50,000 duly countersigned by the DFO, Sundargarh Forest Division which are enclosed at **Plate No.24-28/DP and Plate No.29/DP (Vol-II)** respectively. However, the User Agency has furnished a report regarding the completion of the pillar posting having 95 Nos. in proposed CA land which is enclosed at **Page No.485/DP** and also enclosed the photograph in support of posting pillars which is enclosed at **Page No.158/DP (Vol-I) and Plate No.24-28/DP (Vol-II)**.

#### **10. Cost Benefit Analysis:**

As reported by the DFO, Sundargarh Forest Division, the total benefit of the project comes to Rs.730992.27 Lakhs. The total loss on forests including environmental loss comes to Rs.13,281.44 Lakhs. Hence, the Cost-Benefit Ratio comes to **1:55 (Page No.214-217/DP (Vol-I))**.

#### **11. Environmental Clearance:**

As reported by the DFO, Sundargarh Division, the user agency has furnished the copy of ToR issued for a capacity of 21.00 MTPA by the GoI, MoEF&CC (Impact Assessment Division), New



Delhi vide letter No. J-11015/10/1995-IA-II(M), date 13.12.2022 which is enclosed at **Page No.182-193/DP (Vol-I)**. The user agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to submit the copy of Environmental Clearance for expanded capacity, which has been enclosed at **Page No.197/DP(Vol-I)**.

## **12. Rehabilitation & Resettlement Plan:**

As reported by the DFO, Sundargarh Division, as per the authenticated land schedule, the land belonging to village Kulda, Bankibahal, Balinga, Tumulia, Siarmal & Lalma RF of Hemgir Tahasil, District-Sundargarh, Odisha are involved in Kulda Expansion OCP. The Kulda Open Cast Project includes the Mining Area, Safety zone, embankment & OB Dump area.

Total 295.62 Ha (730.50 acres) of land is involved in Kulda Expansion Project (Ph.II). Out of which 96.24 Ha is Tenancy land, 64.69 Ha is Govt. Non-Forest land, 51.45 Ha is Revenue forest land and 83.24 Ha is Reserve Forest Land. The mining area is 218.08 Ha only. Safety Zone area is 58.89 Ha. The rest area will be for embankment and external OB dump.

Out of **96.24 ha** of tenancy land involved in this project, 44.88 Ha (110.90 acres) belongs to village Kulda, 21.29 Ha (52.61 acres) belongs to village Bankibahal, 1.15 Ha (2.83 acres) belongs to village Balinga, 28.92 ha (71.48 acre) belongs to village Tumulia. The lands of all above villages have been acquired under CBA (A&D) Act, 1957 vide Notification u/s 9(1) of the said Act vide SO No.3055 dated 09.10.1990 (**Page No.16-17/DP) (Vol-I)**. The above land has been vested in MCL u/s 11(1) of the said Act vide SO No. 43015 dated 30.03.1993 (**Page No.18-23/DP) (Vol-I)**. The payment of Compensation and R&R benefits for the village Kulda, Bankibahal, Balinga, and Tumulia including other 10 villages have been undertaken by the Claims Commission, set up by the Hon'ble Supreme Court of India in SLP (C) No.6933 of 2007. The compensation for land and structures for village Kulda, Bankibahal, Balinga has been disbursed to the beneficiaries. For village Tumulia, approval of Hon'ble Supreme Court is awaited to provide the land compensation as well as R&R benefits. The Rehabilitation plan and the Resettlement plan prepared by the User Agency have been enclosed at **Page No.218-223/DP (Vol-I)**. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division for submission of R&R plan after the approval from Ministry of Tribal Affairs, Government of India which has been enclosed at **Page No.224/DP (Vol-I)**.

As reported by the DFO, Sundargarh, the User Agency has intimated that, a vocational training institute has already been established at Belpahar, which is having a capacity to impart training as per the recommendation for the benefits of the eligible unemployed in the project affected villages. Apart from the above, the unemployed youths are also being trained through reputed agencies & Institutions like CIPAT, IIT Kharagpur etc. It is endeavoured that the trained employees shall be deployed in our industry or any other appropriate industry in the vicinity of the forest land being diverted.

The User Agency has intimated that, there is already a separate dedicated department namely Community Development Department in MCL designated to work for the Social Welfare of the peripheral villages and MCL has always understood the socio-economic conditions of the project affected families and taken corrective measures to restore them to their original or better-than-original condition, by providing direct and indirect employments and by providing amenities for the peripheral



village development. The copy of the documental proof is enclosed at **Page No.474-478/DP(Vol-I)**.

**13. Net Present Value (NPV):**

The User Agency has also furnished an undertaking duly countersigned by the DFO, Sundargarh Division to pay the cost of NPV of the forest land proposed to be diverted as per demand of DFO, Sundargarh Forest Division which is enclosed at **Page No.226/DP(Vol-I)**. Further, the user agency has also furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to pay the cost of additional amount of NPV if so, determined as per decision of the Hon'ble Supreme Court of India which are enclosed at **Page No.226/DP(Vol-I)**.

**14. Mining Plan and Mine Closure Plan:**

The User Agency has provided the copy of approval letter along with the booklet of Mining Plan and Mine Closure Plan which is enclosed at **Page No.284-468/DP(Vol-I) and Plate No.18-23/DP (Vol-II)**.

**15. NOC from State Pollution Control Board:**

The user agency has provided the copy of Consent To Operate (CTO) for a production capacity of 21.00 MTPA which is valid till 31.03.2023, issued vide No. 788/IND-I-CON-5125, date 20.01.2023 of OSPCB, which has been enclosed at **Page No.198-212/DP(Vol-I)**. The grant of CTO for the expanded area is awaited till the grant of Environmental Clearance. The user agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Division to submit the copy of CTO for expanded area, which has been enclosed at **Page No.213/DP(Vol-I)**.

**16. Certificate under the FRA, 2006:**

The Collector, Sundargarh has issued the Certificate under FRA, 2006 over 134.69ha vide his letter No.5417, dtd.21.06.2021 which is attached herewith at **Page No.174-180/DP (Vol-I)**. The Gram Sabha Resolution with English and Odia version has been enclosed at **Page No.494-600/DP(Vol-II)**. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to bear the cost of settlement under FRA, 2006 which is enclosed at **Page No.181/DP (Vol-I)**.

**17. DGPS Map:**

Ministry of Environment and Forests, GoI in their letter F. No.11-9/98 dated 08.07.2011 have issued guidelines that all the application seeking prior approval of the Central Govt. under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forest purpose, must be accompanied with Geo-referenced boundary in shape file. Further, in the guideline, it is said that to ensure accurate delineation of the forest area to be diverted, the application should also contain authenticated copy of digital map along with hard copy. Accordingly, the User Agency has submitted the required digitized map duly authenticated by ORSAC and countersigned by the DFO, Sundargarh Forest Division, which are enclosed at **Plate No.5-11/DP**. The UA has also submitted the Shape and KML file of the project area. The soft copy of DGPS map of the forest area proposed for diversion in CD form is enclosed with the DP.

dr



**18. Violation:**

As reported by the DFO, Sundargarh Division in Part-II and Site Inspection report enclosed at **Page No.40-42/DP & 43-44/DP(Vol-I)**, no violation has been committed by the User Agency under Forest (Conservation) Act, 1980.

**19. Others:**

Part-II and Site Inspection report of the DFO, Sundargarh Forest Division are enclosed at **Page No.40-42/DP & 43-44/DP (Vol-I)** respectively. The Part-III & Site Inspection report of RCCF, Rourkela Circle are enclosed at **Page No.45/DP(Vol-I) & 46-47/DP (Vol-I)** respectively. The Part-IV of PCCF & HoFF, Odisha is enclosed at **Page No.45(A)/DP**. The Division Profile of Sundargarh Forest Division is enclosed at **Page No.1028/DP(Vol-II)**. The District Profile of Sundargarh District is enclosed at **Page No.1029/DP(Vol-II)**. The State Profile has been furnished at **Page No.1030/DP(Vol-II)**. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Division to bear the cost of the CATP which is enclosed at **Page No.281/DP(Vol-I)**.

The Principal Chief Conservator of Forests & HoFF, Odisha has recommended the proposal.

In view of the above, Government of India, Ministry of Environment, Forest and Climate Change, New Delhi is requested to consider this proposal for diversion of 134.69 ha of forest land for Expansion of Kulda Open cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District and convey their approval under Section-2(1) (ii) of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 in favour of the User Agency, subject to the following conditions.

- Forest land proposed for diversion shall not be used for any purpose other than that has been proposed.
- The User Agency shall pay the evaluated royalty of enumerated trees before commencement of work on Stage-II approval.
- Safety zone shall be maintained as such and in no circumstances be used for mining purpose.
- The User Agency shall deposit the cost of Afforestation in degraded forest over an area equal to 1.5 times of the forest land under safety zone area.
- The User Agency shall bear the cost of fencing, protection and regeneration of the Safety Zone.
- Trees should be felled only when felt absolutely necessary with prior permission of DFO, Sundargarh Division.
- The user agency shall obtain Environmental Clearance.
- The user agency shall obtain valid Consent to Establish and Consent to Operate from the SPCB.
- Site Specific Wildlife Conservation Plan duly approved by Chief Wildlife Warden; Odisha shall be implemented at project cost.
- The user agency shall contribute towards cost of Regional Wildlife Management Plan.



- The user agency shall submit duly approved R&R Plan and this shall be implemented for the project displaced persons before they are displaced on final forest clearance for the project.
- The User Agency shall undertake demarcation of the lease/ Safety Zone area on the ground, posting 4 feet high cement concrete pillars embedded 2 feet inside the soil with serial number, forward and backward bearing and distance from pillar to pillar. The User Agency shall also submit the map of lease area showing different kinds of forest land, using DGPS survey data and latitude and longitude of each pillar to DFO, Sundargarh for his reference before commencement of work on final forest clearance.

Yours faithfully,

**Encls.:** Diversion Proposal (in 2 volumes)

Memo No. 7680 /FE&CC, Date 25.04.24 OSD-cum-Special Secretary to Government

Copy forwarded to the Principal Chief Conservator of Forests & HoFF, Odisha with reference to his letter No.7712, dtd.08.04.24/ Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Odisha/ Principal Chief Conservator of Forests (FD&NO, FC Act), O/o the PCCF & HoFF, Odisha for information and necessary action.

Memo No. 7681 /FE&CC, Date 25.04.24 OSD-cum-Special Secretary to Government

Copy forwarded to the Regional Chief Conservator of Forest, Rourkela Circle/ Divisional Forest Officer, Sundargarh Forest Division for information and necessary action.

Memo No. 7682 /FE&CC, Date 25.04.24 OSD-cum-Special Secretary to Government

Copy forwarded to the Steel & Mines Department/ Director, Environment-cum-Special Secretary to Government, FE&CC Department/ Member Secretary, SPCB, Odisha/ Collector, Sundargarh for information and necessary action.

Memo No. 7683 /FE&CC, Date 25.04.24 OSD-cum-Special Secretary to Government

Copy forwarded to the Chief Manager Mines, O/o the Project Officer, Kulda OCP, Basundhara Area, MCL, Sundargarh, Odisha-770076 for information and necessary action.

OSD-cum-Special Secretary to Government





**STATE FOREST HEADQUARTERS, ODISHA  
OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS & HoFF  
PLOT NO. GD-2/12, ARANYA BHAWAN, CHANDRASEKHARPUR  
BHUBANESWAR-751023**

**E-mail:- [nodal.pccfhoff@odisha.gov.in](mailto:nodal.pccfhoff@odisha.gov.in) /[nodal.pccfodisha@gmail.com](mailto:nodal.pccfodisha@gmail.com)**

Letter No. **7712** /9F (MG)-49/2023  
Dated, Bhubaneswar, the **08<sup>th</sup>** March, 2024

To

**The Additional Chief Secretary to Government  
Forest, Environment & Climate Change Department  
Government of Odisha, Kharavel Bhawan, Bhubaneswar**

**Sub: Proposal towards seeking clearance from Ministry of Environment, Forest & Climate Change, Govt. of India for diversion of 134.69 ha of forest land for Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District under Sundargarh Forest Division (Proposal No: FP/OR/MIN/50293/2020, State Serial No. OR-050/2021 dated 08.07.2021)**

A proposal towards seeking clearance from Ministry of Environment, Forest & Climate Change, Govt. of India for diversion of 134.69 ha of forest land for Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District duly processed and recommended by the Regional Chief Conservator of Forests, Rourkela Circle and Divisional Forest Officer, Sundargarh Forest Division is sent herewith in duplicate for consideration of the Government and onward transmission to Government of India, Ministry of Environment, Forest & Climate Change, New Delhi for approval under Section-2 (ii) of Forest (Conservation) Act 1980.

**1. Brief Description:**

Kulda Open Cast Coal Mining Project in Sundargarh District is a project of Mahanadi Coal Fields Ltd. (MCL), a Government of India Public Sector Undertaking company dedicated to extract coal from different coal mines located in Odisha. Kulda geological block is located in the north-western part of Ib Valley Coal Field in Sundargarh District in the state of Odisha. It is situated between latitudes 22°01'02'' to 22°03'03'' North and longitudes 83°43'28'' to 83°45'35'' East. The block boundary is defined by the following:-

1. North – Basundhara river,
2. West – Chattjhor nallah, tributary of Basundhara River,
3. East – Metamorphic exposure,
4. South & South East – Line joining boreholes CMHG-103,129,123,139 & 138 & adjacent Garjanbahal block.



The location of the site for coal mining operation fully depends upon nature's deposit of minerals and geological structure of the coal seam.

The district headquarters Sundargarh, on the State Highway-10 (Sambalpur to Rourkela), is at a distance about 46 km. from the Coal blocks. The Sundargarh (Odisha)-Raigarh (Chhattisgarh) all weather road passes through these blocks. The blocks are also connected by black top road with two important towns of Odisha namely Rourkela at a distance of 145 km and Jharsuguda at 75 km. The blocks come under Hemgir Tahsil and Balinga Police Station in the district of Sundargarh, Odisha. The blocks are around 6 km. south west of Basundhara West Colliery and are connected by part metallic road. The blocks are connected by road to the capital city of Bhubaneswar through State Highway-10 and National Highway-42, with a total distance of around 450 km. The blocks are well connected with MCL HQ at Sambalpur situated at a distance of about 100 km.

**Lease Deed/Agreement/Letter of Intent (LoI):-**

Kulda OCP is coming under CIL block and has been dispensed by the Government of India. The complete land coming under the project in the villages of Kulda, Bankibahal, Balinga, Siarmal(P), Tumulia & Lalma R.F. in the district Sundargarh, Orissa, stands acquired by the Central Government and the ownership is vested with MCL. The detail of notification against which the land was acquired under CBA (A&D) is as mentioned below:

S.No.	Particulars	Block details	Date
1	Date of notification under section 4 (i) of CBA (A&D) Act, 1957	Ib block - XI	24.07.1987
2	Date of notification under section 7 (i) of CBA (A&D) Act, 1957	Ib block - XI	25.09.1989
3	Date of notification under section 9 (i) of CBA (A&D) Act, 1957	Ib block - XI	29.10.1990
4	Date of notification under section 11 (i) of CBA (A&D) Act, 1957	Ib block - XI	30.03.1993

The village-wise land acquired by Central Govt.& vested with MCL are as follows:

Ib Block-XI : Tiklipara (1743.85 Ac), Siarmal (852.34 Ac), Gopalpur (part)(140.67 Ac), Tumulia (2381.32 Ac), Karlikachhar (511.94 Ac), Kulda (542.85 Ac), Bankibahal (836.33 Ac), Balinga (1234.64 Ac), Garjanbahal (798.35 Ac), Kiripsira (1680.11 Ac) & Japti Jungle (Lalma RF) (420.00 Ac). Villages falling in Kulda OCP: Kulda, Bankibahal, Balinga, Tumulia, Siarmal(P), & Lalma R.F.

The User Agency has provided the copies of Gazettee Notification under Section 9(i) & 11 (i), which have been enclosed at **page No.12-23/DP (Vol-I)**.

As reported by the DFO, Sundargarh Division, nearest rail-tail head is the Sardega Railway Siding, situated between **Latitude 22°04'06.83" to 22°04'12.08" North and Longitude 83°42'41.0 1" to 83°43'08.38" East (Page 49/DP) (Vol-I)**.



The total length of the track line from Jharsuguda to Sardega Railway siding is 53.1 kms and the distance of Barpali yard from Sardega railway siding is 8.72 kms. The nearest port at Bay of Bengal is Paradip which is situated at a distance of about 600 km from the block. The Jharsuguda airport is the nearest airport from the block (Approx. 45 KM).

As reported by the DFO, Sundargarh Division, the project covers 05 (Five) villages viz. Kulda, Bankibahal, Balinga, Tumulia, Siarmal under Hemgiri Tahasil of Sundargarh Forest Division in Sundargarh District and stands acquired by the Central Government and the ownership is vested with MCL. It also includes one Reserved Forest viz. Lalma RF. Out of several coal mines, Kulda Open Cast Coal Mining Project has a rated capacity 21.00 MTY. The user agency has applied for diversion of 134.69 ha of forest land under Forest (Conservation) Act, 1980.

As reported by the DFO, Sundargarh Forest Division in his part-II and Site Inspection Report at page No.40-42/DP(Vol-I) & 43-44/DP(Vol-I) respectively, the proposed area does not form part of any National Park/Wild life Sanctuary/ Biosphere reserve/ Tiger reserve/ elephant corridor etc. Also, the applied area is not forming part of any eco-sensitive zone of any protected area. No archaeological monument / Heritage site/ Defence establishment etc. are located in the applied area. The total cost of this project is **31925 Lakhs (Page-25/DP) (Vol-I)**. This project will generate permanent employment to 870 persons and temporary employment to 54900 persons (Page 28/DP) (Vol-I). The letter of authorization for filing this diversion proposal is enclosed at page No.24/DP(Vol-I). The sanction order / approval order of the project is enclosed at page No.12-23/DP(Vol-I).

## **2. Justification for locating the project in Forest Area:-**

Gopalpur sector of Ib-valley coalfield forms the north western part of Ib River coalfield which is a greenfield area with huge mining potential. Detailed exploration was undertaken by CMPDI, a Public Sector Undertaking of Govt. of India to assess the quarriable potentiality of coal seams with primary view of opening up of new mining projects to the extent possible. This sector has high potential for opencast mining operations including the proposed project namely Kulda Expansion Opencast Project.

The Ib River coalfield lies in between latitude 21°31'00" to 22°14'00" North and longitude 83°32'00" to 84°10'00" East and falls mainly in Sundargarh, Jharsuguda and Sambalpur districts of Odisha (Page No.50/DP) (Vol-I). Kulda geological block is located in the north-western part of Ib valley coalfield in Sundargarh district in the state of Orissa. It is situated between latitudes 22°01'02" to 22°03'03" North and longitudes 83°43'28" to 83°45'35" (Page No.50/DP) (Vol-I).

Kulda is a potential block having mineable reserves of about 266.49 million tonnes. Kulda Expansion OCP is a running project and has obtained all statutory clearances. Kulda



OCP started its mining operations since 2007-08. Coal extracted is 86.70 Mt and OB removed is 54.90 Mcum till 31.03.2020.

In earlier approved Mining Plan of Kulda Expansion OCP (Revision-1) (10 Mty to 15 Mty), mining operation was carried out in two phases. In Phase-I, surface boundary was restricted within notified lease area for which forest clearance has been obtained i.e. excluding Lalma Reserve Forest. In Phase-II, remaining part of the block was to be worked after obtaining forest clearance for this area. With the increase in demand, MCL now wants to expand the mine in Lalma Reserve forest area so as to enhance the production capacity to 18.75 Mty from this mine. As per the report of DFO, Sundargarh Forest Division in his Part-II (Page No.40-42/DP) (Vol-I), the production capacity has been revised from 18.75 Mty to 21 Mty.

Stage-I forestry clearance was received for land required for a period of 20 years from MOEF in two stages for 50.72ha on 25.07.2001 and 177.17ha on 22.01.2002 respectively. Stage-II clearance was obtained on 08.08.2007 for 227.89 ha of land for 20 years of mine workings (Page No.472-473/DP) (Vol-I) & Page No.493 (A-E).

Coal demand from Ib-valley coalfield has increased many folds due to its strategic location with Howrah-Mumbai railway line passing through the coalfield. Coal of this coalfield is suitable for thermal power plant.

The location of the site for Coal Mine operation is fully depending upon nature's deposit of mineral & geological structure of the coal seams. Hence question of exploring alternative site for the purpose does not arise.

The Coal bearing Area of the Project with Reserves of about 266.49 M Te (Mineable reserves) partially falls under the above forest land. The Opencast method of Mining has been chosen due to geo mining conditions for extraction of coal to meet the heavy demand of coal.

The Mining Plan and method of working had been prepared by Central Mine Planning and Development Institute a Public Sector Undertaking of Govt. of India. As per the Mining Plan of Kulda Expansion OCP, 134.69 Ha of forest land to be diverted for working of the mine. The justification for locating the project in forest area is enclosed at Page No.49-51/DP(Vol-I).

### **3. Maps:-**

The User Agency has furnished the following maps, duly authenticated by all concerned are enclosed at Volume-II/DP.

Sl. No.	Particulars	Scale	Plate No.
1	Toposheet showing location of Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL)	1:50000	1
2	Safety Zone area Plan Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	2



3	Land Use Plan Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	3
4	Surface layout Plan of Kulda Expansion OCP	1:5000	4
5	ORSAC vetted DGPS Surveyed plan of whole forest patches of Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:10,000	5
6	ORSAC vetted DGPS Surveyed map of village Bankibahal of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	6
7	ORSAC vetted DGPS Surveyed map of village Kulda of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	7
8	ORSAC vetted DGPS Surveyed map of village Kulda of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	8
9	ORSAC vetted DGPS Surveyed map of village Tumulia of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	9
10	ORSAC vetted DGPS Surveyed map of village Siarmal of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	10
11	ORSAC vetted DGPS Surveyed map of Lalma RF of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	11
12	Milan Sheet of Kulda Village ( 2 Nos) of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	12
13	Milan Sheet of Bankibahal Village of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	13
14	Milan Sheet of Bankibahal Village of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	14
15	Milan Sheet of Balinga Village of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	15
16	Milan Sheet of Siarmal Village ( 2 Nos) of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	16
17	Milan Sheet of Tumulia Village ( 1 No) of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:3960	17
18	Final Stage Excavation Plan (Reduced) copy	1:4000	18
19	Mining Stage Plan during 1 <sup>st</sup> Year (Reduced) copy	1:4000	19
20	Mining Stage Plan during 3 <sup>rd</sup> Year (Reduced) copy	1:4000	20
21	Mining Stage Plan during 5 <sup>th</sup> Year (Reduced) copy	1:4000	21
22	Final Stage dumping plan (Reduced) copy	1:4000	22
23	Final Mining Closure Plan (Reduced) copy	1:4000	23
24	ORSAC vetted DGPS Surveyed map showing compensatory afforestation areas in Panikholia RF, Pandripani RF, Sidarmunda RF and Punjipahar RF in Sundargarh Range in lieu of forest area proposed for diversion in Kulda OCP, Basundhara Area of M/s MCL, Sundargarh district.	1:10000	24



25	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Panikholia RF (effective DFL area=56.1 ha) with co-ordinates	1:4000	25
26	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Pandripani RF (effective DFL area=56.30 ha)	1:4000	26
27	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Sidharmunda RF (effective DFL area=53.56 ha)	1:4000	27
28	ORSAC vetted DGPS map showing Compensatory Afforestation areas in Punjipahar RF (effective DFL area=121.0 ha)	1:5000	28
29	Toposheet showing location of Compensatory Afforestation Land for Kulda Expansion OCP of Basundhara area, Mahanadi Coalfields Limited (MCL).	1:50,000	29

#### 4. Forest Land:-

As reported by the DFO, Sundargarh Forest Division in his Site Inspection Report (Page No.43-44/DP) (Vol-I) and Part-II (Page No.40-42/DP) (Vol-I) respectively, the proposed Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District involves total land 295.62 ha, out of which 134.69 ha of forest land (RF land 83.24 ha + Revenue Forest land 51.45 ha).

The certificate regarding the land schedule proposed to be diverted as on 25.10.1980 has been furnished by the Tahasildar Hemgir Tahasil and countersigned DFO, Sundargarh Forest Division are enclosed at Page No.95-130/DP(Vol-I) respectively.

The detailed village wise abstract of land schedule involving Forest land required for the project duly authenticated by the DFO, Sundargarh Division and Tahasildar, Hemgir Tahasil are enclosed at Page No.95-99/DP(Vol-I).

The detailed village wise abstract of Forest land involved in this project are furnished below:

Village - Kulda												
S. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	32	57	P. Jungle	1.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	Revenue
2	32	64	P. Jungle	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.30	Revenue
3	32	263 (P)	P. Jungle	8.22	4.18	0.00	0.00	0.00	0.00	0.00	4.18	Revenue
4	32	267	P. Jungle	0.36	0.36	0.00	0.00	0.00	0.00	0.00	0.36	Revenue
5	32	272	P. Jungle	10.93	9.03	0.00	0.00	0.00	0.00	0.00	9.03	Revenue
6	32	374	P. Jungle	1.08	1.04	0.00	0.00	0.00	0.00	0.00	1.04	Revenue
7	32	375	P. Jungle	0.29	0.29	0.00	0.00	0.00	0.00	0.00	0.29	Revenue
8	32	379	P. Jungle	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.33	Revenue
9	32	381	P. Jungle	1.06	0.90	0.16	0.00	0.00	0.00	0.00	1.06	Revenue
10	32	428	P. Jungle	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.84	Revenue
11	32	434	P. Jungle	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.30	Revenue
12	32	439	P. Jungle	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.80	Revenue
13	32	441	P. Jungle	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.04	Revenue
14	32	443	P. Jungle	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.05	Revenue
15	32	446	P. Jungle	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.40	Revenue
16	32	448	P. Jungle	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.60	Revenue
17	32	261	P. Jungle	9.44	1.35	0.00	0.00	0.00	0.00	0.00	1.35	Revenue
			Total in Ac.	36.04	21.81	0.16	0.00	0.00	0.00	0.00	21.97	
			Total in Ha.	14.59	8.83	0.06	0.00	0.00	0.00	0.00	8.89	



Reserved Forest Land												
S. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1		Lalma RF	R.F.	205.69	182.43	0.00	0.00	0.00	0.00	23.26	205.69	R.F.
			Total in Ac.	205.69	182.43	0.00	0.00	0.00	0.00	23.26	205.69	
			Total in Ha.	83.24	73.83	0.00	0.00	0.00	0.00	9.41	83.24	

Village - Bankibahal												
S. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	57	72	Jungle	8.83	1.48	0.00	0.00	0.00	0.00	0.00	1.48	Revenue
2	57	75	Jungle	9.30	9.30	0.00	0.00	0.00	0.00	0.00	9.30	Revenue
3	57	82	Jungle	0.58	0.58	0.00	0.00	0.00	0.00	0.00	0.58	Revenue
4	57	83	Jungle	1.35	1.35	0.00	0.00	0.00	0.00	0.00	1.35	Revenue
			Total in Ac.	20.06	12.71	0.00	0.00	0.00	0.00	0.00	12.71	
			Total in Ha.	8.12	5.14	0.00	0.00	0.00	0.00	0.00	5.14	

Village - Tumulia												
S. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1			Jungle	1.49	1.39	0.00	0.00	0.00	0.10	0.00	1.49	Revenue
2			Jungle	1.72	0.25	0.00	0.00	0.00	1.47	0.00	1.72	Revenue
3			G. Jungle	15.00	15.00	0.00	0.00	0.00	0.00	0.00	15.00	Revenue
4			Jungle	7.38	6.00	0.00	0.00	0.00	1.38	0.00	7.38	Revenue
5			Jungle	6.20	5.20	0.00	0.00	0.00	1.00	0.00	6.20	Revenue
6			G. Jungle	32.05	13.00	0.00	0.00	0.00	19.05	0.00	32.05	Revenue
7			Jungle	11.42	0.00	0.00	0.00	0.00	11.42	0.00	11.42	Revenue
8			Jungle	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.90	Revenue
9			G. Jungle	9.36	8.22	0.00	0.00	0.00	0.00	0.00	8.22	Revenue
10			Jungle	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.96	Revenue
11			Jungle	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.37	Revenue
12			Jungle	0.88	0.88	0.00	0.00	0.00	0.00	0.00	0.88	Revenue
13			Jungle	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.46	Revenue
14			Jungle	1.44	1.44	0.00	0.00	0.00	0.00	0.00	1.44	Revenue
			Total in Ac.	89.63	53.17	0.00	0.00	0.00	34.42	0.00	88.49	
			Total in Ha.	36.27	21.52	0.00	0.00	0.00	13.93	0.00	35.81	

Village - Siarmal												
S. No.	Khata No.	Plot No.	Kisam	Total Area	Mining	Embankment	Infrastructure	Road	OB	Safety	Area required	Remarks
1	53	103 (P)	Jungle	9.20	2.15	0.00	0.00	0.00	0.00	0.00	2.15	Revenue
2	53	588 (P)	Jungle	0.40	0.09	0.00	0.00	0.00	0.00	0.00	0.09	Revenue
3	53	587 (P)	Jungle	2.50	1.34	0.00	0.00	0.00	0.00	0.00	1.34	Revenue
4	53	568 (P)	S. Jungle	0.17	0.10	0.00	0.00	0.00	0.00	0.00	0.10	Revenue
5	53	786 (P)	Jungle	0.78	0.29						0.29	Revenue
			Total in Ac.	13.05	3.97	0.00	0.00	0.00	0.00	0.00	3.97	
			Total in Ha.	5.28	1.61	0.00	0.00	0.00	0.00	0.00	1.61	
			G. Total in Ha.								134.69	

The total non-forest land involved in the project is 160.93 ha, out of which 64.69 ha of Govt. non-forest land and 96.24 ha of tenancy land. The detailed village wise abstract of



land schedule involving non-forest land required for the project duly authenticated by the DFO, Sundargarh Division and Tahasildar, Hemgir Tahasil has been enclosed at **Page No.100-121/DP(Vol-I)**.

The detailed village wise abstract of Non-forest land involved in this project are furnished below:

Sl. No.	Division	Village	Non-Forest land (ha)			Grand Total (in ha)
			Govt. Land	Tenancy Land	Total	
1.	Sundargarh	Kulda	28.88	44.88	73.76	73.76
		Bankibahal	10.80	21.29	32.09	32.09
		Balinga	8.60	1.15	9.75	9.75
		Tumulia	16.41	28.92	45.33	45.33
		Siarmal	0	0	0	0
<b>Grand Total (in ha)</b>			<b>64.69</b>	<b>96.24</b>		<b>160.93</b>

The certificate for minimum use of forest land furnished by the UA duly countersigned by DFO, Sundargarh Forest Division is enclosed at **Page No.131/DP(Vol-I)**.

The purpose wise break-up of forest land and non-forest land required duly authenticated by all concern which is enclosed as **Page No.93/DP (Vol-I)**. The village wise summarized data of land schedule component wise and village wise duly authenticated by all concern which is enclosed as **Page No.94/DP (Vol-I)**. The details of breakup of forest and non-forest land are as follows:

Component wise land abstract – Kulda Expansion OCP (Ph-II)								
Sl. No.	Component	Forest				Govt. Non Forest Land (in Ac)	Tenancy (in Ac)	Total Area (in Ac)
		Reserve (in Ac)	Revenue (in Ac)	Total (in Ac)	Total (in Ha.)			
1	Mining	182.43	91.66	274.09	110.92	105.36	159.42	538.87
2	7.5m Safety Zone	23.26	0.90	24.16	9.78	43.36	77.99	145.51
3	Embankment	0.00	0.16	0.16	0.06	11.13	0.41	11.70
4	OB Dump	0.00	34.42	34.42	13.93	0.00	0.00	34.42
	<b>Total in Ac</b>	<b>205.69</b>	<b>127.14</b>	<b>332.83</b>		<b>159.85</b>	<b>237.82</b>	<b>730.50</b>
	<b>Total in Ha.</b>	<b>83.24</b>	<b>51.45</b>	<b>134.69</b>	<b>134.69</b>	<b>64.69</b>	<b>96.24</b>	<b>295.62</b>

The DGPS map of the forest land of the project proposed to be diverted authenticated by ORSAC and countersigned by DFO, Sundargarh Forest Division and Tahasildar, Hemgir Tahasil is enclosed at **Plate No.5/DP(Vol-II)**. The soft copy of shape & KML file in CD form is appended to the DP.

#### **5. Safety Zone:-**

##### **Details of Safety Zone Area over Forest, Government Non-Forest, Private Land.**

The details of safety zone involved in the Kulda expansion mining project are furnished below which is enclosed as **Page No.94/DP (Vol-I)**.



Sl. No.	Village	Type of Land	Area (Ha)	Total
1	Kulda	Forest	Nil	11.92
		Govt. Non-Forest	6.147	
		Tenancy	5.775	
2	Bankibahal	Forest	Nil	3.32
		Govt. Non-Forest	Nil	
		Tenancy	3.323	
3	Tumulia	Forest	0.364	34.23
		Govt. Non-Forest	11.40	
		Tenancy	22.465	
4	Siarmal	Forest	Nil	Nil
		Govt. Non-Forest	Nil	
		Tenancy	Nil	
5	Balinga	Forest	Nil	Nil
		Govt. Non-Forest	Nil	
		Tenancy	Nil	
6	Lalma R.F.	Forest	9.413	9.41
<b>Total area for safety zone (in Ha)</b>				<b>58.89</b>

The total area required for safety zone is 58.89 Ha in which 9.78 Ha is falling in the Forest Land. The user agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to bear the cost of maintenance of safety zone for greenbelt and bear the cost of afforestation over 1.5 times of the safety zone area on degraded forest land identified elsewhere, which are enclosed at Page No. 274-276/DP (Vol-I) respectively.

#### **6. Flora & Fauna:-**

In the Part-II and Site Inspection report of the DFO, Sundargarh Forest Division enclosed at Page No.40-42/DP & 43-44/DP (Vol-I), the forest land proposed for diversion has been put under **Eco-Value Class-III** (Tropical Dry Deciduous Forests) with **canopy density 0.5** vide his Memo No.2548 Dtd.15.05.2023 (Page No.492/DP) (Vol-I). The prevailing vegetation found in the proposed area comprises of *Acacia auriculiformis* (Sunajhari), *Terminalia arjuna* (Arjuna), *Phyllanthus emblica* (Amla), *Ficus benghalensis* (Bara), *Terminalia belerica* (Bahada), *Aegle marmelos* (Bela), *Ziziphus mauritiana* (Bara Koli), *Ficus racemose* (Dimiri), *Gmelina arborea* (Gambhar), *Terminalia chebula* (Harida), *Syzygium cumini* L (Jamun), *Neolamarckia cadamba* (Kadamba), *Anacardium occidentale* (Kaju), *Adina cordifolia* (Haldu), *Diospyros melanoxylon* (Kendu), *Acacia Catechu* (Khair), *Careya arborea* (Kumbhi), *Schleichera oleosa* (Kusum), *Azadirachta indica* (Neem), *Mangifera indica* (Amba), *Butea monosperma* (Palas), *Artocarpus heterophyllus* (Panasa), *Ficus religiosa* (Aswastha), *Albizia lebbeck* (Sirisa), *Tectona grandis* (Teak), *Terminalia tomentosa* (Asana), *Shorea robusta* (Sal), *Bombax ceiba* (Simili), *Dalbergia sissoo* (Sissoo), *Cassia fistula* (Sunari) & *Tamarindus indica* (Tentuli) etc. No rare and endangered species are available in the forest area applied for diversion and there is no archaeologically important monument situated in the



area. The Fauna like Fox (*Vulpes vulpes*), Wild Boar (*Sus scrofa*), Indian Hare (*Oryctolagus cuniculus*), Jungle cat (*Felis chaus*), Jungle fowl (*Gallus gallus*) etc. are seen in the applied area (Page No.47/DP) (Vol-I).

## **7. Wildlife Management:-**

### **(a) Regional Wildlife Management Plan:-**

The user Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to pay the cost of Regional Wildlife Management Plan for the total project area as per the present rate which is enclosed at Page No.228/DP(Vol-I).

### **(b) Site Specific Wildlife Conservation Plan:-**

The user Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to pay the cost of SSWLCP after due approval of the same by the PCCF(WL) & CWLW, Odisha which is enclosed at Page No.229/DP(Vol-I).

## **8. Tree enumeration:-**

In the Part-II and Site Inspection report of the DFO, Sundargarh Forest Division enclosed at page No.40-42/DP & 43-44/DP(Vol-I), the total tree enumeration has been taken up over the total project area of 295.62 ha. (Forest-134.69 ha. + Non-Forest-160.93 ha.) are as follows:

Lalma RF – Total no. of trees enumerated	-	20912 Trees
Tumulia Village Revenue Forest Land	-	1050 Trees
Kulda Village Revenue Forest Land	-	807 Trees
Bankibahal Village Revenue Forest Land	-	<u>866 Trees</u>
<b>Total</b>	<b>-</b>	<b>23635 Trees (P. No.87-88/DP) (Vol-I)</b>
Kulda Village Non-Forest Govt. land	-	<b>363 Trees (P. No.91/DP) (Vol-I)</b>
Kulda Village Tenancy Non-forest land	-	2013 Trees
Tumulia Village Tenancy Non-forest land	-	2632 Trees
Bankibahal Village Tenancy Non-forest land	-	<u>1798 Trees</u>
<b>Total</b>	<b>-</b>	<b>6443 Trees (P. No.601-608/DP) (Vol-II)</b>
<b>G. Total</b>	<b>-</b>	<b>30441 Trees</b>

The tree enumeration list and abstract which has been enclosed at Page No.484&485 and Page No.625-1027/DP (Vol-II).

## **9. Compensatory Afforestation:-**

Compensatory Afforestation scheme has been prepared by the DFO, Sundargarh over 305.59 ha (Effective area-286.96 ha) of degraded forest land identified in Pandripani R.F., Sidarmunda R.F., Punjipahad R.F., Panikholia R.F., under Gopalpur Range of Sundargarh Forest Division i.e. over twice the extent of forest land over 134.69 ha proposed for diversion under Parivesh-I.



The detailed Degraded Forest Land status for CA is furnished below which is enclosed at **Page No.144/DP(Vol-I)**.

Sl. No.	Name of the Reserve Forest	Legal Status	Area (in ha)	Effective area (in ha)
<b>Gopalpur Forest Range</b>				
1.	Pandripani RF	Reserve Forest /p	64.10	56.30
2.	Sidarmunda RF	Reserve Forest /p	53.56	53.56
3.	Punjipahar RF	Reserve Forest /p	131.54	121.00
4.	Panikholia RF	Reserve Forest /p	56.39	56.10
		<b>Total</b>	<b>305.59</b>	<b>286.96</b>

Accordingly, the DFO, Sundargarh Forest Division has prepared the Site Specific CA scheme as per approved one time cost norm basis an average of 500 seedlings/ha with 18 month old seedlings to be planted thereof with a provision of required soil moisture conservation activities, watering and fencing etc with maintenance upto 10 years. The DSS analysis report furnished by the DFO, Sundargarh and countersigned by the RCCF, Rourkela Circle is enclosed at **Page No.147-155/DP(Vol-I)**. The indigenous species which has been preferred to be planted considering the adverse soil and moisture condition are Neem (*Azadirachta indica*), Karanja (*Derris indica*), Amla (*Embllica officinalis*), Asana (*Terminalia tomentosa*), Jamun (*Syzygium cumini*), Khair (*Acacia catechu*), *Terminalia chebula*(Harida), *Dalbergia sissoo* (Sissoo) etc (**Page No.140/DP**) (**Vol-I**). A copy of the Compensatory Afforestation scheme is enclosed at **Page No.132-173/DP(Vol-I)**.

The CA scheme has been approved by the PCCF (FD & NO, FC Act) with a financial outlay of Rs.9,02,61,000/- (Rupees nine crores two lakhs sixty one thousand) only is enclosed at **Page No.143/DP (Vol-I)**.

The CA land suitability certificate along with Joint Verification Report have been furnished by the DFO, Sundargarh Forest Division and Tahasildar, Hemgir Tahasil is enclosed at **Page No.144/DP and Page No.159/DP(Vol-I)** respectively. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to bear the cost of CA, Penal CA, Additional CA, Soil and Moisture Conservation Measures and any other cost of Site Specific activities as mentioned in the financial outlay of CA if required as per prevailing wage rate at the time of plantation which is enclosed at **Page No.146 & 227/DP(Vol-I)**. The DGPS map and the location of CA land has been shown in Sol Toposheet No.64N/12, 64N/16, 64O/9, 64O/13 of scale 1:50,000 duly countersigned by the DFO, Sundargarh Forest Division which is enclosed at **Plate No.24-28/DP and Plate No.29/DP (Vol-II)** respectively. However, the User Agency has furnished a report regarding the completion of the pillar posting having 95 Nos. in proposed CA land which is enclosed at **Page No.485/DP** and also enclosed the photograph in support of posting pillars which is enclosed at **Page No.158/DP(Vol-I) and Plate No.24-28/DP (Vol-II)**.



#### **10. Cost benefit analysis:-**

As reported by the DFO, Sundargarh Forest Division, the total benefit of the project comes to Rs.730992.27 Lakhs. The total loss on forests including environmental loss comes to Rs.13,281.44 Lakhs. Hence, the Cost-Benefit Ratio comes to 1:55 (Page No.214-217/DP) (Vol-I).

#### **11. Environmental Clearance:-**

As reported by the DFO, Sundargarh Division, the user agency has furnished the copy of ToR issued for a capacity of 21.00 MTPA, vide letter No. J-11015/10/1995-IA-II(M), date 13.12.2022, which has been enclosed at Page No.182-193/DP(Vol-I). The user agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to submit the copy of Environmental Clearance for expanded capacity, which has been enclosed at Page No.197/DP(Vol-I).

#### **12. Rehabilitation & Resettlement Plan:-**

As reported by the DFO, Sundargarh Division, as per the authenticated land schedule, the land belonging to village Kulda, Bankibahal, baling, Tumulia, Siarmal, & lalma RF of Hemgir Tahasil, District-Sundargarh, Odisha are involved in Kulda Expansion OCP. The Kulda Open Cast Project includes the Mining Area, Safety zone, embankment, & OB Dump area.

Total 295.62 Ha (730.50 acres) of land is involved in Kulda Expansion Project (Ph.II). Out of which 96.24 Ha is Tenancy land, 64.69 Ha is Govt. Non-Forest land, 51.45 Ha is Revenue forest land and 83.24 Ha is Reserve Forest Land. The mining area is 218.08 Ha only. Safety Zone area is 58.89 Ha. The rest area will be for embankment and external OB dump.

Out of 96.24 ha of tenancy land involved in this project, 44.88 Ha (110.90 acres) belongs to village Kulda, 21.29 Ha (52.61 acres) belongs to village Bankibahal, 1.15 Ha (2.83 acres) belongs to village Balinga, 28.92 ha (71.48 acre) belongs to village Tumulia. The lands of all above villages have been acquired under CBA (A&D) Act, 1957 vide Notification u/s 9(1) of the said Act vide SO No. 3055 dated 29.10.1990 (Page No.13-17/DP) (Vol-I). The above land has been vested in MCL u/s 11(1) of the said Act vide SO No. 43015 dated 30.03.1993 (Page No.18-23/DP) (Vol-I). The payment of Compensation and R&R benefits for the village Kulda, Bankibahal, Balinga, and Tumulia including other 10 villages have been under taken by the Claims Commission, set up by the Hon'ble Supreme Court of India in SLP© 6933 of 2007. The compensation for land and structures for village Kulda, Bankibahal, Balinga has been disbursed to the beneficiaries. For village Tumulia, approval of Hon'ble Supreme Court is awaited to provide the land compensation as well as R&R benefits. The Rehabilitation plan and the Resettlement plan prepared by the User Agency have been enclosed at Page No.218-223/DP(Vol-I). The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest



Division for submission of R&R plan after the approval from Ministry of Tribal Affairs, Government of India which has been enclosed at **Page No.224/DP(Vol-I)**.

As reported by the DFO, Sundargarh, the User Agency has intimated that, a vocational training institute has already been established at Belpahar, which is having a capacity to impart training as per the recommendation for the benefits of the eligible unemployed in the project affected villages. Apart from the above, the unemployed youths are also being trained through reputed agencies & Institutions like CIPAT, IIT Kharagpur etc. It is endeavored that the trained employees shall be deployed in our industry or any other appropriate industry in the vicinity of the forest land being diverted.

The User Agency has intimated that, there is already a separate dedicated department namely Community Development Department in MCL designated to work for the Social Welfare of the peripheral villages and MCL has always understood the socio-economic conditions of the project affected families and taken corrective measures to restore them to their original or better-than-original condition, by providing direct and indirect employments and by providing amenities for the peripheral village development. The copy of the documental proof is enclosed at **Page No.474-478/DP(Vol-I)**.

### **13. NPV (Net Present Value):-**

The User Agency has also furnished an undertaking duly countersigned by the DFO, Sundargarh Division to pay the cost of NPV of the forest land proposed to be diverted as per demand of concerned DFO i.e. Sundargarh Forest Division which is enclosed at **Page No.226/DP(Vol-I)**. Further, the user agency has also furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to pay the cost of additional amount of NPV if so, determined as per decision of the Hon'ble Supreme Court of India which are enclosed at **Page No.226/DP(Vol-I)**.

### **14. Mining Plan and Mine Closure Plan:-**

The User Agency has provided the copy of approval letter along with the booklet of Mining Plan and Mine Closure Plan which is enclosed at **Page No.284-468/DP(Vol-I)** and **Plate No.18-23/DP (Vol-II)**.

### **15. NOC from State Pollution Control Board:-**

The user agency has provided the copy of Consent To Operate (CTO) for a production capacity of 21.00 MTPA which is valid till 31.03.2023, issued vide No. 788/IND-I-CON-5125, date 20.01.2023 of OSPCB, which has been enclosed at **Page No.198-212/DP(Vol-I)**. The grant of CTO for the expanded area is awaited till the grant of Environmental Clearance. The user agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Division to submit the copy of CTO for expanded area, which has been enclosed at **Page No.213/DP(Vol-I)**.



**16. Certificate under the FRA' 2006:-**

The Collector, Sundargarh has issued the Certificate under FRA,2006 over 134.69 ha. vide his letter No.5418/VIII-08/2021/ dtd.21.06.2021 which is attached herewith at **Page No.174-180/DP(Vol-I)**. The Gram Sabha Resolution with English and Odia version has been enclosed at **Page No.494-600/DP(Vol-II)**. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Forest Division to bear the cost of settlement under FRA, 2006 which is enclosed at **Page No.181/DP(Vol-I)**.

**17. DGPS Map:**

Ministry of Environment and Forests, GoI in their letter No. F. No.11-9/98 dated 08.07.2011 have issued guidelines that all the application seeking prior approval of the Central Govt. under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forest purpose, must be accompanied with Geo-referenced boundary in shape file. Further, in the guideline, it is said that to ensure accurate delineation of the forest area to be diverted, the application should also contain authenticated copy of digital map along with hard copy. Accordingly, the User Agency has submitted the required digitized map duly authenticated by ORSAC and countersigned by the DFO, Sundargarh Forest Division, which are enclosed at **Plate No.5-11/DP**. The UA has also submitted the Shape and KML file of the project area. The soft copy of DGPS map of the forest area proposed for diversion in CD form is enclosed with the DP.

**18. Violation:**

As reported by the DFO, Sundargarh Division in Part-II and Site Inspection report of the DFO, Bonai Forest Division enclosed at **Page No.40-42/DP & 43-44/DP(Vol-I)**, no violation has been committed by the User Agency under Forest (Conservation) Act, 1980.

**19. Others:**

Part-II and Site Inspection report of the DFO, Sundargarh Forest Division are enclosed at **Page No.40-42/DP & 43-44/DP(Vol-I)** respectively. The Part-III & Site Inspection report of RCCF, Rourkela Circle are enclosed at **Page No.45/DP(Vol-I) & 46-47/DP (Vol-I) respectively**. The Division Profile of Sundargarh Forest Division is enclosed at **Page No.1028/DP(Vol-II)**. The District Profile of Sundargarh District is enclosed at **Page No.1029/DP(Vol-II)**. The State Profile has been furnished at **Page No.1030/DP(Vol-II)**. The User Agency has furnished an undertaking duly countersigned by the DFO, Sundargarh Division to bear the cost of the CATP which is enclosed at **Page No.281/DP(Vol-I)**.

**20. Recommendation:**

In view of the above, a proposal towards seeking clearance from Ministry of Environment, Forest & Climate change, Govt. of India for diversion of 134.69 ha of forest land for Expansion of Kulda Open cast Coal Mining Project of Basundhara Area of Mahanadi Coalfields Limited in Sundargarh District in duplicate is sent herewith for consideration of



the Government and onward transmission to Government of India, Ministry of Environment, Forest & Climate Change, New Delhi for approval under Section-2 (ii) of Forest (Conservation) Act, 1980.

Yours faithfully

Encl:- **Diversion Proposal  
in duplicate (2 Sets)  
alongwith PDF file in  
CD form**

  
Principal Chief Conservator of Forests & HoFF  
Odisha

Memo No. **7713** Date. **08.04.2024**

Copy forwarded to the Regional Chief Conservator of Forests, Rourkela Circle with reference to his Memo No.349 dated 31.01.2024.

  
Chief Conservator of Forests (Nodal)

Memo No. **7714** Date. **08.04.2024**

Copy forwarded to the Divisional Forest Officer, Sundargarh Forest Division for information & necessary action with reference to Memo No.350 dated 31.01.2024 of RCCF, Rourkela Circle to his address.

  
Chief Conservator of Forests (Nodal)

Memo No. **7715** Date. **08.04.2024**

Copy forwarded to the Project Officer, Kulda OCP, Basundhara Area of M/s Mahanadi Coalfields Limited, Dist-Sundargarh, Pin-770076 for information.

  
Chief Conservator of Forests (Nodal)



Financial Outlay for Compensatory Afforestation Scheme over an area of 286.96 ha of Degraded Forest land identified in Pandripani RF (64.10 ha), Sidarmunda RF (53.56 ha), Punjipahar RF (131.54 ha), Panikholia RF (56.39 ha) under Gopalpur Range of Sundargarh Forest Division against diversion of 134.69 ha forest land for Expansion of Kulda Open Cast Coal Mining Project of Basundhara Area by MCL as per approved One-time Cost Norm

Sl. No.	Description	Amount (Rs.)
1.	Cost of ANR Plantation @ 500 Plants per ha over 286.96 ha @ Rs.1,50,051/- per ha with 10 years maintenance	4,30,58,635.00
2.	Cost of Bamboo Twig and Thorn fencing over 23885 RMT with 5 years maintenance @ Rs.1,10,214/- per ha/ 250 RMT (As proposed by DFO, Sundargarh Division)	1,05,29,846.00
3.	Cost of SMC activities like staggered trenches, percolation pits, contour trench, graded earthen bund, LBCD, wire mesh LBCD, Sub-Surface Dyke and WIIS as per the slope and site requirement @ Rs.39,284/- per ha over 286.96 ha with 5 years maintenance	1,12,72,937.00
4.	Watering by Diesel Pump Set fitted with borewell (1 Borewell for 5 ha Plantation) @ Rs.5,27,321/- for 58 Nos. of borewell (As proposed by the DFO, Sundargarh Forest Division)	3,05,84,618.00
<b>Grand Total</b>		<b>9,54,46,036.00</b> <b>or rounded off to</b> <b>9,54,46,100.00</b>
5.	<b>Infrastructure to be provided as per consent of the User Agency in kinds</b>	
i.	Supply 2023 Mahindra Bolero Neo 1.5 D N 10 OPT with all accessories, including RTO, insurance and other charges for monitoring of the CA Plantation with Petrol and Driver	
ii.	Supply Mahindra Scorpio-N Z8 L Duesek NT 4WD 7 STR (with Everest White) with all accessories, including RTO, insurance and other charges for monitoring of the CA area	

(Rupees Nine Crore fifty four lakhs forty six thousand and one hundred) only

Approved

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

1113



**SCHEME FOR**

**COMPENSATORY AFFORESTATION**

**OVER DEGRADED RESERVED FOREST (305.59 Ha) OF GOPALPUR  
RANGE, UNDER SUNDARGARH FOREST DIVISION OF SUNDARGARH  
DISTRICT, ODISHA**

**AGAINST DIVERSION OF FOREST LAND (i.e. 134.69 Ha)**

**FOR**

**KULDA OPEN CAST EXPANSION PROJECT**

**OF**

**Mahanadi Coalfields Limited**  
**(A Subsidiary of Coal India Limited)**  
**Jagriti Vihar, Burla, Sambalpur**

**Prepared by**

**Divisional Forest Officer,  
Sundargarh Forest Division,**



# **CONTENTS**

<b>S.No.</b>	<b>Particulars</b>	<b>Page</b>
<b>1</b>	Compensatory Afforestation Scheme	
<b>2</b>	Total Financial outlay of the CA scheme ( <b>Annexure-A</b> )	
<b>3</b>	Suitability Certificate from DFO, Sundargarh Division ( <b>Annexure-B</b> )	
<b>4</b>	Land Schedule of Forest land involved in diversion ( <b>Annexure-C</b> )	
<b>5</b>	Undertaking by User Agency to bear the cost of CA amount ( <b>Annexure-D</b> )	
<b>6</b>	DSS Analysis report from DFO, Sundargarh Division ( <b>Annexure-E</b> )	
<b>7</b>	DSS Certificate from DFO, Sundargarh Division ( <b>Annexure-F</b> )	
<b>8</b>	DGPS map of compensatory afforestation site of Kulda OCP at Pandripani R.F., Sidarmunda R.F., Punjipahar R.F., Panikholla R.F. ( <b>Annexure- G</b> )	
<b>9</b>	Topo-sheet showing CA Site of Kulda OCP ( <b>Annexure-H</b> )	
<b>10</b>	Cost of ANR plantation and its maintenance as per the one-time cost norm for the year 2023-24 in Annexure-7 ( <b>Annexure-I</b> )	
<b>11</b>	Soil Moisture Conservation Measures as per cost norm for the year 2023-24 in Annexure-11 ( <b>Annexure-J</b> )	
<b>12</b>	Fencing of Bamboo Twigs & Thorns as per cost norm in Fencing Model – F – I ( <b>Annexure-K</b> )	
<b>13</b>	Watering provision to Compensatory Afforestation(CA) plantation as per cost norm in watering Model – W – II ( <b>Annexure-L</b> )	



## **1. INTRODUCTION**

Kulda Expansion OCP is located in the north-western part of Ib valley coalfield in Sundargarh District in the state of Odisha. It is situated between latitudes 22°01'02" to 22°03'03" North and Longitudes 83°43'28" to 83°45'35" East and falls mainly in Sundargarh, Jharusguda and Sambalpur districts of Odisha. District headquarter Sundargarh, on State highway-10 (Sambalpur to Rourkela), is at a distance of about 46 Km from the blocks. The Sundargarh(Odisha) – Raigarh(Chattisgarh) all weather road passes through the blocks. The blocks are also well connected by black top road with two different towns of Odisha namely Rourkela at 145Km and Jharsuguda at 75Km. The blocks are around 6 Km south west of Basundhara West Colliery and are connected by part metallic road. The blocks are connected by road to the state capital Bhubaneswar through State Highway-10 and National Highway-42, with a total distance of 450Km. The blocks are well connected with MCL HQ at Sambalpur situated at a distance of about 100 km. The Nearest railhead is Hemgir, on Mumbai-Howrah Broad Gauge of South Eastern Railway at a distance of about 35 km from the blocks. Jharsuguda railway station on Jharsuguda-Sambalpur-Bhubaneswar rail line of East Coast Railway is at a distance of about 75 km. The nearest port at Bay of Bengal is Paradip and situated at a distance of about 600 km. from the block. The Jharsuguda Airport is the nearest airport from the block (Approx. 45 KM).

Kulda OCP is operating since 2007-08. About 120.90 Mt of coal and 86.88 M.Cum of OB have been extracted till 31.03.2022. This project is expansion of existing Kulda Open Cast Mining Project having 218.627 Mt of mineable coal reserve in Kulda, Balinga, Bankibahal, Siarmal(p), Tumulia(p) villages. The Kulda Expansion OCP has got a life span of 11 years. The project extends over an area of 981.705 Ha (incl. existing area) of tenancy land, forest land and Non-Forest land as detailed below:

#	Type of Land	Existing Area (Ha.)	Proposed Area (Ha.)	Total (Ha)
1.	Forest Land	219.371*	134.690	354.061
2.	Govt. Non-Forest Land	320.193	62.670	382.863
3.	Tenancy Land	146.521	98.260	244.781
Total Land		686.085	295.620	981.705

\*Out of 227.89 Ha of forest land already diverted for Kulda OCP, 8.52 Ha of forest land has been re-diverted for Basundhara Washery and balance area of 219.371 Ha is existing and another 134.69 Ha is proposed for diversion for Kulda Expansion OCP (Ph-II) of M/s MCL, Basundhara Area.



## **2. FOREST LAND INVOLVED**

Out of the total land requirement of 981.705 Ha, the Kulda OCP involves 354.06 Ha of forest land. Out of this 354.06 Ha of forest land 219.37 Ha (incl. of 15.184Ha of forest safety zone) has already been diverted for Kulda OCP in phase-I, the remaining 134.69Ha of forest land has been proposed for diversion including 9.77 Ha of forest safety zone, which is to be diverted for non-forestry purpose for Kulda OCP in phase –II. The detailed land schedule of Forest land proposed for non-forestry purpose is furnished below:

#	Type of Use	Total (Ha)
1.	Mining Zone	110.92
2.	OB Dump, Embankment, Other infrastructure and Blasting danger zone	13.99
3.	Safety Zone	9.78
Total Land		134.69

## **3. IDENTIFICATION OF DEGRADED FOREST LAND**

As per revised guidelines contained in letter No.11-30/96-FC, dated 10.04.1997 of the Ministry of Forest & Environment a special provision for Central Government Projects has been made for compensatory afforestation by inserting Para 3.2 (viii) (inserted) in the existing guideline. As per revised guideline for diversion of Forest Land under the Forest (Conservation) Act – 1980, compensatory afforestation can be done over degraded forest land twice in extent of forest area being diverted for Central Projects. As per clause 4.7 of the consolidated guidelines for diversion of forest land under the Forest (conservation) Act – 1980 in the matter of mining lease, the forest Area required for safety zone for mining operation should be the part of the forest area proposed for diversion.

Therefore, the present scheme for compensatory afforestation aims at prescribing afforestation program over 286.96 Ha of degraded forest area (twice in extent to the forest area of 134.69 Ha including the area of safety zone i.e.,9.77 ha.) being diverted. Accordingly, a gross area of 305.59Ha (effective area = 286.96 Ha) of degraded forest area has been identified in Pandripani R.F., Panikholia R.F., Sidarmunda R.F., Punjipahad R.F., under



Sundargarh Division (**Annexure-C**). The identified area of degraded forest is in a four patches in the respective Reserved Forest. The DGPS map showing the afforestation site in Pandripani R.F., Panikholia R.F., Sidarmunda R.F., Punjipahad R.F., is furnished herewith as **Annexure – G**. The degraded forest lands identified having found suitable for afforestation; a certificate to that effect is furnished in **Annexure - B**. The compensatory afforestation sites are shown on Topo-sheet enclosed in **Annexure-H**. The DSS Analysis report and Certificate has been attached in **Annexure-E & F**, respectively. The details of quantum of plantation per hectare of CA land and the Forest Range/section under which the plantation shall be carried out is as under:

#	Details of CA Land	Allocated Area (Ha)	Effective Area (Ha)	ANR (Plantation/Ha)	Forest Range	Forest Section	Forest Division
1	Pandripani R.F.	64.10	56.30	600	Gopalpur	Gopalpur	Sundargarh
2	Sidarmunda R.F.	53.56	53.56	400	Gopalpur	Gopalpur	Sundargarh
3	Punjipahar R.F.	131.54	121.00	600	Gopalpur	Duduka	Sundargarh
4	Panikholia R.F.	56.39	56.10	400	Gopalpur	Duduka	Sundargarh

The financial outlay has been calculated taking an average of 500 ANR/Ha in an area of 286.96 (Effective Area) and the total amount for compensatory afforestation shall be disbursed as per the above table to each Forest Range/Division for carrying out the plantation and associated works.

#### **4. ORSAC VERIFICATION OF IDENTIFIED CA SITES AT PANDRIPANI R.F., PANIKHOLIA R.F., SIDARMUNDA R.F., PUNJIPAHAD R.F. (AREA = 305.59 HA)**

The CA site identified at **Pandripani R.F., Panikholia R.F., Sidarmunda R.F., Punjipahad R.F** of area 305.59Ha has been verified by the ORSAC after DGPS survey vide their letter vide no. – ORSAC/DGPS-FD/1084/2022/3277(3), dt.–07.09.2022. The DGPS surveyed map certified by ORSAC is attached in **Annexure-G**.

#### **5. DESCRIPTION OF EXISTING VEGETATION**

The CA sites identified are having Low Dense Forest (LDF) as well as Moderately Dense Forest (MDF) as categorized by Forest Survey of India. As per the sample tree enumeration carried during site visit, sparse forest growth exists in the areas. Also there are stony patches excluded from planting area. The main species found here are sparse growths of Sal, Asan, Neem, Bija, Bahada, Kendu, Karanja, Char, Mahula, Kusum, Mai, Semuli,



114

Tentuli etc. The site is degraded due to repeated biotic interferences like grazing, fire hazard, illicit felling and encroachment. However, whatever regeneration is sprouting do not grow due to trampling effect by domestic cattle of surrounding villages. These species are existing at sparse in deformed shape. Major plant of this area is covered with weeds like *Lantana camara* and *Eupatorium odoratum*.

## **6. TOPOGRAPHY & SOIL**

The identified CA land in Pandripani R.F., Panikholia R.F., Sidarmunda R.F., Punjipahad R.F., is located in the Survey of India; Topo-sheet no. –64 N/12, 64 N/16, 64 O/9, 64 O/13. The topography of the degraded forest land identified for this purpose is plain to undulating, small hilly terrain. The soil is mostly **laterite** & clayey having some portion of **Murom**. The slope varies from moderate to steep. Drainage is good. The thickness of soil varies from very shallow to moderate. The soil is also devoid of humus. At the site, erosion varies from slight to moderate. There are encroachment at some patches which has been removed in the Treatment Plan attached in Vol II and an effective area of 286.96 Ha has been considered for plantation.

## **7. CLIMATE**

The climate of this region is characterized by hot dry summer with well distributed rainfall in South West monsoon season. Cold seasons begin in the month of November and lasts till the end of February. The hot seasons follows thereafter and continues till June. The South-West monsoon starts from mid-June and continues till the end of September. The annual rainfall varies from 1200 to 1500 mm. The months of October and November constitute the post-monsoon seasons. The climate in general is hot, moist and sub-humid. The temperature varies from 15<sup>0</sup> c to 48<sup>0</sup> c. May and December are the hottest and coldest months of the year respectively.

## **8. SPECIAL OBJECTIVES OF MANAGEMENT**

- i) To restrict the degradation by reducing the biotic interference to barest minimum and reverse the trend towards the process of restoration of vegetation.
- ii) To develop the Crop composition by providing site-specific silvicultural treatment.
- iii) To facilitate the boosting of natural regeneration and ensure their establishment.



- 115
- iv) To take up appropriate soil moisture conservation measures to improve the soil and moisture regime.
  - v) To improve the bio-diversity of the site.
  - vi) To meet the need of the local villagers with regard to firewood and small timber depending upon the productivity from silvicultural operations like thinning, subsidiary silvicultural operation, climber cutting, cutting of high stumps, double shoot cutting etc.

## **9. QUANTUM OF WORK TO BE TAKEN UP**

The following are the items have been considered for the CA purpose.

- 1. Plantation over the identified degraded forest land.
- 2. Soil Moisture Conservation (SMC) practices as per the MoEF&CC / State specific guidelines
- 3. Watering Provision for the sustainable growth of trees
- 4. Bamboo fencing provision to fence the plantation area for protection from wild animals.

## **10. NURSERY**

- A) A good nursery is the pre-requisite for a successful plantation. All care should be taken to raise healthy and sound seedlings of required size (45 cm height) before they are put to plantation site. Planting of one year and six month old seedling of indigenous species shall be taken up. Nursery Programme must be planned out as per the "Guide-lines" in the plantation manual 1977 so that a good stock of healthy Seedling can be raised. 10% extra seedling is to be raised to cover the shortfall due to casualty in the nursery stage/Plantation Site.
- B) The temporary nursery should be raised near the plantation site as far as practicable.
- C) A seeds should be collected preferably from + trees or purchased from State Siviculturist.
- D) Proper treatment of seeds should be done as per the Plantation manual.
- E) During nursery stage periodical shifting and grading is recommended to avoid roots interlacing/ coiling in to the ground soil.



## **11. PROTECTION**

The important element of successful plantation is Protection. Watchers are to be engaged for the various purpose such as protection, watering, to prevent fire during summer season etc.

## **12. CONTROL**

The nursery journal, plantation journal and other records shall be maintained separately in accordance with the provision of "The Orissa Forest Plantation Manual 1977" indicating the physical and financial achievements. Necessary entries with regard to plantation activities undertaken shall be entered in the journals and shall be produced before the inspecting officers. In case of any eventuality like cyclone, thunderstorm, hail storm etc. if affect the plantation, this should also be noted. It is also necessary to note the distribution of rain fall which not only helps in monitoring the growth of plants at site but also acts as a guideline for the ensuing year's nursery schedule to be formulated.

Protection, measures shall be taken to save the plantation from fire/ grazing incidence. During February / March the cut materials are to be burnt (control burning) under strict supervision. The inspection path shall also have to be laid and weed growths are to be scrapped. Fallen leaves etc. are to be swept regularly.

## **13. SOIL & WATER CONSERVATION MEASURES**

It is indispensable to take up the soil & moisture conservation work. Small gullies are to be plugged by live plants. As the area will be dried out quickly, water conservation measures will be taken up by digging staggered trenches. These trenches will be dug along the contour. The dimensions of the trenches will be 2.5mtr x 0.5mtr x 0.5mtr. and dug out earth will be kept on the lower hill side. Staggered trenches are to be aligned 15mtr. apart along the contour and 7.5mtr. across the contour. In addition to above, leguminous seeds are to be sown in the inter space between the plants. Check dams are proposed to be constructed, out of dry rubbles across the nallas & gullies.

## **14. PLANTATION**

The area will be restocked by planting adequate nos. of seedlings @ 500 nos./Ha (i.e. 1,43,480 nos.) over the identified land for CA purpose. Taking into consideration of soil



112  
condition, requirement of local inhabitants and suitability of the site, the following local native species are recommended for plantation.

1. Bamboo- *Dendrocalamus strictus*
2. Neem – *Azadirachta indica*
3. Karanj – *Pongamia pinnata*
4. Amla – *Emblica officinalis*
5. Asan - *Terminalia tomentosa*
6. Jamun – *Syzgium cumini*
7. Khair - *Acacia catechu*
8. Bahada - *Terminalia chebulla*
9. Sissoo – *Dalbergia sissoo* and others.

**Following two major operations will be carried out:**

**A. Regeneration Cleaning:**

This operation will be carried out in winter. Following works will be carried out during this operation:

1. For helping the rooted waste to grow better all the unwanted growth including climber and creepers will be cleaned and removed and the useful species will be freed from suppression.
2. The mal formed stems will be coppiced. When there will be more than one shoot, the sound shoot will be singled out.
3. The congested stands of useful species will also be thinned.
4. Where congested bamboo clumps are available, the same will be cleaned.
5. High stumps will be cut flush to the ground

**B. Gap Planting:**

For filling up the blanks, 500 numbers of seedlings per Hectore is proposed in ANR plantation. The detailed plantation activities & cost has been appended in **Annexure - A**. In the area chosen for plantation work, two stages of weeding are recommended to be carried out. To promote and enhance the growth of the plants, it is necessary to see that, the plants get as much nutrients as possible and that no other plants are competing for space, light and



118  
nutrients. Therefore, weeding and soil working must be taken up in a newly created plantation. The period of weeding should be as follows:

(A) 1st weeding and manuring (including casualty replacement) – Last week of July.

(B) 2nd weeding, soil working & manuring – Last week of August/ September

1st weeding is an area weeding and should be taken up after a fortnight of completion of planting. In this weeding, the weeds around the planted seedlings are pulled to a radius of 45 cm and in all other space, they are cut back. During this operation, a dose of NPK fertilizer @ 20 grams per plant will be given to each plant. 2nd weeding is a strip weeding to be taken up in the last week of August/ September. This weeding shall also be carried out along the contour and the cut-out materials will be kept in intermediate lines. In soil, working the soil around each plant is loosened. The soil should be left in clods which will improve soil aeration and help develop root system along with moisture conservation by breaking soil capillary action. The detail plantation cost has been appended in **Annexure - A**.

## **15. PEOPLE'S PARTICIPATION**

The local communities are to be involved for the protection of the plantation. The V.S.S. (Van Surkasha Samiti) is to be formed (if not done earlier) & incentives to be given to the V.S.S. for their active participation in protecting the plantation. Livelihood option and Entry Point Activities are to be taken to improve the socio-economic status of the people living around the forest. For effective protection of area watch and ward shall be provided during the project period (from inception to 10<sup>th</sup> year) and subsequently the plantation will be looked after by the V.S.S.

## **16. WATCH AND WARD**

Watchers (one watcher for every 10Ha of Plantation) should be engaged from the day of inception of the plantation. Also, extra provision for watch and ward will be considered if applicable towards the successful implementation of scheme and for better protection of plantation.



119

## **17. TOTAL FINANCIAL OUTLAY AND THE FUNDING AGENCY**


M/s Kulda OCP of MCL, Basundhara Area will pay the cost of Compensatory Afforestation amounting to **Rs. 21,91,38,726.00 [ Rupees Twenty One Crore, Ninety One Lakh, Thirty Eight Thousand Seven Hundred Twenty Six only ]** only on receipt of Demand Notice from D.F.O., Sundargarh Division. However, Kulda OCP has furnished an undertaking to pay any additional amount in case the Wage Rate is escalated between the date of recommendation of this proposal and issue of Stage-II approval issued by MoEF & CC for diversion of forest land. The User Agency has provided an Undertaking to bear the cost of CA amount, which is attached in **Annexure-D**.

## **18. EXECUTING AGENCY**

Divisional Forest Officer, Sundargarh Forest Division.

## **19. MONITORING AND EVALUATION**

Divisional Forest Officer, Sundargarh Forest Division shall monitor and evaluate the scheme periodically.

  
Divisional Forest Officer,  
DIVISION  
Sundargarh Forest Division  
DIVISION



**ANNEXURE-A****TOTAL FINANCIAL OUT LAY OF THE PROJECT****A. COST OF AFFORESTATION ACTIVITIES:**

Sl. No	Item of works	Amount (in Rs.)
1	Cost of ANR plantation and its maintenance over 286.96 Ha (as per the one-time cost norm for the year 2023-24_Annexure-7) @ Rs. 150051/- @ 500 plant per Ha (Annexure-I)	4,30,58,634.96
2	Soil Moisture Conservation Measures as per cost norm for the year 2023-24_Annexure-11) (286.96 Ha x 39284) (Annexure-J)	1,12,72,936.64
3	Fencing of Bamboo Twigs & Thorns (286.96 x 250 m = 71740 RMT) @ Rs. 188.00 per RMT (As per cost norm in Fencing Model – F - I) (Annexure-K)	1,34,87,120
4	Watering provision to Compensatory Afforestation(CA) plantation @ Rs. 527321 per Ha over 286.96 Ha (As per cost norm in watering Model – W - II) (Annexure-L)	15,13,20,034.16
	<b>TOTAL</b>	<b>Rs. 21,91,38,725.76 Or 21,91,38,726.00</b>

(Rs. Only)

  
**Divisional Forest Officer**  
**Sundargarh Forest Division**



## **SUITABILITY CERTIFICATE**

This is to certify that the Degraded Forest Land identified in the following Reserve Forest Land and as per the effective area mentioned below which has been selected for Compensatory Afforestation against diversion of 134.69 Ha of forest land for Kulda Expansion OCP; Coal Mining Project of M/s MCL are suitable for Afforestation and will be used for the purpose of Compensatory Afforestation:-

Name of Reserve Forest	Legal status	AREA (in Ha)	Effective area in Ha.
<b>Gopalpur Forest Range</b>			
Pandripani R.F.	Reserve Forest /p	64.10	<b>56.30</b>
Sidarmunda R.F.	Reserve Forest /p	53.56	<b>53.56</b>
Punjipahar R.F.	Reserve Forest /p	131.54	<b>121.00</b>
Panikholia R.F.	Reserve Forest /p	56.39	<b>56.10</b>
<b>TOTAL</b>		<b>305.59</b>	<b>286.96</b>



**Divisional Forest Officer**  
**Sundargarh Forest Division**