



Ref: MCL/GM/BA/E&F/2021-22/ 68-456/190

Date: 29/11/2021

To,

The Divisional Forest Officer,
Sundargarh Division,
District- Sundergarh,
Odisha 770001.

Sub: Proposal for diversion of 134.69 ha forest land against Kulda Expansion Open Cast Coal Mining Project rated capacity 18.75 MTY of Basundhara Area of Mahanadi Coalfields Limited. (Proposal No. 50293/2020, State Sl. No. OR-050/2021 dated 08.07.2021)

Respected Sir,

A proposal for diversion of 134.69 ha of forest land against Kulda Expansion Open Cast Coal Mining Project rated capacity 18.75 MTY of Basundhara Area of Mahanadi Coalfields Limited duly attested is being forwarded herewith in six copies for obtaining approval of Government of India, MoEF&CC under Section -2 (ii) of Forest (Conservation) Act, 1980.

1. Brief description of the Project

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 win coal from different coal mines located in Odisha. 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" 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.

District headquarter 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 the blocks. The blocks are also connected by block top road with two important towns of Odisha

namely Rourkela at 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 State of Bhubneshwar 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.

Nearest rail-tail head is the Sardega railway siding, situated between 22°04'06.83" to 22°04'12.08" North and Longitude 83°42'41.0 1" to 83°43'08.38" East, 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 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).

The project covers 05 (Five) villages viz. Kulda, Bankibahal, Balinga, Tumulia, Siarmal, in Sundargarh Forest Division of 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 18.75 MTY. The user agency has applied for diversion of 134.69 ha of forest land under the Forest (Conservation) Act, 1980. Forest land break-up is as given below.

Break-up of Forest Land				
Mining	Safety Zone	Embankment, OB Dump, Blasting Zone & Others	OB Dump	Total
110.93	9.77	0.06	13.93	134.69 Ha

Village wise Break-up of Forest land Proposed for diversion.

Sr. No	Village Name	Area (In Ha.)
1	Kulda	8.89
2	Bankibahal	5.14
3	Balinga	35.81
4	Tumulia	0
5	Siarmal	1.61
6	Lalma RF	83.24
Total		134.69

2. Justification for locating 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 $21^{\circ}31'$ to $22^{\circ}14'$ North and longitude $83^{\circ}32'00''$ to $84^{\circ}10'00''$ East and falls mainly in Sundergarh, Jharsuguda and Sambalpur districts of Odisha. Kulda geological block is located in the north-western part of Ib valley coalfield in Sundergarh district in the state of Orissa. It is situated between latitudes $22^{\circ}01'02''$ to $22^{\circ}03'03''$ North and longitudes $83^{\circ}43'28''$ to $83^{\circ}45'35''$

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 in 2007-08. Coal extracted till 31.3.2020 is 86.70 Mt and OB removed till 31.3.2020 is 54.90 Mcum.


In earlier approved Mining Plan of Kulda Expn. 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 forest area so as to enhance the production capacity to 18.75 Mty from this mine.

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.

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 plants.

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 Hectare of Forest Land is to be diverted for working of the mine.
The Justification has been enclosed in **Annexure – VII**

3. **MAPS**

The following maps duly authenticated by concerned authority are being submitted herewith:

Sr. No.	Particulars	Scale
1	Toposheet showing location of Kulda Expansion OCP	1:50000
2	Safety Zone area Plan	1:3960
3	Land Use Plan	1:3960
4	DGPS Survey plan of whole forest patches of Kulda Expansion OCP	1:10000
5	DGPS of forest patches of Co-ordinates (6 Nos)	1:3960
6	Milan Sheet of Kulda Village (1 Nos)	1:3960
7	Milan Sheet of Bankibahal Village (2 Nos)	1:3960
8	Milan Sheet of Balinga Village (1 Nos)	1:3960
9	Milan Sheet of Siarmal Village (2 Nos)	1:3960
10	Milan Sheet of Tumulia Village (1 Nos)	1:3960
11	Stage wise mining plan and phase wise reclamation plan (5 Nos)	Reduced

4. **Forest Land**

The proposed Kulda Open Cast Coal Mining Project includes the following categories of land duly authenticated by Tahsildar, Himgir and the details village wise land schedule of forest lands are as follows:

#	District	Division	Village/ Range/ Tehsil	Forest area Proposed for diversion (in ha.)	Non-forest land (In ha)		Grand Total
					Govt. Land	Tenancy Land	
1.	SUNDARGARH	SUNDARGARH	Kulda/ Gopalpur/ Hemgir	8.89	26.86	46.90	82.65
2.			Bankibahal/ Gopalpur/ Hemgir	5.14	10.80	21.29	37.23
3.			Balinga/ Gopalpur/ Hemgir	35.81	8.59	1.15	45.55
4.			Tumulia/ Gopalpur/ Hemgir	0	16.42	28.93	45.35
5			Siarmal/ Gopalpur/ Hemgir	1.61	0	0	1.61
6			Lalma RF/ Gopalpur/ Hemgir	83.24	0	0	83.24
Total				134.69	62.67	98.27	295.63

The purpose-wise breakup of forest land and non-forest land for requirement of this project are as follows:

SI No	Purpose of Utilization	Forest Land (in Ha)	Non-Forest Land (in Ha)	Total area in Ha)
1	Mining	110.92	40.61	66.54
2	7.5m Safety Zone	9.78	17.56	31.56
3	Embankment	0.06	0	0.17
4	OB Dump	13.93	4.50	0.00
Total		134.69	62.67	98.27
Forest Land proposed to be diverted		134.69		

An undertaking is hereby being furnished that the Forest area involved in the proposal is unavoidable and barest minimum forest area has been proposed for diversion which is attached herewith in **Annexure - VIII**

5. Flora & Fauna

As per the EI&EMP report of existing Kulda Expansion OCP (16.8Mty), tree species which are commonly noticed in the proposed area are as follows:

1. Flora

- Terrestrial Flora

Table: List of Agricultural crops

Type	Local Name	Family name	Botanical Name
Vegetable	Amaranthus Green	Amaranthaceae	<i>Amaranthus hybridus</i> L. – green
	Onion	Amaryllidaceae	<i>Allium cepa</i> L.
	Garlic	Amaryllidaceae	<i>Allium sativum</i> L.
	Tomato	Solanaceae	<i>Lycopersicum esculentum</i> L.
	Lemon	Rutaceae	<i>Citrus limon</i> (L.) Burm f
	Sponge guard	Cucurbitaceae	<i>Luffa cylindrical</i> (Linn.) M. J. Roem
	Ash guard	Cucurbitaceae	<i>Benicasa hispida</i> (Thunb.) Cogn.
	Chilly	Solanaceae	<i>Capsicum annum</i> L.
	Mint	Lamiaceae	<i>Mentha arvensis</i> L.
	Bitter Gourd	Cucurbitaceae	<i>Momordica charantia</i> L.
	Radish	Brassicaceae	<i>Rhapanus sativus</i> L.
	Country Beans [Rita Bingham]	Leguminosae	<i>Lablab purpureus</i> (L.) Sweet
	Brinjal	Solanaceae	<i>Solanum melongena</i> L.
	Drumstick	Moringaceae	<i>Moringa oleifera</i> Lam
	Cucumber	Cucurbitaceae	<i>Cucumis sativus</i> L.
	Ginger	Zingiberaceae	<i>Zingiber officinale</i> Roscoe
	Bottle guard	Cucurbitaceae	<i>Lagenaria siceraria</i> (Molina) Standl

Table: List of List of Commercial crops

Type	Local Name	Family name	Botanical Name
Cereal/ commercial crop	Paddy	Poaceae	<i>Oryza sativa</i> L.
	Sugar cane	Poaceae	<i>Saccharum officinarum</i> L.
	Mustard	Brassicaceae	<i>Brassica juncea</i> (L.) Czern.
	Sorghum	Poaceae	<i>Sorghum bicolor</i> (L.) Moench
	Banana	Musaceae	<i>Musa paradisiaca</i> L.
	Toor Dal	Leguminosae	<i>Cajanus cajan</i> (L.) Millsp.
	Maize	Poaceae	<i>Zea mays</i> L.

Tabl: List of Natural Vegetation

Type	Common Name	Family name	Botanical Name
	Babul tree	Leguminosae	<i>Acacia nilotica</i> (L.) Delile
	Bael	Rutaceae	<i>Aegle marmelos</i> (L.) Corrêa
	Maharukh	Simaroubaceae	<i>Ailanthus excelsa</i> Roxb.
Trees	Sirish	Leguminosae	<i>Albizia lebbek</i> (L.) Benth
	Sabtaparni	Apocynaceae	<i>Alstonia scholaris</i> (L.) R. Br
	Daura	Combretaceae	<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Guillem. & Perr.
	Kat Hal, Jack	Moraceae	<i>Artocarpus heterophyllus</i> Lam.
	kanchanar	Leguminosae	<i>Bauhinia purpurea</i> L.
	Salia	Burseraceae	<i>Boswellia serrata</i> Roxb. ex Colebr.
	Polash	Leguminosae	<i>Butea monosperma</i> (Lam.) Taub.
	Euphorbia Nivulea	Euphorbiaceae	<i>Euphorbia nivulea</i> Buch-Ham
	Banyan	Moraceae	<i>Ficus benghalensis</i> L.
	Wild Fig	Moraceae	<i>Ficus hispida</i> L.f
	Udumbara, Fig	Moraceae	<i>Ficus racemosa</i> L.
	Peepal Tree	Moraceae	<i>Ficus religiosa</i> L.
	Kadam	Rubiaceae	<i>Adina cordifolia</i> Willd ex Roxb.)Benth &Hook f ex Brandis
	Kumbhi	Lecythidaceae	<i>Careya arborea</i> Roxb.
	Avli, Tapasi	Ulmaceae	<i>Holoptelia integrifolia</i> (Roxb.) Planch
	Dhaura, sanah	Lythraceae	<i>Lagerstroemia parviflora</i> Roxb.
	Wood apple	Rutaceae	<i>Limonia acidissima</i> Groff
	Mahua	Sapotaceae	<i>Madhuca indica</i> J F Gmel
	Aam, Mango	Anacardiaceae	<i>Mangifera indica</i> L.
	Drum stick	Moringaceae	<i>Moringa oleifera</i> Lam.
	Kadamba	Rubiaceae	<i>Neolamarckia cadamba</i> (Roxb.) Bosser
	yellow-flame	Leguminosae	<i>Peltophorum pterocarpum</i> (DC.) K.Heyne

	Wild Date	<i>Arecaceae</i>	<i>Phoenix sylvestris</i> (L.) Roxb.
	Amla	<i>Phyllanthaceae</i>	<i>Phyllanthus emblica</i> L.
	False Ashoka	<i>Annonaceae</i>	<i>Polyalthia longifolia</i> (Sonn.) Thwaites
	Salmale, Silk cotton	<i>Bombacaceae</i>	<i>Salmaaliala malabarica</i> (DC) Schott &Endl.
	Soapnut	<i>Sapindaceae</i>	<i>Sapindus mukorossi</i> Gaertn.
	Kusumu	<i>Sapindaceae</i>	<i>Schleichera oleosa</i> (Lour.) Merr.
	kassod tree,	<i>Leguminosae</i>	<i>Senna siamea</i> Irwin & Barnaby.
	Sal	<i>Dipterocarpaceae</i>	<i>Shorea robusta</i> Gaertn. f
	Sihora, Sand paper tree	<i>Moraceae</i>	<i>Streblus asper</i> Lour.
	Nirmali	<i>Loganiaceae</i>	<i>Strychnos potatorum</i> L.f.
	Jamun	<i>Myrtaceae</i>	<i>Syzygium cuminii</i> (L.) Skeels
	Arjun	<i>Combretaceae</i>	<i>Terminalia arjuna</i> (Roxb.) Wt &Arn.
	Bahera	<i>Combretaceae</i>	<i>Terminalia bellirica</i> (Gaertn.) Roxb.
	Saj	<i>Combretaceae</i>	<i>Terminalia tomentosa</i> Wight & Arn.
	Pala Indigo Plant	<i>Apocynaceae</i>	<i>Wrightia tinctoria</i> R.Br.
	Wild Ber	<i>Rhamnaceae</i>	<i>Ziziphus mauritiana</i> Lamk.
Shrubs	Vasaka	<i>Acanthaceae</i>	<i>Adhatoda zeylanica</i> Medik
	Eupatorium	<i>Asteraceae</i>	<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.
	Devils back bone	<i>Euphorbiaceae</i>	<i>Pedilanthus tithymaloides</i> (L.) Poit.
	Kali angedi	<i>Acanthaceae</i>	<i>Peristrophe bicalyculata</i> (Retz.) Nees
	Indian madder	<i>Apocynaceae</i>	<i>Calotropis gigantea</i> (L.) Dryand.
	Bala	<i>Malvaceae</i>	<i>Sida acuta</i> L.
	Dahi phool	<i>Lytraceae</i>	<i>Woodfordia fruticosa</i> (L.) Kurz
	Sharpunka	<i>Leguminosae</i>	<i>Tephrosia purpurea</i> (L.) Pers
Grasses	Khus Khus	<i>Poaceae</i>	<i>Vetiveria zizanioides</i> (L.) Nash
	Cogon grass	<i>Poaceae</i>	<i>Imperata cylindrical</i> (L.) Raeusch
	Durva	<i>Poaceae</i>	<i>Cyanodon dactylon</i> L.
	Tangle head	<i>Poaceae</i>	<i>Hetropogon contortus</i> (L.) Beauv ex Roem &Schult
	wild sugarcane	<i>Poaceae</i>	<i>Saccharum spontaneum</i> L.
			<i>Themeda triandra</i> Forssk
Climbers	Aradanda	<i>Capparaceae</i>	<i>Capparis zeylanica</i> L.
	Atundi	<i>Combretaceae</i>	<i>Combretum decandrum</i> Jacq.
		<i>Dioscoreaceae</i>	<i>Dioscorea esculenta</i> (Lour.) Burkill
	Kanta alu	<i>Dioscoreaceae</i>	<i>Dioscorea pentaphylla</i> L.
	Kali dhoodi	<i>Apocynaceae</i>	<i>Ichnocarpus frutescens</i> (L.) R.Br.
	Marda	<i>Leguminosae</i>	<i>Endosamara racemosa</i> (Roxb.) R.Geesink

	Sponge guard	Cucurbitaceae	<i>Luffa cylindrica</i> (L.) M.Roem.
	dheniani	Olacaceae.	<i>Olax scandens</i> Roxb.
	Climbing hemp vine	Asteraceae	<i>Mikania scandens</i> (L.) Willd.
	Karela	Cucurbitaceae	<i>Momordica charantia</i> L.
	Pitti	Rhamnaceae	<i>Ventilago maderapatana</i> Gaertn.
	Jackle jujube	Rhamnaceae	<i>Ziziphus oenoplia</i> (L.) Mill.
Herbs	Panwad	Leguminosae	<i>Cassia tora</i> L.
	Sahadevi	Asteraceae	<i>Cyanthillium cinereum</i> (L.) H.Rob.
	coatbuttons	Asteraceae	<i>Tridax procumbens</i> L.
	Orchid	Orchidaceae	<i>Vanda tessellata</i> (Roxb.) Hook. ex G.Don
	Common Cocklebur,	Asteraceae	<i>Xanthium strumarium</i> L.

Table: List of Shrubs and Climbers

Common Name	Family Name	Botanical Name
Indian madder	Apocynaceae	<i>Calotropis gigantea</i> (L.) R.Br.
Dadmurdan,	Leguminosae	<i>Senna alata</i> (L.) Roxb.
Kali dudi	Apocynaceae	<i>Ichnocarpus frutescens</i> (L.) R.Br.
Pan bel	Convolvulaceae	<i>Ipomoea obscura</i> (L.) Ker Gawler
Bush morning glory	Convolvulaceae	<i>Ipomoea carnea</i> Jace
Wild sage	Lamiaceae	<i>Lantana camara</i> L.
Kanbojini	Phyllanthaceae	<i>Phyllanthus reticulatus</i> L.
Castor	Euphorbiaceae	<i>Ricinus communis</i>
Yellow oleander	Apocynaceae	<i>Thevetia nerifolia</i> Juss. ex Steud.
Nirgundi	Verbenaceae	<i>Vitex negundo</i> L.
Small-Fruited Jujube	Rhamnaceae	<i>Zizyphus oenoplia</i> (L.) Miller

- Aquatic Flora**

Aquatic flora was identified from the nearby small rivers and small ponds etc. The information for the same was collected from fishermen / villagers also.

Table: List of Aquatic Plants

Common Name	Family name	Botanical Name
Arvi, Kachalu	Araceae	<i>Colocasia esculenta</i> (L.) Schott
Nali	Convolvulaceae	<i>Ipomoea aquatica</i> Forssk.
Four leaved clover	Marsiliaceae	<i>Marsilea quadrifolia</i> L.

Jala pippali	Verbenaceae	<i>Phyla nodiflora</i> (L.) Grene
Polygonum	Polygonaceae	<i>Persicaria glabra</i> (Willd.) M.Gómez
Narrowleaf cattail	Typhaceae	<i>Typha angustifolia</i> L.

There is no rare/endangered/unique species of flora and fauna found in the area.

2. Fauna

- Terrestrial Fauna

Table: List of Terrestrial Fauna:

(a) Mammals

Zoological Name	Common Name	Status in wildlife (Protection) Act	ICUN RDB
<i>Mus booduga</i>	Indian Field Mouse	Schedule-V, Section, 5	LC
<i>Herpestes edwardsi</i>	Indian Grey Mongoose	Schedule-IV, Section, 6A	LC
<i>Funambulus palmarum</i>	Indian Ground Squirrel	Schedule-IV	LC
<i>Macaca mullata</i>	Bandar	Schedule-IV	LC
<i>Canis lupus</i>	Wolf	Schedule-IV	LC
<i>Sus scrofa</i>	Wild Pig	Schedule-IV	LC
<i>Lycaon pictus</i>	Wild Dog	Schedule-IV	LC
<i>Funambulus palmarum</i>	Indian Ground Squirrel	Schedule-IV	LC
<i>Hystrix indica</i>	Indian Porcupine	Schedule-IV	LC
<i>Ateles fusciceps</i>	Black Faced Monkey	Schedule-IV	LC
<i>Cebus capucinus</i>	Small Brown Monkey	Schedule-IV	LC
<i>Felis chaus</i>	Jungle Cat	Schedule-IV	LC
<i>Canis aureus</i>	Jackal	Schedule-IV	LC
<i>hyena striata</i>	Hyena	Schedule-IV	LC

(b) Birds

Zoological Name	Common Name	Status in wildlife (Protection) Act	ICUN RDB
<i>Bubulcus ibis</i>	Cattle egret	Schedule-IV, Section, 11	LC
<i>Ardeola grayii</i>	Indian pond heron	Schedule-IV, Section, 11	LC
<i>Milvus migrans</i>	Black kite	Schedule-IV, Section, 11	LC
<i>Streptopelia chinensis</i>	Spotted dove	Schedule-IV, Section, 11	LC
<i>Alcedo atthis</i>	Small blue kingfisher	Schedule-IV, Section, 11	LC
<i>Halcyon smyrensis</i>	White-breasted kingfisher	Schedule-IV, Section, 11	LC

<i>Columbia livia</i>	Pigeon	Schedule-IV, Section,11	LC
<i>hasianus colchicus</i>	Indian Ringfowl	Schedule-IV, Section,11	LC
<i>Galloperdix bicalcarata</i>	Common Spur Fowl	Schedule-IV, Section,11	LC
<i>Anas discors</i>	Blue Winged Teal	Schedule-IV, Section,11	LC
<i>Nettapus coromandelianus</i>	Cotton Teal	Schedule-IV, Section,11	LC
<i>Eudynamys scolopacea</i>	Indian Koel	Schedule-IV, Section,11	LC
<i>Streptopelia capicola</i>	Indian Ring Dove	Schedule-IV, Section,11	LC
<i>Passer domesticus</i>	Common Sparrow	Schedule-IV, Section,11	LC

(c) Reptiles

Zoological Name	Common Name	Status in Wildlife (Protection) Act	ICUN RDB
<i>Calotes versicolor</i>	Garden lizard	IV	LC
<i>Naja tripudians</i>	Common cobra	IV	LC
<i>Natrix piscator</i>	Water snake	IV	LC
<i>Zamenis mucosus</i>	Rat snake	II	LC
<i>XEnochrophis piscator</i>	Dhanda	II	LC

(d) Amphibians

Zoological Name	Common Name	Status in Wildlife (Protection) Act	ICUN RDB
<i>Bufo melanostictus</i>	Common toad	IV	LC
<i>Euphlyctis hexadactyla</i>	Common frog	IV	LC
<i>Rana hexadactyla</i>	Green pond frog	IV	LC
<i>Rana tigrina</i>	Indian bull frog	IV	LC

(e) Insects

Zoological name	Common name	Nos. of species observed	Status in Wildlife (Protection) Act
<i>Rhopalocera</i>	Butterfly	12	Schedule - IV, Section,18
<i>Anisoptera</i>	Dragonfly	10	Schedule-IV, Section,18

➤ **Aquatic Fauna**

Table: List of Aquatic Fauna:

Fishes:

Zoological Name	Common Name	Status in Wildlife (Protection) Act
<i>Cirrhinay mrigala</i>	Mirikali	Schedule - IV
<i>Catla catla</i>	Bhakur	Schedule - IV
<i>Ophiocephalus marulius</i>	Sala	Schedule - IV
<i>Ophiocephalus steiatus</i>	Seul	Schedule - IV
<i>wallagoattu</i>	Balia	Schedule - IV
<i>Labeo rohita</i>	Rohu	Schedule - IV
<i>Hilsa ilisha</i>	ilish	Schedule - IV

During survey, it is observed that endangered, endemic and migratory species are not present in the study area. Also, migratory corridors, flight paths and spawning grounds are not present in the study area.

6. Wildlife Management Plan

The proposed forest area for diversion is not falling within any eco-sensitive zone, national park or sanctuary in Sundargarh Forest Division. However, Wildlife Management Plan is to be prepared and submitted. An undertaking to this effect is being submitted herewith as **Annexure - XVIII**

7. Tree Enumeration

Trees are yet to be enumerated both in forest and non-forest land involved in the project which may required to be felled. The species wise and girth class-wise abstract of tree enumeration both in the forest and non-forest areas shall be submitted after enumeration.

8. Cost Benefit Analysis

The Cost Benefit Analysis for the proposed project duly authenticated by the competent authority is being submitted herewith as **Annexure - X**

9. Rehabilitation and Resettlement

As per the authenticated land schedule, the land belonging to village Kulda, Bankibahal, baling, Tumulia, Siarmal, & Ialma 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 295.63 Ha (730.50 acres) of land is involved in Kulda Expansion Project (Ph.II). Out of which 98.27 Ha is Tenancy land, 62.67 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 218.07 Ha only. Safety Zone area is 58.89 Ha. The rest area will be for embankment and external OB dump.

Out of **98.27 Ha** of tenancy land involved in this project, 46.9 Ha (115.89 acres) belongs to village Kulda, 21.29 Ha (52.61 acres) belongs to village Bankibahal, 1.15 Ha (2.84 acres) belongs to village Balinga, 28.93 Ha (71.49 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. The above land has been vested in MCL u/s 11(1) of the said Act vide SO No. 43015 dated 30.03.1993.

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. And for village Tumulia, approval of Hon'ble Supreme Court is awaited to provide the land compensation as well as R&R benefits. The Approved R&R Plan duly authenticated is enclosed in the diversion proposal as **Annexure - XVI**

10. Rehabilitation and Resettlement


The rehabilitation and resettlement of project affected persons is decided based on the survey of Hon'ble claim commission appointed by the Honorable Supreme court of India to future facilitate the solution of the complaints and grievance, if any of the person employed and general public a samadhan Kendra has been established by an order of the competent authority This facilitates the faster resolution of complaints as they are directed to the respective department for speedy resolution the details of the grievance addressable system.

11. Forest Right Act, 2006

The District Collector, Sundargarh vide Letter No. 5418/VIII-08/2021 dtd. 21.06.2021 has issued the FRA certificate for 134.69 ha which is enclosed herewith as **Annexure - XI**.

12. Net Present Value

The proposed forest land for diversion 134.69 ha. However; an undertaking has been furnished herewith to pay NPV and additional NPV if so determined as per the decision of the Hon'ble Supreme Court of the proposed forest land to be diverted and is enclosed herewith in the diversion proposal, in **Annexure - IX**.

 The Compensatory Afforestation scheme shall be prepared and submitted by DFO, Sundargarh, after due approval at the current wage rate by the RCCF, Rourkela,

The financial outlay duly approved by competent authority along with CA Scheme shall be submitted after the allotment of CA land. The user agency has furnished an undertaking to bear the cost of CA as per prevailing wage rate at the time of plantation attached in **Annexure - XII**

As per guideline of MoEF & CC, GoI, issued vide No. 11-423/2011- FC dated 08.11.2017 at least 1000 seedlings should be planted per ha of forest area to be diverted. The suitability Certificate, non-encumbrance and non-enchroachment Certificate for the area selected for Compensatory Afforestation shall be furnished by the Divisional Forest Officer.

13. Environmental Clearance

The user agency is yet to apply online for obtaining Environmental Clearance from MoEF&CC for the project Kulda Expansion OCP of MCL, The user agency will submit the same after Stage-I forest clearance. The user agency has submitted an undertaking as **Annexure - IV**.

14. Consent Order by SPCB (State Pollution Control Board)

The consent order of the State Pollution Control Board was issued vide no.5284/IND-I-CON-5125, dated 26.03.2021 which is valid for the period up to 31.03.2022.

15. DGPS Map

In Compliance, the User Agency have submitted the DGPS survey map of the forest land proposed for diversion by ORSAC and duly authenticated. The details of enclosed DGPS maps are as given below.

S.No	Particulars	Scale	Reference
1	Index Map showing DGPS surveyed coordinates diverted for Kulda Expansion OCP of Basundhara Area, Mahanadi Coalfields Limited.	1:10000	Odisha Space Applications centre, Bhubaneswar, Map No.-FDC-676, date-24.09.2020
2	DGPS Survey map of proposed forest diversion area/Village wise	1:3960	Map No. FDC-676/1 Map No. FDC-676/2 Map No. FDC-676/3 Map No. FDC-676/4 Map No. FDC-676/5 Map No. FDC-676/6

16. Violation

There is no violation in respect of the forest land, involved in the instant diversion proposal, under FC Act, 1980. Further, an undertaking to this effect is being submitted herewith as **Annexure - XIX**.



17. Mining Plan

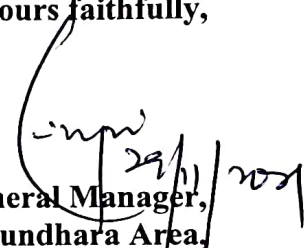
Mining Plan for Kulda Expansion OCP of MCL 18.75 MTY has been approved by the Ministry of Coal, Vide GoI letter No. MCL/SBP/CS/CR-19/2020-21/10992 dated 10.06.2020 which has been enclosed in the diversion proposal. Further, Phased Reclamation plan of the project area along with map as submitted by User Agency duly authenticated is enclosed in the DP. The Mining Plan has been submitted in **Annexure - XIV**

19. Recommendation

In view of the above, the proposal for diversion of 134.69ha forest land against Kulda Expansion OCP (Ph-II) rated capacity 18.75 MTY, Mahanadi Coalfields Ltd. Basundhara Area, Sundargarh, is being sent herewith in six copies for kind consideration for necessary approval under section-2(ii) of Forest (Conservation) Act, 1980 in its own merit.

Encl: **Diversiion Proposal along with its annexures.**

Yours faithfully,


General Manager,
Basundhara Area,
Mahanadi Coalfields Limited.

Copy To:

- General Manager (E&F), MCL, HQ – For kind information.
- Project Officer, Kulda OCP – For kind information.
- SO (E&F), Basundhara Area
- O/c