



**OFFICE OF THE DIVISIONAL FOREST OFFICER, KEONJHAR DIVISION**

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Memo No. 6582 /6F- Mining-305/2018  
Dated, Keonjhar the 02.07.2019

To

The Regional Chief Conservator of Forests,  
Rourkela Circle, Rourkela.

**Sub: Proposal for diversion of 22.671 ha forest land for Establishment of proposed Grinding, De-sliming (Beneficiation) plant and slurry pumping station and Water intake System of M/s JSW Utkal Steel Ltd under Barbil Tahasil in District Keonjhar, Odisha.**

Ref: (Proposal No. FP/OR/IND/36705/2018, St. Sl. No.OR-05/2019).

The proposal for diversion of 22.671 ha Forest land for establishment of proposed Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities at village Gobardhanpur to produce 30 MTPA Iron Ore Concentrate and Water Intake System at village Kandra under Barbil Tahasil in District Keonjhar in respect of M/s JSW Utkal Steel Ltd has been received online from the Addl. Principal Chief Conservator of Forests, Forest Diversion and Nodal Officer, FC Act. O/o the Principal Chief Conservator of Forests, Odisha, Bhubaneswar vide (Proposal No. FP/OR/IND/36705/2018, St. Sl. No. OR-05/2019). The said proposal submitted over 22.671 ha forest land, after due scrutinization, is sent herewith in 5 sets for approval under section-2(ii) of Forest Conservation Act, 1980 (Amended).

**1. Brief description of the Project**

Information submitted by User Agency that M/s JSW Utkal Steel Ltd is incorporated on 16.11.2017 under the Companies Act, 2013 (18 of 2013) by Ministry of Corporate Affairs, Govt. of India vide **Annexure -1**. It is a subsidiary of M/s JSW Steel Ltd. The project envisages establishment of 30 MTPA of Iron Ore Grinding, De-Sliming [Beneficiation] Plant & Slurry Pumping Station at Villages-Gobardhanpur, Bhaglpur, Sialijoda & Lahanda and Water Intake System at Village-Kandra under Barbil Tahasil, Keonjhar District. High Level Clearance Authority (HLCA), Government of Odisha has accorded In-principle approval for setting of Iron ore Grinding, Beneficiation Plants to produce 30 Million Metric Tonne Per Annum (MTPA) iron ore concentrate & transport through Slurry Pipeline system at Gobardhanpur Village under Barbil Tahasil, Keonjhar District to Integrated Steel Plant at Paradip in District Jagatsinghpur to produce pellets to meet the raw material requirement of proposed Green Field Integrated Steel Plant. IPICOL has recommended for allotment of 80.505 Ha of land vide his letter no. GM/SLNA/JSW/38/17 dated 02.02.2018 vide **Annexure- 2** for said project in Keonjhar District for proposed Iron Ore Grinding, De-Sliming [Beneficiation] Plant & Slurry Pumping Station at Villages-Gobardhanpur, Bhaglpur, Sialijoda & Lahanda and Water Intake System at Village-Kandra under Barbil Tahasil, Keonjhar District. This project is of vital importance as it will ensure continuous supply of raw material as Iron Ore Concentrate to upcoming Integrated Steel plant near Paradip. For setting up the proposed Project, Iron ore Grinding, De-Sliming [Beneficiation] Plant & Slurry Pumping Station and Water Intake System, IDCO has handed over the possession of already leased out land measuring 74.304 Ha of land (20.585 ha. Non forest land recorded as forest as on 25.10.1980 + 53.719 ha. Non-forest) situated in the villages of Gobardhanpur, Bhaglpur, Sialijoda and Lahanda in favour of M/s JSW Utkal Steel Ltd vide his letter no. IDCO/LAE-4012-17/12878 dated 21.06.2018 vide **Annexure- 4**. The said land has been lease out by IDCO vide a registered lease deed no.

11031800324 on dated 23.06.2018. The said land comprises of 23.581 Ha of Govt. land and 50.723 Ha of Pvt land, which was acquired by IDCO for industrial purpose. To meet the total 80.505 ha of land requirement, M/s JSW Utkal Steel Ltd had applied to acquire additional 3.873 Ha (1.045ha. Revenue forest+ 2.828ha.non forest land) in villages of Bhagalpur and Gobardhanpur to make project area contiguous and compact for its industrial facilities. After obtaining forest clearance over 1.045 ha of revenue forest land from central Govt., the additional area of 3.873 ha will be acquired.

In addition, M/s JSW Utkal Steel Ltd proposes to establish Project, Water Intake System over 2.328 ha land (1.041 ha Non forest land recorded as forest as on 25.10.1980 and 1.287 ha non-forest land ) at village Kandra under Barbil Tahasil in Keonjhar District which is essential requirement for Project. So total land involves in the instant proposal over 80.505 ha which is involves 22.671 Ha forest land (1.045 ha Revenue Forest + 21.626 ha. Non Forest Land recorded as Forest as on 25.10.1980) and 57.834 ha non forest land.

The major facilities comprising the aforesaid Project:

- a. Grinding & de-sliming [Beneficiation] process plant.
- b. Slurry Pumping Station.
- c. Water treatment and pumping to plant
- d. Raw Material Handling System (RMHS).
- e. Truck loading system, conveyor system, Intermediate Slime Storage.

### **A.2. Physiography and Geological formation**

The proposed for diversion of 22.671 ha of Forest land is required for establishment of Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Keonjhar District in respect of M/s JSW Utkal Steel Ltd. The forest land proposed for diversion in the instant case is situated in four villages i.e Gobardhanpur, Bhagalpur & Lahanda and Water Intake System at Village Kandra, Barbil Tahasil, Keonjhar District. The proposed site is situated at a distance of 3 km (approx.) from Thakurani RF, which falls under physiographyc Joda Barbil- Plateau extending from Chamakpur to the border of Singhbhum of Jharkhand in north and Bonai in the West.

### **A.3. Floristic- Faunal Composition**

The proposed site is required for diversion of 22.671 ha Forest land for establishment of Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Keonjhar District in respect of M/s JSW Utkal Steel Ltd. The prevailing vegetation in the forest land proposed for diversion includes *Tectona grandis*, *Shorea robusta*, *Mangifera indica*, *Syzygium cumini*, *Diospyros melanoxylon*, *Terminalia tomentosa* & *Misc Species*.

Since majority of forest land proposed for diversion in the instant case situated near the Thakurani RF, the Eco value class is considered at par with that of Thakurani RF which is Eco value Class-I (Northern Tropical Moist Deciduous Forest-3C). The canopy density of the forest land proposed for diversion is taken as 0.2.

The area falls under Elephant habitat zone-2 as per ORSAC study report titled as "Remote sensing application for characterisation of elephant habitats and corridors in Orissa and part of Bihar" published in September, 1999. The wildlife present in and around the forest land proposed to be utilized for Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil ,are Barking deer, Jackal, Hyena, Mongoose, Cuckoo, Owl, Golden-backed Woodpecker, Cobra, Monitor etc. Movement of wild Elephants is often noticed in the proposed area.

## **B. Documents and Undertakings as regards Forest Diversion Proposal**

### **B.1. Maps**

The user agency has furnished the required maps as depicted in the following table-

<b>SI No</b>	<b>List of Drawings / Maps</b>	<b>Scale</b>	<b>No of Plates</b>
1	Composite Survey of India Topo maps F45H8 & F45H12 showing the project area.	1:50000	Plate –I
2	Survey of India Topo maps F45H8 showing the Grinding, De-sliming (Beneficiation) plant and slurry pumping station	1:50000	Plate –II
3	Survey of India Topo maps F45H12 showing the Water Intake system.	1:50000	Plate –III
4	Index Cadastral map showing the project boundary for installation Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System	1: 9000	Plate-IV
5	Cadastral Maps depicting project site at village Bhagalpur duly authenticated by field functionaries of Forest & Revenue officials	1: 3960	Plate-V
6	Cadastral Maps depicting project site at village Gobardhanpur duly authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- VI
7	Cadastral Maps depicting project site at village Sialijoda duly authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- VII
8	Cadastral Maps depicting project site at village Lahanda duly authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- VIII
9	Cadastral Maps depicting project site at village Kandra duly authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- IX
10	DGPS Index map showing the project boundary for installation Grinding, De-sliming (Beneficiation) plant and slurry pumping station and Water Intake System vetted by ORSAC & authenticated by field functionaries of Forest & Revenue officials	1:10000	Plate- X
11	DGPS Map showing the forest land at village Bhagalpur duly vetted by ORSAC & authenticated by field functionaries of Forest & Revenue officials	1: 3960	Plate-XI
12	DGPS Map showing the forest land at village Gobardhanpur duly vetted by ORSAC & authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- XII

13	DGPS Map showing the forest land at village Lahanda duly vetted by ORSAC & authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- XIII
14	DGPS Map showing the forest land at village Kandra duly vetted by ORSAC & authenticated by field functionaries of Forest & Revenue officials	1:3960	Plate- XIV
15	Super imposed route map on forest cover map showing RF/National Park/PRF/Sanctuary/PF etc. with mention of category of forest(Natural Forest /Plantation),Density (Open /Moderately dense/Dense) and species in the map.	1:30000	Plate –XV
16	Map showing for compensatory afforestation identified in village Podadihi under Banspal Tahasil in Survey of India Topo Sheet No. F45N6.	1:50000	Plate- XVI
17	Index Map showing for compensatory afforestation identified in village Podadihi under Banspal Tahasil	1:6000	Plate- XVII
18	Land use pattern Map of grinding unit and de-sliming unit at Joda & water intake system at Kandara	Not to Scale	Plate-XVIII

## B.2. Forest Land

The submitted proposal for diversion of forest land for Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Keonjhar District. The details of the forest land involved in the project with the purpose of utilisation is furnished hereunder-

### Purpose wise breakup of the forest & Non Forest land required for the project.

Sl. No.	Purpose of Utilization	Revenue Forest in ha	Non-forest land recorded as Forest as on 25.10.1980 in ha.	Total Forest Land in ha	Total Non-forest land in ha	Grand Total in ha
1	Admin Building, Store with yard, Ambulance Room, First Aid Center Canteen, Security Barack, Check Post Gate Room/ Time Office,	0.000	0.225	0.225	0.861	1.086
2	Grinding with Desliming Unit, Grinding Unit, Concentrate Thickeners, Over Flow Tanks, Slurry Holding Tanks, Pumphouse for Slurry Transpotation, Chemicals Dosing Unit,	0.000	1.580	1.580	10.600	12.180
3	Ore Stock pile area, Stacker Reclaimers, Conveyors, Crushing & Screening area,RMHS with associated facilities	0.305	1.153	1.458	18.917	20.375
4	Emergency Dump pond	0.000	0.000	0.000	0.640	0.640

5	MRSS, LBDS, DG ,Electricals Installations, Car parking,Plant office, Chemical & quality control Centre	0.000	0.500	0.500	2.320	2.820
6	Intake Well,Intake Chamber,Flash Mixture, Clariflocutor	0.000	0.022	0.022	0.133	0.155
7	Sub Station & DG, Control Room with Office	0.000	0.059	0.059	0.560	0.619
8	Operator Room,Security room & Maintenance Room	0.000	0.280	0.280	0.000	0.280
9	Pump house & Delivery Pipe System	0.000	0.076	0.076	0.068	0.144
10	Truck Unloading Area, Weigh Bridges, Ground Hoppers Area, Intermediate Slime Storage, Conveyors, RMHS with associated facilities ,Electrical Installations	0.000	10.245	10.245	0.000	10.245
11	Water Resorvior	0.000	0.095	0.095	4.240	4.335
12	Work shop & Assembly points,LBDS	0.000	0.000	0.000	0.780	0.780
13	Security office & Security barrack	0.000	0.020	0.020	0.126	0.146
14	Roads & Drains	0.000	0.069	0.069	0.064	0.133
15	Green belt areas (33%)	0.740	7.302	8.042	18.525	26.567
	<b>Total</b>	<b>1.045</b>	<b>21.626</b>	<b>22.671</b>	<b>57.834</b>	<b>80.505</b>

### **B.3. Status of total land (Forest and Non-forest) as on 25.10.1980 involved in the project.**

The Tahasildar, Barbil Tahasil have furnished the certificate as regards the status of total land involved in the project as on 25.10.1980 vide their letter no. 4737 dated 23.10.2018, proposed for Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in respect of M/s JSW Utkal Steel Ltd and the said certificates are enclosed herewith as **Annexure- 5**.

### **B.4. Tree Enumeration.**

There are 396 nos. sound and 9 nos. of un- sound trees are standing in the proposed forest land over 22.671 ha. There are 353 nos. sound and 10 nos. of un-sound trees are standing over 57.834 ha in non-forest land .The species wise and diameter class wise abstract of trees enumerated is enclosed as **Annexure- 16**.

### **B.5. Cost Benefit Analysis.**

The Cost Benefit analysis has been worked out as per the guide lines of Forest (Conservation) Act, 1980 and enclosed in the proposal as **Annexure- 13**. The Cost Benefit ratio is 1:228.29.

### **B.6. Re-settlement and Rehabilitation.**

The project does not involve displacement of any human habitation and therefore the Re-settlement and Rehabilitation plan is not warranted.

### **B.7. Reclamation and Rehabilitation Plan.**

The proposed Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Revenue Forest and Non-forest land recorded as Forest as on 25.10.1980. The User Agency has submitted an undertaking to make good the land after use and make good any loss to forest/ environment.

### B.8. District Profile

The district profiles in the prescribed proforma vide **Annexure- VII** of FC Act guideline is enclosed herewith as **Annexure- 23**.

### B.9. Certificate under FRA, 2006

The User Agency has requested to the Collector, Keonjhar vide letter No. JSW/U/O/2018/298 dated 23.10.2018 to issue certificate under FRA, 2006 for the forest land over 22.671 ha is enclosed vide **Annexure- 15A**. The User Agency has submitted an undertaking in this regard to submit the certificate under FRA, 2006 from Competent Authority for onward transmission before Stage-II approval from MoEF, GOI vide **Annexure- 15**.

### B.10. Site Inspection Report of DCF

Site Inspection report of the Deputy Conservator of Forests, Keonjhar Division is furnished as **Annexure- 22**.

### B.11. DGPS maps

The DGPS map signed by all concerned officials of Revenue and Forest Dept., vetted by ORSAC and duly countersigned by the undersigned is enclosed as **Plate –10, 11, 12, 13 & 14**. The area as per land schedule and that of DGPS map involved in the submitted diversion proposal is produced below-

Sl No.	Particulars of Forest Land	Compartment No./ Coupe No./ Plot No.	Area as per land schedule (in ha.)	Area as per DGPS (in ha.)	Deviation in %
1	DGPS map showing the forest patches in village Bhagalpur	Sheet No 1	3.829	3.818	0.287↓
2	DGPS map showing the forest patches in village Gobardhanpur	Sheet No 2	2.164	2.175	0.508↑
3	DGPS map showing the forest patches in village Kandra	Sheet No 4	1.041	0.989	4.995↓
4	DGPS map showing the forest patches in village Lahanda	Sheet No 3	15.617	15.895	1.78↑
	<b>Total:</b>		<b>22.651</b>	<b>22.877</b>	<b>0.997↑</b>

## C. Compensatory Levies

### C.1. Compensatory Afforestation

Non-forest Govt. land required for Compensatory Afforestation for diversion of 22.671 ha of Forest Land under Sec 2(ii) under FC Act, 1980, will be met from the identified and allotted non-forest Govt. land over 22.80 ha in village Podadihi under Banspal Tahasil of Keonjhar District in favour of M/s JSW Utkal Steel Ltd vide letter No. 2105/Rev dt. 20.12.2018 of Collector, Keonjhar for raising Compensatory Afforestation at the prevailing wage rate @Rs. 286.30 per MD with a maintenance period of ten years under Bald Hill Plantation norms @1600/ha approved by PCCF, Odisha.(Annexure- 13 letter No. 25281 dated 18.12.2018 over 10.00 ha and remaining 1.00 ha of the same patch which is having slope gradient more than 40° is suitable for ANR without gap model, The plantation norm approved by PCCF, Odisha.(Annexure- 8 letter No. 25281 dated 18.12.2018) in patch-1 and ANR with gap model norms @600/ha approved by PCCF, Odisha.(Annexure- 11 letter No. 25281 dated 18.12.2018) over 11.80 ha in patch-2 has been prepared. The copy of the allotment letter issued by Collector, Keonjhar is enclosed as **Annexure-17A**. Compensatory Afforestation scheme, prepared by the Divisional Forest Officer, Keonjhar in respect of the aforementioned Non-forest land is enclosed herewith as **Annexure- 19**.

### **C.2. Net Present Value (NPV).**

The NPV of the forest land proposed for diversion under FC Act, 1980 will be realised from the User Agency on receipt of Stage-I approval. The undertaking submitted by the User Agency to this effect is enclosed as **Annexure- 20**.

### **C.3. Wild Life Management- Site Specific Wildlife Conservation Plan and Regional Wildlife Management Plan.**

The proposal for Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Keonjhar District. The very nature of the project is Beneficiation plant to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra. Nonetheless, the prevalence of wild fauna in the proposed forest land is the same as that of adjoining forest blocks and are likely to be impacted by the project work. Therefore, Site Specific Wildlife Conservation Plan is suggested to be imposed as a condition in addition to an elephant anti-depredation scheme for Barbil Range.

### **D. Statutory Clearances**

#### **D.1. Environmental Clearance**

The User Agency has applied for Environmental Clearance and obtained ToR vide No. IA-J-11011/271/2018-IA-II (I) dt.22.02.2019 for 30 MTPA for Installation of Iron Ore Grinding & de-sliming plant of Govt. of India, MoEF (Copy enclosed as **Annexure- 2E**).

#### **D.2. Consent to Operate from SPCB, Odisha**

The User Agency has been obtained for Consent to Establish from SPCB, Odisha vide letter No.16414 IND-II-NOC-6115 dated 23.12.2017 is enclosed as **Annexure- 2F**.

### **E. Misc. Information**

#### **E.1. Violation and Action Taken thereof.**

No violation is committed in the forest land proposed for diversion under FC Act, 1980 for Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Keonjhar District.

#### **E.2. Pending Court Matters.**

There is no Court matter pending against the User Agency in respect of the forest land proposed for diversion under FC Act, 1980 for Grinding, De-sliming (Beneficiation) plant and slurry pumping station along with associate facilities to produce 30 MTPA Iron Ore Concentrate at village Gobardhanpur and Water Intake System at village Kandra under Barbil Tahasil in Keonjhar District. The declaration submitted by the User Agency to this effect is enclosed as **Annexure- 21**.

The submitted diversion proposal over 22.671 ha of Forest land under Keonjhar Forest Division is forwarded herewith for approval as per provision under section 2(ii) of Forest (Conservation) Act, 1980 (Amended).

**Enclosure- Diversion proposal along with requisite documents.**

  
11/7/19.  
Divisional Forest Officer,  
Keonjhar Division.

**Memo No.** \_\_\_\_\_ **/Dated**

Copy forwarded to the Additional Principal Chief Conservator of Forests, Forest  
Diversion and Nodal Officer, FC Act, O/o the Principal Chief Conservator of Forests, Odisha,  
Bhubaneswar for favour of kind information.

**Divisional Forest Officer,**  
 **Keonjhar Division.**