

Subject : Diversion of 126.401 ha. of Forest land in favour of M/s ESSAR STEEL INDIA LIMITED for Ghoraburhani Sagasahi Iron Ore Block of Essar Steel India Limited in District Jagatsinghapur , state Orissa.

1. The State Government of Orissa vide their letter no. **No 10F (Cons) -26/2018/17489/F&E** and date **8-8-2018** submitted the above mentoned proposal to obtain prior approval of central Government,in accordance with Section-2 of the Forest(Conservation)Act,1980.

2. Details indicated in the proposal submitted by the Government of Orissa are as below

FACT SHEET

1. Project Details	
(i) Proposal No	FP/OR/MIN/18611/2016
(ii) Name of the Proposal	Ghoraburhani Sagasahi Iron Ore Block of Essar Steel India Limited
(iii) Short Narrative of the proposal and Project/scheme for which the forest land is Required	Forest Diversion Proposal over 126.401 ha of forest land under Section 2(iii) of FC Act, 1980. Out of the above area 120.838 ha under Sec 2(ii) (excluding Safety zone) of FC Act, 1980 within the allotted Mining Lease over 139.165 ha in village Ghoraburhani, Kalmang and Sagasahi under Koira Tahasil o
(iv) Category	Mining
(v) Total Area of the Forest Land (in ha.):	126.401
(vi) Total period for which the forest land is proposed to be diverted(in years)	50
2. Location:	
(i) State	Orissa
(ii) District	Jagatsinghapur
3. Detail of user agency	
(i) Name of the user agency	ESSAR STEEL INDIA LIMITED
(ii) Shape of forest land proposed to be diverted	Non Linear
(iii) Legal status of User Agency	Private

4. Legal status of forest land proposed for diversion

S. No.	Division	Forest Land(ha.)	Legal Status
1	Bonai	76.666	Proposed Reserved Forests (Sec-4 of IFA)
2	Bonai	3.794	Revenue Forest
3	Bonai	45.941	District Level Committee (D.L.C.) Forest

5. Land use plan

Component wise breakup

S.no	Component	Forest Land(ha.)	Non-Forest Land(ha.)
1	Mining with Mine Road and Conveyor Line with Steel	88.758	2.132
2	Fixed Screening & Crushing Plant with Premises	0.26	1.729
3	Benificiation Plant with Premises	7.042	2.072
4	Benificiation Plant Reject	11.26	0.275
5	Area for Wter Reservoir, Pump house & water recycl	2.571	0
6	Tailing Pond Discharge with Embankment Structure a	1.888	2.95
7	Office, Site office & Admin Building	0	1.606

8	Internal Road from Quarry to Dump yard, Tailing Po	0.352	0
9	Village Road	0	0.598
10	Magazine	0.038	0
11	Parking Area	0	0.077
12	Road for in & out in SZ area	0	0.04
13	Waste dump with environmental safegaurd like retai	8.499	0
14	Water Sump	0.17	0.093
15	Safety Zone along the Lease Boundary and village r	5.563	1.192
Total		126.401	12.764

6. Vegetation

(i) Species-wise and diameter class wise enumeration of trees

Division Name : Bonai

S. No.	Scientific Name	Local Name	(0-30)cm.	(31-60)cm.	(61-90)cm.	(91-120)cm.	(121-150)cm.	(>150)cm.
1	Dalbergia Latifolia	Sisoo	-1	6	4	3	0	1
2	Tectona grandis	Saguan	-1	219	101	6	0	0
3	Shorea robusta	Sal	-1	774	325	98	25	13
4	Pterocarpus marsupium	Piyasal	-1	31	30	10	1	1
5	Gmelina arborea	Gambhari	-1	23	5	1	1	0
6	Adina cordifolia	Kuruma	-1	48	23	5	4	2
7	Bridelia retusa	Kashi	-1	81	40	12	1	0
8	Albizia Procera	Sirsha	-1	4	6	8	7	7
9	embelica officinalis	Amla	-1	8	0	0	0	0
10	Terminalia belerica	Bahada	-1	109	46	7	5	6
11	Ougeinia ougenensis	Bandhan	-1	5	3	3	0	1
12	Ficus bengalensis	Bara	-1	0	0	0	0	8
13	Hardwickia Binnata	Baranga	-1	0	0	2	0	0
14	Aegle marmelos	Bela	-1	44	11	2	0	1
15	Semecarpus anacardium	Bhalia	-1	3	0	0	0	0
16	Alstonia scholaris	Chachina	-1	1	0	0	1	0
17	Buchanania lanzan	Char	-1	95	38	13	6	0
18	Lannea coromandelica	Daka	-1	54	30	14	2	2
19	Anogeissus latifolia	Dhaura	-1	211	71	14	9	2
20	Nyctanthes Arbor-Tristis	Gangasiuli	-1	10	2	0	0	0
21	Diospyros montana	Haldu	-1	84	27	6	0	0
22	Terminalia Chebula	Harida	-1	19	7	4	4	1
23	Syzygium cumini	Jamu	-1	94	72	23	8	4
24	Ficus religiosa	Jodi	-1	2	4	2	5	8
25	Pongamia pinnata	Karanja	-1	39	9	2	0	0
26	Diospyros melanoxylon	Kendu	-1	128	17	7	3	1
27	Careya arborea	Kumbhi	-1	4	1	1	0	0
28	Holarrhena antidysenterica	Kurein	-1	23	3	0	0	0
29	Schleichera oleosa	Kusum	-1	27	14	16	12	22
30	Madhuca indica	Mahula	-1	6	10	15	8	4

31	Mangifera indica	Mango	-1	1	2	3	0	4
32	Lannea coromandelica	Mai	-1	1	5	3	0	0
33	Gmelina arborea	Panigamhari	-1	7	6	0	1	0
34	Trewia nudiflora	Rimili	-1	38	8	2	0	0
35	Lagerstroemia parviflora	Sidha	-1	54	18	3	0	1
36	Bombax ceiba	Simili	-1	9	8	3	3	5
37	Cassia fistula	Sunari	-1	11	0	0	0	0
38	Others	Misc.	-1	908	288	64	20	12

(ii)	Density of Vegetation	S.No.	Division Name	Density	Eco Class
		1	Bonai	0.6	Eco 1
(iii)	Total numbers of trees to be filled	S.No.	Division Name	Total numbers of trees	
		1	Bonai	4961	
(iv)	Total Tree to be retained .	S.No.	Division Name	Less than 60(in cm.)	Greater than 60(in cm.)
		1	Bonai	3143	1818
7.	Vulnerability of area to soil erosion	S.No.	Division Name	Vulnerability of area	
		1	Bonai	The applied area is not vulnerable to erosion.	
8.	Approximate distance of proposed site for diversion from boundry of forest (in Km.)	S.No.	Division Name	distance from boundry of forest(Km.)	
		1	Bonai	0	
9.	Significance of the forest land proposed for diversion from wildlife point of view				
(i)	Details of wildlife present in and around the forest land proposed for diversion	S.No.	Division Name	Details of wildlife diversion	
		1	Bonai	Monkey (Macacamullata), Jungle cat (Felischaus), Rabbit (Rodentia Rattus), Sloth Bear (Melursusursinus), and different types of Snake and Birds are also sometimes seen in the applied area	
(ii)	Whether forms part of national park, wildlife sanctuary, biosphere reserve,tiger reserve, elephant corridor, wildlife migration corridor etc.	S.No.	Division Name	National park/Wildlife sanctuary/Biosphere reserve/Tiger reserve/Elephant corridor/Wildlife migration corridor	
		1	Bonai	No	
(iii)	Whether the forest land proposed for diversion is located within eco-sensitive zone(ESZ) of the Protected Area notified under Wildlife(Protection) Act,1972 (Note: In case, ESZ of a Protected Area is not notified,then,10kms	S.No.	Division Name	Diversion is located within ESZ	
		1	Bonai	No	

	distance from boundary of the Protected Area should be treated as ESZ)::																					
(iv)	Whether any national park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, wildlife migration corridor etc., is located within 1 Km. from boundary of the forest land proposed for diversion :	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Division Name</th> <th>Location of reserve/corridor within 1 Km. from boundary of the forest land</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bonai</td> <td>No</td> </tr> </tbody> </table>	S.No.	Division Name	Location of reserve/corridor within 1 Km. from boundary of the forest land	1	Bonai	No														
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1	Bonai	No																				
(v)	Whether any rare/ endangered/ unique species of flora and fauna found in the area :	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Division Name</th> <th>flora and fauna found in the area</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bonai</td> <td>No</td> </tr> </tbody> </table>	S.No.	Division Name	flora and fauna found in the area	1	Bonai	No														
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10.	Whether any protected archaeological/ heritage site/ defence establishment or any other important monument is located in the area. if so, the details thereof with NOC from competent authority, if required.	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Division Name</th> <th>Details of with NOC from competent authority</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bonai</td> <td>No</td> </tr> </tbody> </table>	S.No.	Division Name	Details of with NOC from competent authority	1	Bonai	No														
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1	Bonai	No																				
11.	Whether the requirement of forest land as proposed by the User Agency is unavoidable and bare minimum for the project. if no, recommended area item-wise with details of alternatives examined.	yes																				
12.	Whether any work in violation of the Act has been carried out (yes/No). if yes, details of the work done, action taken on erring officials. Whether work in violation is still under progress.	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Division Name</th> <th>Wildlife Point of View</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bonai</td> <td>No</td> </tr> </tbody> </table>	S.No.	Division Name	Wildlife Point of View	1	Bonai	No														
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13.	Details of compensatory afforestation scheme																					
(i)	Patch wise details of non-forest or Revenue forest land to be provided by User Agency for CA																					
	<table border="1"> <thead> <tr> <th colspan="4">Patch Wise Details</th> </tr> <tr> <th>S.no</th> <th>District Name</th> <th>Village</th> <th>Area(in ha.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Keonjhar</td> <td>Podadihi</td> <td>74</td> </tr> <tr> <td>2</td> <td>Keonjhar</td> <td>Podadihi</td> <td>46.848</td> </tr> <tr> <td colspan="2">Total</td> <td colspan="2">Area :120.848</td> </tr> </tbody> </table>		Patch Wise Details				S.no	District Name	Village	Area(in ha.)	1	Keonjhar	Podadihi	74	2	Keonjhar	Podadihi	46.848	Total		Area :120.848	
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S.no	District Name	Village	Area(in ha.)																			
1	Keonjhar	Podadihi	74																			
2	Keonjhar	Podadihi	46.848																			
Total		Area :120.848																				
(ii)	Patch wise details for Degraded Area (To be earmarked by DFO)																					

No Data								
(iii)	Total Financial Outlay for C.A(lacs):	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Division Name</th> <th>Total Financial Outlay for C.A(lacs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bonai</td> <td>48845835</td> </tr> </tbody> </table>	S.No.	Division Name	Total Financial Outlay for C.A(lacs)	1	Bonai	48845835
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1	Bonai	48845835						
(iv)	Whether the land identified by User Agency is suitable for CA and from management point of view:	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Division Name</th> <th>Land is suitable for CA</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bonai</td> <td>Yes</td> </tr> </tbody> </table>	S.No.	Division Name	Land is suitable for CA	1	Bonai	Yes
S.No.	Division Name	Land is suitable for CA						
1	Bonai	Yes						
14.	Documentary evidence in support of settlement of rights in accordance with the provisions of the scheduled Tribes and other Traditional Forest Dwellers(Recognition of forest Rights) Act,2006 on the forest land proposed to be diverted enclosed.	certificate given						
15.	Whether the project requires environment Clearance	(a). Status of the Environmental Clearance to the Project: EC under process (ii). Environmental Clearance File No.: NA						
16.	Catchment Area Treatment Plan	-						
17.	Rehabilitaion of Outstee							
(i)	Number of SC Families	0						
(ii)	Number of ST Families	0						
(iii)	Number of Backword Families	0						
(iv)	Copies of R&R Plan	-						
18.	Cost Benefit Analysis	1 23						
19.	Total cost of the project(in crore):	99800						
20.	Employment Potential	Permanent Employee : 60 Temporary Employee : 200 Total Employee : 260						
21.	Details of Mining lease	Yes						
(i).	Whether the forest land is aquired under Coal Bearing Areas Act	No						
(ii).	(a).Reference number of Letter of Intent for grant of mining lease: (b).Date of issue of the Letter of Intent(LOI) for grant of mining lease: (c).Total area of the mining lease(in ha.): (d).Area of forest land located in the mining lease(in ha.):	Director of Mines, Govt. of Odisha 28 Mar 2016 139.165 126.401						
(iii).	Details of Mining Plan	No						
(iv).	(a).Date of approval of mining plan: (b).Approval authority: (c).Nature of mining (underground/opencast):	11 Jul 2016 Indian Bureau of Mines Opencast						
(v).	Total area of safety zone of the mining lease in ha	No Record Found						
(vi).	Details of safety zone of mining lease	No Record found						

(vii).	Detail of prospecting activity under taken in the mining lease:	After execution prospecting work will be carried out as per mining plan.																									
(viii).	Details of bore holes drilled for prospecting :	<table border="1"> <thead> <tr> <th colspan="5">Bore holes drilled for prospecting</th> </tr> <tr> <th>S.no</th> <th>No. of Bore holes (in forest land)</th> <th>Diameters(in inch.) forest land</th> <th>No. of Bore holes (in non-forest land)</th> <th>Diameters(in inch.) non-forest land</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>27</td> <td>4</td> <td>1</td> <td>4</td> </tr> </tbody> </table>					Bore holes drilled for prospecting					S.no	No. of Bore holes (in forest land)	Diameters(in inch.) forest land	No. of Bore holes (in non-forest land)	Diameters(in inch.) non-forest land	1	27	4	1	4						
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Iron Ore	95.10	95	95	3.51	95	95																					
(x).	<p>a) Details of approval under the Forest (Consevation) Act,1980 obtained for undertaking prospecting activities in the forest land located in the mining lease :</p> <p>b)Whether approval under the Forest (Conservation) Act, 1980 for undertaking prospecting activities in the forest land located in the mining lease have been obtained :</p>	<p>No</p> <table border="1"> <thead> <tr> <th colspan="6">Details of approval under the Forest(Consevation) Act,1980</th> </tr> <tr> <th>S.no</th> <th>MoEF File No</th> <th>Date of approval</th> <th>Area of forest land diverted(in ha.)</th> <th>From Date</th> <th>To Date</th> </tr> </thead> <tbody> <tr> <td colspan="6">NA</td> </tr> </tbody> </table>					Details of approval under the Forest(Consevation) Act,1980						S.no	MoEF File No	Date of approval	Area of forest land diverted(in ha.)	From Date	To Date	NA								
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22. Undertaking to bear the cost of CA and NPV yes

23.District Profile

S.no	District Name	Geographical area of the district (in ha.)	Forest area of the district (in ha.)	Total forest area diverted since 1980 (in ha.)	No. of Approved Cases	Forest Land including penal C.A. (in ha.)	Progress of compensatory afforestation as on(date)	Forest land (in ha.)	Non-forest land (in ha.)
1	Sundargarh	971200	495732	5422.179	54	7844.748	01/01/2017	7620.063	1113.090

24. Total area proposed for afforested since 1980 -

Degraded forest land -	7844.748
Penal CA over Forest land -	7620.063
Non-Forest land -	1113.090
Total-	16577.901

25. Total area afforested since 1980 -

Degraded forest land -	7844.748
Penal CA over Forest land -	7620.063
Non-Forest land -	1113.090
Total-	16577.901

26.Site Inspection Report

Division	Circle	Site Inspection By	Date Of Visit	Brief Details of SIR at DFO
Bonai	Rourkela	DFO	08/12/2017	
	Rourkela	CF	06/01/2018	

27.Recommendation with Specific conditions,(if any)

DFO/CF/PCCF/Nodal Officer

Division	Circle	Recommendation By	Recommendation	Remarks/Conditions
Bonai	Rourkela	DFO	Recommended	In view of the above position, grant of approval for diversion of 120.838 ha. of forest land U/s-2 (ii), and for approval of 126.401 ha. of forest land U/s-2 (iii) of the Forest

				(Conservation) Act' 1980 may be considered on its own merit.
	Rourkela	CF	Recommended	As per the Diversion Proposal, the Cost Benefit ratio is 1 23 .
		Nodal Officer	Recommended	Recommended for diversion of 120.838 ha of forest land under section 2 (ii) and approval of 126.401 ha of forest land under section 2 (iii) of Forest Conservation Act, 1980 in village Sagasahi, Kalmang, Ghoraburhani and Mendhamaruni PRF-I within the lease area of Ghoraburhani-Sagasahi Iron Ore Block under Bonai Forest Division of Sundargarh District by M/s Essar Steel India Ltd

28. Specific recommendation of the State Government

State	Recommendation By	Recommendation	Remarks/Conditions
Orissa	State Secretary	Recommended	recommended vide letter no 17489 dated 08.08.2018.

29.	Forwarding Letter for Nodal Officer	
30.	Forwarding Letter for State Government	<p>State Government of Odisha vide their letter No 10F (Cons) -26/2018/17489/F& E dated 08.08.2018 forwarded a proposal for diversion of 120.838 ha. of forest land for iron ore mining under Section 2(ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act,1980 for entire forest land 126.401 ha. including safety zone area of 5.563 ha. in favour of M/s Essar Steel India Ltd. within their allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha. located in village Sagasahi, Kalmang, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha as received from PCCF, Odisha for consideration of Govt. of India, Ministry of Environment, Forest and Climate Change.</p> <p>The forwarding letter dated 08.08.2018 contain the following information</p> <p>(i) Brief description</p> <p>M/s Essar Steel Limited was originally incorporated on 1.6.1976 under the Companies Act, 1956 as ESSAR CONSTRUCTION LIMITED. As per resolution passed by the Company under Section 21 of the above Act and approval obtained from Government of India thereon, the name of the Company has been changed to M/s ESSAR STEEL INDIA LIMITED and certificate to this effect was issued by the Registrar of Companies, Gujrat, Dadra and Nagar Haveli on 18.1.2012. The Memorandum of Association and Articles of Association of the Company is placed at page 292(A) to 381/DP. Essar Steel India Limited is reported to be one of the leading producers of Steel in India. As per the lease profile submitted by the Company, it does not have any other iron ore mines in the State of Odisha. Government of Odisha, pursuant to the Mines and Minerals (Development & Regulation) Act, 1957 and Mineral (Auction) Rules, 2015 issued notice inviting tender dt. 23.12.2015 to commence the auction process for grant of mining lease for Ghoraburhani-Sagasahi Block located in Sundargarh district of Odisha. The e-auction process was conducted in accordance with the tender document for the said mineral block and this Company i.e. M/s Essar Steel India Limited was declared as the Preferred Bidder under Rule 9(4)(b)(iii) of the above mentioned Rules. As required under Rule 10(1) of Mineral (Auction) Rules, 2015, the Preferred Bidder deposited the 1st instalment being 10% of the upfront payment of Rs. 9,26,24,599/-on 17.3.2016 and thereafter the State Government of Odisha, pursuant to Rule 10(2) of the Mineral Auction Rules, 2015 issued vide their order No. MXIII-(b) 60/2015 3114/DM dt. 28.3.2016 the Letter of intent(LoI) for grant of Mining lease for Ghoraburhani-Sagasahi Block for iron ore in Ghoraburhani, Sagasahi and Kalmang village of Koira Tehsil in Sundargarh district over a total area of 139.165ha. (90.629 ha. of mineralized area and 48.536ha. of non-mineralised area) of toposheet No. 73G/5 to the Preferred Bidder (M/s Essar Steel India Limited) for a period of 50 years which would be co-terminus with the lease period under Section 8 (A) 2 of MMDR Amendment Act, 2015. As intimated earlier by the user agency, this is first iron ore mines in the country which was allocated through the process of e-auction after implementation of MMDR (Amendment) Act, 2015 and Mineral(Auction) Rules, 2015 in the State of Odisha.</p> <p>The condition No. 3.3(b) of LoI stipulates that the Preferred Bidder shall sign the Mine Development and Production Agreement with Government of Odisha upon obtaining all consent, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operation. After signing of the above mentioned Agreement and due payment of upfront amount, the State Government shall grant the mining lease in favour of the Company as per condition No. 3.3(c) of the LoI. Copy of LoI is attached at page 44-47/DP. Accordingly, M/s Essar Steel India Ltd. has submitted the proposal to obtain diversion of 120.838 ha. of forest land for iron ore mining under Section 2(ii) and for obtaining permission under Section 2 (iii) of the Forest (Conservation) Act 1980 for entire forest land 126.401 ha. including safety zone area of 5.563ha. in their favour within their allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165ha. located in village Sagasahi, Kalmang, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha.</p> <p>It has been reported that M/s Essar Steel India Ltd. is one of the India s leading integrated steel producers with an annual production capacity of 10 million tonnes supported by a 20 million tonnes pellet facility. The manufacturing operations comprises of Iron ore beneficiation, pellet making, steel making and downstream facilities and pre-coated facility, a steel processing facility, and extra-wide plate mill and pipe mills with coating facilities. The Company has a 12 MTPA Beneficiation Plant at Dabuna, Joda in Keonjhar district (Odisha),</p>

which is strategically established to leverage the rich Iron ore deposits in the region. The beneficiated ore is transported in slurry form to Company s Pellet plant at Paradip through 253 km slurry pipeline from Dabuna to Paradip. The existing Pellet plant of 6.0 million ton per annum capacity at Paradip, will have second module of 6.0 MTPA which is under commissioning stage. This will provide vital raw material to their Steel Plant at Hazira (Gujarat). It is to mention here that the Company has a fully integrated world-class facility at Hazira, Gujarat having the World s fourth largest single-location Steel Plant. This Plant requires minimum 16.0 million tons of raw materials (Iron ore) for steel making. The Ghoraburhani, Sagasahi Iron ore Block will partially cater to the requirement of this Steel Plant. The deposit will be utilised exclusively for captive use. The project details of Iron ore Beneficiation Plan at Dabuna, Pellet Plant at Paradip and Slurry pipeline already laid from Dabuna to Paradip as submitted the project proponent is placed at page 382-548/DP.

Production target has been fixed at 7.6 MT of ROM/annum which is planned to be achieved in 5th year of the plan period. The area has earlier been explored in detail by Geological Survey of India and the total resource of + 45 % Fe is estimated to be 98.61 Million tons and the minerals reserve is estimated to 78.24 million tons. The estimate for iron ore is likely to increase after detailed exploration is undertaken on execution of mining lease Mining Plan has been approved for 139.165 ha for Iron Ore vide letter No.MP/FM/02-ORI/BHU/2016 dated 11.07.2016 with is enclosed at Page No.59 to 139/DP. **The life of mines is estimated to be 12 years.**

The allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha. involves 126.401 ha. of forest land (76.666 ha. of Mendhamaruri PRF-I, 3.794 ha of Revenue Forest and 45.941ha. of DLC forest land) and 12.764ha. of Non-forest Govt. land . The land schedule of the total Iron ore block area over 139. 165 ha duly authenticated by the Tahasildar, Koira, D.D.M, Koira and Divisional Forest Officer, Bonai are placed at page 52-55/DP. The Tahasildar, Koira has also certified the status of land as on 25.10.1980. Similarly detailed authenticated land schedule of forest land involved in this iron ore block is attached at page 56-58/DP.

The applied Iron ore block area has been delineated in Survey of India Topo sheet No. F45N5 (73G/5) and is bounded by latitude 21° 56 08.83" N to 21° 57 09.61" N and longitude 85° 17 02.52" E to 85° 17 57.23" E. The iron ore block area is bounded by the mining lease area of KJS Ahulwalia on North -eastern side, Mining lease of Sanindipur Iron & Bauxite Mines of Rungta Sons Pvt. Ltd on southern side and mining lease of Kalmang Manganese Mines of Rungta Mines Ltd on Eastern side.

This lease area does not form part of any National park/ Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve. Availability of rare and endangered species of flora & fauna has not been reported by the DFO, Bonai. There is no archaeological monument /heritage site/defence establishment located within the applied area. There will be no displacement of human habitation due to this project. The estimated cost of the project is Rs.998.72crore(page 29/DP). This project will generate employment for about 212 persons with different skills. In addition, there will be large number of local people who will get indirect employment in ancillary services owing to this project (Pae 32/DP).

(ii) Maps The User Agency has furnished the necessary maps duly authenticated by all concerned

(iii) Forest land

The allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha. involves 126.401 ha. of forest land (76.666 ha. of Mendhamaruri PRF-I, 3.794 ha of Revenue Forest and 45.941 ha. of DLC forest land) and 12.764 ha. of Non-Forest Govt. land. The instant proposal is for obtaining diversion of 120.838 ha. of forest land for iron ore mining under Section 2(ii) and for obtaining permission under Section 2 (iii) of the Forest (Conservation) Act,1980 for entire forest land 126.401 ha. including safety zone area of 5.563 ha. for the purpose of execution of Mining lease deed. The breakup of forest land involved in this project for obtaining permission u/s 2 (iii) of Forest (Conservation) Act, 1980 is indicated below

Forest Division	Forest Land involved (in ha)	Non-forest land (in ha)	Grand Total (in ha)				
				Unclassed Forest	DLC Forest	Revenue Forest	Total
RF	PRF	VF					

Bonai	-	76.666	3.794	-	45.941	-	126.401	12.764	139.165
Total	76.666	3.794	-	45.941	-	126.401	12.764	139.165	

Similarly, detailed breakup of 120.838 ha. of forest land applied for approval U/s-2 (ii) of Forest (Conservation) Act 1980 and non-forest land for mining and ancillary purposes is mentioned below

Forest Division	Forest Land involved (in ha)	Non-forest land (in ha)	Grand Total (in ha)				11.572	132.41
			Unclassed Forest	DLC Forest	Revenue Forest	Total		
Bonai	-	73.953	3.434	-	43.451	-	120.838	132.41

The purpose-wise break-up of the total land required for this Mining Project as furnished by the User Agency in Part-I of Form-A is indicated as under

Si.	Particulars		Category wise Forest Land	Total	Non-	Grand Total
No.			in ha.	Forest in ha.	Forest Land in ha.	in ha.
	PRF	VF	DLC			

1	Mining	Mining along with Mines Road and Conveyor Line with Steel Structure	37.988	0	39.89	77.878	1.850	79.728
	Initially to be used for Waste Dump and later to be converted to Mining		0	0	3.281	3.281	0	3.281
	Initially to be used for Sub-Grade Dump and later to be converted to Mining		3.923	0	0	3.923	0.120	4.043

	Initially to be used for Top-soil stacking and later to be converted to Mining	0.519	0	0	0.519		0.519		
	Initially to be used for Screening & Crusher Plant and later to be converted to Mining	3.022	0	0	3.022	0.162	3.184		
			Sub Total for Mining	45.452	0	43.171	88.623	2.132	90.755
2	Waste Dump with environmental Safeguard			7.921	0.669	0	8.590	0	8.590
3	Mineral Processing i) Fixed Screening & Crushing Plant with premises			0	0	0.260	0.26	1.822	2.082
	ii) Beneficiation Plant with ancillaries	7.042	2.765	0	9.807	2.072	11.879		
	iii) Beneficiation Plant Reject (Tailing Pond) with Embankment Structure	13.148	0	0	13.148	3.225	16.373		
	Sub Total for Mineral Processing	20.190	2.765	0.260	23.215	7.119	30.334		
4	Office, Site service, Parking & Admn. Building			0	0	0	0	1.703	1.703
5	Road Internal Road for Exploration, Dump yard etc.			0.352	0	0	0.352	0	0.352

Revenue Road	0	0	0	0	0.598	0.598		
Road for ingress to, and egress from SZ area	0	0	0.020	0.020	0.020	0.040		
Sub-Total for Road	0.352	0	0.020	0.372	0.618	0.990		
6		Magazine	0.038	0	0	0.038	0	0.038
		Total	73.953	3.434	43.451	120.838	11.572	132.410
7		Safety Zone i) Along the Lease boundary	1.932	0.360	2.154	4.446	0.960	5.406
		ii) Along the Revenue road	0.781	0	0.336	1.117	0.232	1.349
		Sub Total Safety Zone	2.713	0.360	2.490	5.563	1.192	6.755
		Grant Total	76.666	3.794	45.941	126.401	12.764	139.165
Broken & Virgin area Statement								
1.		Broken Pre-1980	--		-	-	-	-
2.		Broken- Post 1980	--		-	-	-	-
3.		Virgin	76.666	3.794	45.941	126.401	12.764	139.165

(iv) **Flora & Fauna** The DFO, Bonai Division has reported the density of vegetation existing over the applied area to be **0.6 with Eco-Value Class-I** (Page No.38-40/DP and Page No.271-273/DP). The tree species which are commonly noticed in the applied area are Sal (*Shorea robusta*), Teak (*Tectona grandis*), Sidha (*Lagerstroemia parviflora*), Sisoo (*Dalbergia latifolia*), Bandhan (*Ougeinia oojeinensis*), Char (*Buchanania lanzan*), Dhaura (*Anogeissus latifolia*), Kurum (*Adina cordifolia*), Asan (*Terminalia tomentosa*), Karanja (*Pongamia pinnata*), Mango (*Mangifera indica*), Kendu (*Diospyros melanoxylon*), Bahada (*Terminalia belerica*) Jamu (*Syzygium cuminii*), Kusum (*Schleichera oleosa*), Gambhari (*Gmelina arborea*), Mahul (*Madhuca indica*) etc.

Wild fauna like Monkey (*Macaca mullata*), Jungle cat (*Fells chaus*), Rabbit (*Rodentia Rattus*), Sloth Bear

(*Melursus ursinus*), and different types of Snake and Birds are seen in the applied area. Movement of wild elephants in the area has also been reported by PCCF, Odisha. It has been reported by DFO, Bonai Division that no rare or endangered or unique species of flora & fauna is found in the applied area. The applied area does not form part of National Park/Wildlife Sanctuary/Bio-sphere reserve/Tiger reserve.

(v) Wildlife Management

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In order to protect/conservate the wildlife available in the area along with their habitat, the proportionate cost of **Regional Wildlife Management Plan as per latest norm fixed by the State Government shall be realized from the Company only after mining lease is granted in their favour.** The Company has submitted an undertaking to pay towards cost of the Regional Wildlife Management Plan (Page-192/DP). Besides, **the Site Specific Wildlife Conservation Plan for the allotted iron ore block area along with its impact area is also required to be prepared by the Company and got it approved by the PCCF(WL)& CWLW, Odisha for its implementation at project cost.** It has been reported that the Company has submitted Site Specific Wildlife Conservation Plan which is under scrutiny by DFO, Bonai Division for its onward submission to PCCF (WL) & CWLW, Odisha for his approval. The Company has submitted an undertaking to pay the cost of the Site Specific Wildlife Conservation Plan (Page-192/DP)

(vi) Tree enumeration

Sample enumeration of trees existing over the entire 120.838 ha of forest land proposed for diversion under Section 2(ii) of FC. Act, 1980 has been taken up. As per sample tree enumeration report of DFO, Bonai at page 140-144/DP, enumeration over 25 representative Plots of 1 ha. each reveals about existence of 4,999 no. of trees of above 30 cm girth(2011 sound and 2898 unsound trees). By extrapolating this figure for the entire forest area of 120.838ha. Proposed for diversion, 24,168 no. of trees of above 30cm girth are assessed to be existing there. The abstract of tree enumeration is enclosed at **Page-140-144/DP.**

(vii) Compensatory Afforestation

Equivalent extent of non-forest land is required for compensatory afforestation in lieu of Forest land applied for diversion U/s-2 (ii) of F.C. Act 1980 i.e. 120.838 ha. The District Administration of Keonjhar has identified/allotted non-forest land of 120.838 ha. in village Podadihi of Banspal Tehsil coming under BJP Range of Keonjhar Forest Division in Keonjhar district for the purpose of raising Compensatory Afforestation. The land schedule of allotted non-forest land is at page 196-197/DP. The allotted non-forest land is certified to be suitable for plantation and is free from encroachment and encumbrance (Page 198/DP). DGPS maps (4 sheets) of the non-forest land authenticated by DFO, Keonjhar are also enclosed at Plate XII to XII-C in the DP. A compensatory afforestation scheme has been prepared by DFO, Keonjhar Division for taking up plantation over 120.838 ha in ANR mode @1000 plants per ha with 10 years maintenance along with barbed wire fencing around the plantation and provision of soil & moisture conservation with loose boulder check dams which is enclosed at Page No.252-270/DP. The species selected for plantation under Compensatory afforestation include *Syzium cumini* (Jamu), *Adina cordifolia* (Kuruma), *Anogeissus latifolia* (Dhaura), *Acacia catechu* (Khair), *Dalbergia sissoo* (Sisso), *Azadirachta indica* (Neem), *Gmelina arborea* (Gambhar), *Terminalia belerica* (Bahada), *Terminalia chebula* (Harida), *Pongamia pinnata* (Karanja), *Emblia officinalis* (Amla). The compensatory afforestation scheme has been technically approved by Addl.PCCF (FD & NO, FC Act) with a total financial outlay of Rs.2,31,06,300/- only at current wage rate of Rs.213.50/- per manday, The copy of approved CA scheme is at page 252-267/DP. The Company has furnished an undertaking to pay the cost of compensatory afforestation which is enclosed at Page-192/DP.

(viii) Cost Benefit analysis

As reported by the DFO, Bonai Division, the benefit per annum comes to Rs. 604.06 Crore whereas the total loss on forests including environmental loss comes to Rs. 26.26 Crore. Hence, the cost benefit ratio of the Mining Project is 1:23 which is enclosed at Page-145-147/DP.

(ix) Safety Zone

An extent of 6.755 ha of land in allotted iron ore block is earmarked to be maintained under Safety Zone which

includes 5.563 ha. of forest land. The Safety Zone area will be maintained as a Green Belt. The User Agency has furnished an undertaking to bear the cost of maintenance of Safety Zone, and cost of Afforestation over 1.5 times the Safety Zone area in degraded forest land, which is enclosed at Page-192/DP. The detail of safety zone is indicated below

		Category wise Forest land (in ha)	Total Forest (In ha)	Non-Forest (In ha)	Grand Total (In Ha)		
Sl No.	Item	PRF	VF	DLC			
1	7.5 mtrs Safety Zone along the Mine Boundary	1.932	0.360	2.154	4.446	0.960	5.406
2.	10 mtrs Safety Zone along the Revenue Village Road	0.781	0	0.336	1.117	0.232	1.349
	Grand Total	2.713	0.360	2.490	5.563	1.192	6.755

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(x) Environmental clearance

The user agency has taken steps for obtaining environmental clearance from Government of India for this mining project. Accordingly Term of Reference (ToR) has been prescribed for production of 7.16 MTPA (RoM) in favour of the user agency by MoEF& CC vide their Letter No.J-11015/ 192/2016-IA.II (M) dt.16.01.2017 (Page-148-152/DP). The public hearing has been conducted/completed on 19.05.2017 which is enclosed at Page No.153-190/DP.

(xi) Phased Reclamation Plan

The User Agency has furnished the Phased Reclamation Plan to undertake the phased reclamation and rehabilitation of forest / non-forest land to be affected by mining operation. The user agency shall complete the reclamation work before winding up of mining operation and abandonment of the mine. The copy of the Phased Reclamation Plan is enclosed at Page-207-215/DP.

(xii) Mining Plan

The Mining Plan has been approved by the Indian Bureau of Mines vide their Letter No.MP/FM/02-ORUBHU/2016-17/964 dt.11.07.2016 (Page-59-139/DP). Production target has been fixed at 7.6 MT of ROM/annum which is planned to be achieved in 5th year of the plan period. The area has earlier explored in detail by Geological Survey of India and the total resource of + 45%Fe is estimated to be 98.61 Million tons and the minerals reserve is estimated to be 78.24 million tons. The estimates for iron is likely to increase after

detailed exploration is undertaken on execution of mining lease. The life of mines is estimated to be 12 years. Although it was reported by the User Agency that total forest land in the allotted. Block is 126.137ha. is as per verification of Land Schedule by the Tehsildar, Koira, on the basis of which the Mining Plan was approved by the IBM yet based on joint verification by officials of Revenue, Mining and Forest Department, the DFO, Bonai has reported the total forest land in the allotted block to be 126.401ha. and accordingly this forest diversion proposal has been processed.

(xiii) Lease profile

The User Agency has furnished the lease profile, which is enclosed at Page-206/DP.

(xiv) Resettlement & Rehabilitation Plan.

There is no habitation in the applied forest area and hence there is no issue of re-settlement and re habilitation in this project. Therefore R & R Plan is not required.

(xv) Violation

The Director of Mines, Odisha, Bhubaneswar vide his Letter No. 9691 dtd. 28.10.2016 addressed to the Deputy Director General, Geological Survey of India, Unit-8, Bhubaneswar, DFO, Bonai Division & Deputy Director, Mines, Koira had informed that a clarification on the portion of allotted iron ore block area of over 0.5 hecets indicated to have been mined out has been sought from the State Govt. by the MoEF & CC, GoI in connection with grant of Environment clearance for the iron ore block area of M/s Essar Steel India Ltd. and requested them to carry out field inspection and furnish their considered views on the above issue for further action.

The Deputy Director General Geological Survey of India, Bhubaneswar vide letter No.1594 dated 02.11.2016 has intimated to the Director of Mines, Government of Odisha, Bhubaneswar that the details of the queries like, when or by whom it was carried out cannot be ascertained. It is also reported that the area was inspected and found that the quarries are now filled with overgrowth of bushes and vegetation which suggest that the quarries are old and prior to the year 2003-04.

The Deputy Director of Mines, Koira vide his letter No.6638 dated 05.11.2016 has intimated to Director of Mines, Odisha Bhubaneswar that these were old excavations of very low and negligible depth covering an area of approximately 0.5 ha in different locations & although no confirmation can be claimed as the genesis is not known, these excavation cannot be termed as mined out pit or area under mining operation. The excavated areas are found to be filled with thick vegetation growth. Further he has reported that the area has not been previously granted PL/ ML or mined out for any mineral previously.

In above context, the DFO, Bonai Division has intimated to the Director of Mines, Odisha, Bhubaneswar vide his Letter No.10499 dt.18.11.2016 that Ghoraburhani-Sagasahi Iron Ore Block having an area of 139.165 ha. in the village Ghoraburhani, Sagasahi and Kalmang awarded through auction in favour of M/s Essar Steel India Limited was inspected and during field inspection, very old small excavations were found covered with overgrowth of bushes and vegetation, which appears to have been caused by scraping, though it is very difficult to ascertain the genesis at this point of time.

The Director of Mines Odisha Bhubaneswar vide his letter No.10364 dated 21.11.2016 to Principal

Secretary to Government, Department of Steel & Mines Odisha Bhubaneswar and a copy endorsed to Director (S) MoEF & CC, GoI Impact Assessment Division has intimated that it may not be proper to attribute the excavations over the said 0.5 ha area to any type of mining operation in violation of the E (P) Act, 1986 and FC Act, 1980. In this regard it may further be noted that the allotted iron ore block area over 139.165 ha in Ghoraburhani-Sagasahi was not held under any mining lease earlier.

All the above documents mentioned above are placed at page 283-288/DP.

During the Site Inspection, RCCF, Rourkela has also observed that, these excavated pits found in the forest area are old excavations now covered with bushy vegetation. These excavations appear to have been made in the past for unauthorized collection of float ores as evidenced by presence of some left over materials. The old excavation of very low and negligible depth has been delineated in existing land use map in Plate No. IV/DP prepared by the User Agency and countersigned by the DFO, Bonai Divisio

(xvi) Others

Net Present Value (NPV) is applicable to the project. NPV shall be realized from the user agency after Mining lease is granted and in-principle forest clearance is accorded by MoEF& CC, GoI. The User Agency has furnished an undertaking to pay NPV (**Page-192/DP**). The Basic information of Bonai Forest Division, District profile of Sundargarh and State Profile have been furnished at Page No.278-280/DP. The site inspection report of DFO, Bonai and RCCF, Rourkela are appended at page 271-273/DP and 275-277/DP respectively.

(xvii) Geo-referenced digital map of forest land applied for diversion

Ministry of Environment and Forests, GoI in their letter No.F. No.11-9/98 dated 08.07.2011 have issued guidelines that all 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-reference boundary in shape file. In compliance to this guideline, the user agency has submitted the required Digital geo-referenced map duly verified by ORSAC and authenticated by Divisional Forest Officer, Bonai Forest Division which is enclosed as **Plate No-II**. The soft copy in CD form is also attached to the DP. The User Agency has informed vide their Letter No.75 dt.7.12.2017 that the DGPS Map submitted along with the Diversion proposal has been prepared in accordance with the DGPS Map supplied to the User Agency by the Government of Odisha along with the Tender documents during the process of Auction of the above mineral block (**Copy enclosed**). Further, the User Agency has informed vide their Letter No.74 dt.7.12.2017 that the nomenclature used for the PRF pillars in the DGPS Map are not same to that of the original PRF pillars of Mendhamaruni PRF-I (**Copy enclosed**).

(xviii) Compliance of Govt. of India, MoEF& CC circular dt. 3.8.2009/5.7.2013 on processing of the Forest diversion proposal as per provisions of the ST & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

In compliance to Govt. of India, MoEF& CC circulars vide F.No.11-9/1998-FC(Pt.) dt. 3.8.2009 and subsequent guidelines issued thereafter in the matter of ensuring compliance to the provisions of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 while processing a forest diversion proposal, the Collector, Sundargarh has furnished certificate in prescribed format for an area of 126.40 ha ha. of forest land of the allotted iron ore block (page 193(B)/DP) area along with other documents such as Gram Sabha resolutions of village Sagasahi dt. 13.12.2016, Ghodabudani dt. 8.12.2016, village Kalmang dt. 13.12.2016 in Odia language along with their English version, Proceedings dt. 4.6.2018 of the SDLC, Bonai and DLC, Sundargar. dt. 20.6.2018 etc. (page 193(7) to 193(55)/DP).

(xix) The Principal Chief Conservator of Forests, Odisha has recommended the proposal.

In view of the above, state Govt. is requested to examine this proposal for diversion of 120.838 ha. of forest land for iron ore mining under Section 2(ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act 1980 for entire forest land 126.401 ha. including safety zone area of 5.563ha in favour of M/s Essar Steel India Ltd. within their allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha. located in village Sagasahi, Kalmang, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha and convey their order to this department subject to the following stipulation

(i) The User Agency shall pay towards cost of removal of trees enumerated before commencement of work on Stage-II approval/ execution of lease deed and tree felling should be taken up in phases strictly as per requirement under the supervision of the Divisional Forest Officer, Bonai Forest Division.

(ii) The User Agency shall pay towards cost for implementation of Regional Wildlife Management Plan as per revised cost norm. Besides, Site specific Wildlife Conservation Plan pertaining to the project as well as its impact shall also be prepared as per guidelines of CWLW, Odisha and the same be approved by the PCCF(WL)& CWLW, Odisha. The project proponent shall implement the approved components of the Plan within the leasehold area at their cost and also pay towards approved cost of components of the Plan in the project impact area. They shall furnish an undertaking to execute the Plan within the leasehold area at their cost.

(iii) 5.563 ha. of forest land is to be maintained as safety zone and in no circumstances, it shall be used for mining and other allied activities.

(iv) The user agency shall undertake demarcation of the lease area on the ground posting four feet high cement concrete pillars embedded two feet inside the soil with serial number, forward and backward bearings, 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 the Divisional Forest Officer, Keonjhar for his reference before commencement of work on final forest clearance.

(v) Mining operation is subject to having valid lease as per provision of MMDR Act.

(vi) The user agency shall obtain environmental clearance from MoEF& r2C. They may obtain Consent to Establish/Consent to Operate in favour of the project from the SPCB, Odisha before commencement of mining operation.

(vii) NPV and all other compensatory levies are to be realized from the applicant Company pertaining to this diversion proposal after Stage-I approval of MoEF& CC is granted and Mining lease is granted in favour of the Company.

Brief detail of SIR by RO

The site inspection of the said project was carried out by Shri Suman Mahapatra, Conservator of Forests(Central), Regional Office, Bhunan me on 25.10.2018 and 26.10.2018 along with DFO, Bonai Forest Division, staff of Keonjhar Forest Division and the personnel from the user agency.

1. Legal status of the forest land proposed for diversion

A) Under Section 2 (ii) FC Act, 1980	
Legal Status	Forest area (ha)
PRF	73.953 ha
Revenue Forest	3.434
DLC Forest	43.451 ha
Total	120.838 ha
B) Under Section 2 (iii) of FC Act, 1980	
Legal Status	Forest area (ha)
PRF	76.666 ha.
Revenue Forest	3.794 ha.
DLC Forest	45.941 ha.
Total	126.401 ha

2. Item-wise break-up details of the forest land proposed for diversion

The item wise details of forest land proposed for diversion is furnished below

i.	Mining with haul road	88.623 ha.
ii.	Waste dump with environmental safeguard	8.590 ha
iii.	Mining processing	23.215 ha
iv.	Road	0.372 ha
v.	Magazine	0.038 ha
	Sub total	120.838 ha
	Safety zone	5.563 ha
	Total	126.401 ha

3. Whether proposal involves any construction of buildings including residential) or not. If yes, details thereof

As stated in Point No 2.

4. Total cost of the project at present rates

As reported by the State Government, the estimated cost of the project is 998.72 crore.

5. Wildlife

As reported, wild fauna like monkey, jungle cat, rabbit, sloth bear and different types of snake and birds are seen in the applied area. Movement of wild elephants in the area has also been reported by PCCF, Odisha.

Whether forest area proposed for diversion is important from wildlife point of view or not

It has been reported by DFQ, Bonai Forest Division that no rare or endangered or unique species of flora and fauna is found in the applied area. The applied area does not form part of National Park/Wildlife sanctuary/Biosphere reserve/tiger reserve.

6. Vegetation

The applied area comes under Eco value Class-1. The density of vegetation is 0.6.

a) Total number of trees to be felled

As reported by DFO, Bonai Forest Division, as per sample enumeration, 4999 number of trees have been enumerated in 25 numbers of sample plots of 1 ha each within 120.838 ha of forest land applied for diversion.

As reported, 24168 numbers of trees are to be felled over 120.838 ha of forest land.

Effect of removal of trees on the general ecosystem in the area

In general, the ecosystem of an area is disturbed due to any mining activity due to removal of trees. The proposed area is observed to be surrounded by working mines and therefore already disturbed.

b) Important species

The tree species which are commonly noticed in the applied area are *Sal, Teak, Sidha, Sisoo, Bandhan, Char, Dhaura, kurum, Asan, Karanj, Mango, Kendu, Bahada, Jamun, Kusum, Gambhari, Mahul, etc.*

Number of trees of girth below 60cm.

As reported by DFO, Bonai Forest Division, about 15376 number of trees are girth below 60 cm.

Number of trees of girth above 60cm.

As reported by DFO, Bonai Forest Division, about 8792 numbers of trees are girth below 60 cm.

7. Background note on the proposal

As stated, M/s Essar Steel Limited was originally incorporated on 01.06.1976 under the Companies Act, 1956 as Essar Construction Limited. As per resolution passed by the Company under Section 21 of the above Act and approval obtained from Government of India thereon, the name of the Company has been changed to M/s Essar Steel India Limited.

The company has 12 MTPA Beneficiation Plant at Dabuna, Joda in Keonjhar district (Odisha), which is strategically established to leverage the rich iron ore deposits in the region.

M/s Essar Steel Limited has submitted the proposal for diversion of 120.838 ha of forest land for iron ore mining under Section 2 (ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land of 126.401 ha including safety zone area of 5.563 ha in favour of M/s Essar Steel India Ltd. within their allotted Ghoraburhani -Sagasahi Iron Ore Block of 139.165 ha located in village Sagasahi, Kalmong, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha.

8. Compensatory afforestation

State Govt. has informed that 120.838 ha of non-forest land has been identified in village Podadihi of Banspal Tehsil coming under BJP Range of Keonjhar Forest division in Keonjhar district for the purpose of raising compensatory afforestation. The DFO, Keonjhar has prepared a C.A. Scheme for taking up plantation over 120.838 ha in ANR mode @1000 plants per ha with 10 years maintenance along with barbed wire fencing around the plantation and provision of soil and moisture conservation with loose boulder check dam. The C.A. Scheme has been technically approved by APCCF (Nodal), Odisha with a total financial outlay of Rs.2,31,06,300/-.

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a) Whether land for compensatory afforestation is suitable from plantation and management point of view or not

The DFO, Keonjhar has certified that the identified non-forest land is suitable for plantation

b) Whether land for compensatory afforestation is free from encroachment/other encumbrances

The Tehsildar, Banspal has the non-encroachment certificate of the allotted non-forest land.

c) Whether land for compensatory afforestation is important from Religious/Archaeological point of view

Not reported.

d) Land identified for raising compensatory afforestation is in how many patches, whether patches are compact or not

Two compact patches as mentioned above.

e) Map with details

Submitted

f) Total financial outlay

As stated, the CA scheme has been technically approved by Addl. PCCF

(FD & NO, FC Act) with a total financial outlay of Rs.2,31,06,300/-

9. Whether proposal involves violation of Forest (Conservation) Act, 1980 or not. If yes, a detailed report on violation including action taken against the concerned officials

During field inspection an area of earlier mined out area of 0.5 hectare was visited by Conservator of Forests (C), Regional office, Bhubaneswar. This appears to be some old excavations covered with a lot of overgrowth of shrubs and bushes. This does not seem to be a part of any systematic mining operation. Though the mining operation which appears to be manual is quite old, the time of excavation cannot be ascertained. **Hence appropriate penal compensatory afforestation may be imposed.**

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10. whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government or not

As reported by the State Government, there will be no displacement of human habitation due to this project.

11. Reclamation plan

The user agency has submitted a phased reclamation plan to undertake phased reclamation and rehabilitation of forest/non forest land to be affected by mining operation.

Details and financial allocation

As per phase Reclamation Plan, the total expenditure for the proposed afforested area of 129.780 will be Rs.1,55,08,710/- As stated, the back filling of mining pits will be carried out by the user agency during the mining operation.

12. Details on catchment and command area, under the project Catchment area treatment plan to prevent siltation of reservoir

Not applicable.

13. Cost benefit ratio

As reported, the cost benefit ratio of the mining project is 1.23.

14. Recommendations of the Principal Chief Conservator, of Forests/State Government

Recommended by the Principal Chief Conservator of Forests/State Government.

15. Recommendations of Additional Principal Chief Conservator of Forests (Central) along with detailed reasons

The instant proposal is for diversion of 120.838 ha of forest land for iron ore mining under section 2 (ii) and for according permission under section. 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land of 126.401 ha including Safety Zone area of 5.563 ha in favour of M/s Essar Steel India Ltd. The Site Inspection Report of the CF (C) is enclosed for consideration of the Ministry along with the following additional observations of the APCCF (C), Regional office, Bhubneshwar

(i) The proposed area is for a fresh mining which is surrounded by many working mines and a few mining leases in the pipeline.

(ii) The forest area involved is mostly PRF having MDF cover. Though the density reported by DSS is 0.6, but the tree counting report and site inspection report shows the forests, more the proposed site exhibit indications of ecological deterioration with more than 50% of the total trees unsound along with more than 60% unsound trees in the younger girth classes i.e. below 60 cm girth which may be due to mining disturbances going on all around. The diversion of this patch may not have much impact on the general ecosystem of the area.

Considering the situation of the proposed site and the fresh mining proposed in an already disturbed zone and analysing all the documents, reports submitted, this proposal is recommended for consideration for the grant of approval.

16. Conservator of Forests (Central) shall give detailed comments on locating the project on the non-forest land whether there are any alternative routes/alignment for

Mining is a site specific activity. Therefore, alternative routes or alignment is not possible. Besides, the DFO, Bonai has reported that the requirement of forest land as proposed by the user agency is unavoidable and barest minimum for the project.

17. Utility of the project

As reported by. The State Government, the project may generate employment opportunity for the local people.

Numbers of Scheduled Caste /Scheduled Tribes to be benefited by thee project

The user agency has not reported the exact number of SC/STs to be benefitted by the project. However, since Sundergarh is a tribal district, the local tribals are likely to be benefitted by the project.

18.

a) **Whether land being diverted has any socio-cultural/ religious value** No

b) **Whether any sacred grove or very old growth trees/forests exist in the areas proposed for diversion**

Not reported.

c) **Whether the land under diversion forms part of any unique eco-system**

Not reported.

19. Situation with respect to any Protected Area

As informed by DFO, Bonai the nearest protected area, i.e. Debrigarh Wildlife Sanctuary is about 100 km away from the project.

20. Any other information relating to the project

a. The Mendhamaruni PRF is located on the hills and hill slopes. The PRF portion of the project site appears to be dense, The DLC and Revenue Forests are on plain land which appear to be less dense compared to be the PRF portion. The growth of sal and the associates in the PRF is very good. The user agency argues that the exclusive mining operation shall not take place in the dense portion, rather it will set up ore beneficiation plant, tailing pond and roads in the said area. However even for such activities, a number of trees have to be felled.

b. The user agency has meanwhile submitted the Proposed land use plan, Reclamation Plan, Ghoraburhani-Sagasahi Iron Ore Block 5th year Development Plan of the Mining Plan and Surface run off Management Plan (which are attached as **Annexure-I**). As per the mining plan, mining will be commenced at two pits, Pit 1 and Pit 2. Pit 1 is mainly DLC forest area and Pit 2 is PRF area. The excavation at Pit 2 i.e. PRF area will be at moderate rate for the first five years. By the end of five years, Pit 1 is expected to be exhausted, but Pit 2 will continue beyond 5th year. Later on another pit will be opened at the eastern part of Pit 2 in DLC area. In the first five years, about 70% of the production will be achieved from Pit I and the rest from Pit 2.

c. As informed by the user agency, exclusive mining activity will be carried out in about 65% of the total lease hold area and the majority of it will be in the forest land. In the PRF area, half of the mining activities are proposed to be carried out. Besides mining, mineral processing such as screening, crushing, construction of beneficiation plant, etc. shall also be carried out in about half of the remaining PRP area.

d. The proposed area for diversion is adjacent to 363.436 ha of area proposed for diversion, under Section 2 (iii) of FC, Act for the purpose of mining by M/S Pradhan Associates.

e. DSS report on the project area over 139.165 ha (ML area) is enclosed as **Annexure-II**. As per the report, the forest type is 3C/2e (iii) Moist Peninsular Valley Sal forest. The forest cover includes about 90% MDF and the rest open forest and non-forest.

f. The proposed site is surrounded by many working mines such as Sanindpur Iron Ore & Bauxite Mines of M/s Rungta, M/s Kolmong Manganese Mines of M/s Rungta, Nuagaon Iron Mines of M/s KJS Ahluwallia, and it was observed that the surrounding forests have been disturbed due to mining activities. The site inspection of the said project was carried out by Shri Suman Mahapatra, Conservator of Forests(Central), Regional Office, Bhunan me on 25.10.2018 and 26.10.2018 along with DFO, Bonai Forest Division, staff of Keonjhar Forest Division and the personnel from the user agency.

1. Legal status of the forest land proposed for diversion

A) Under Section 2 (ii) FC Act, 1980	
Legal Status	Forest area (ha)
PRF	73.953 ha
Revenue Forest	3.434
DLC Forest	43.451 ha
Total	120.838 ha
B) Under Section 2 (iii) of FC Act, 1980	
Legal Status	Forest area (ha)
PRF	76.666 ha.
Revenue Forest	3.794 ha.
DLC Forest	45.941 ha.
Total	126.401 ha

2. Item-wise break-up details of the forest land proposed for diversion

The item wise details of forest land proposed for diversion is furnished below

i.	Mining with haul road	88.623 ha.
ii.	Waste dump with environmental safeguard	8.590 ha
iii.	Mining processing	23.215 ha
iv.	Road	0.372 ha
v.	Magazine	0.038 ha
	Sub total	120.838 ha
	Safety zone	5.563 ha
	Total	126.401 ha

3. Whether proposal involves any construction of buildings including residential) or not. If yes, details thereof

As stated in Point No 2.

4. Total cost of the project at present rates

As reported by the State Government, the estimated cost of the project is 998.72 crore.

5. Wildlife

As reported, wild fauna like monkey, jungle cat, rabbit, sloth bear and different types of snake and birds are seen in the applied area. Movement of wild elephants in the area has also been reported by PCCF, Odisha.

Whether forest area proposed for diversion is important from wildlife point of view or not

It has been reported by DFO, Bonai Forest Division that no rare or endangered or unique species of flora and fauna is found in the applied area. The applied area does not form part of National Park/Wildlife sanctuary/Biosphere reserve/tiger reserve.

6. Vegetation

The applied area comes under Eco value Class-1. The density of vegetation is 0.6.

a) Total number of trees to be felled

As reported by DFO, Bonai Forest Division, as per sample enumeration, 4999 number of trees have been enumerated in 25 numbers of sample plots of 1 ha each within 120.838 ha of forest land applied for diversion.

As reported, 24168 numbers of trees are to be felled over 120.838 ha of forest land.

Effect of removal of trees on the general ecosystem in the area

In general, the ecosystem of an area is disturbed due to any mining activity due to removal of trees. The proposed area is observed to be surrounded by

working mines and therefore already disturbed.

b) Important species

The tree species which are commonly noticed in the applied area are *Sal, Teak, Sidha, Sisoo, Bandhan, Char, Dhaura, kurum, Asan, Karanj, Mango, Kendu, Bahada, Jamun, Kusum, Gambhari, Mahul, etc.*

Number of trees of girth below 60cm.

As reported by DFO, Bonai Forest Division, about 15376 number of trees are girth below 60 cm.

Number of trees of girth above 60cm.

As reported by DFO, Bonai Forest Division, about 8792 numbers of trees are girth below 60 cm.

7. Background note on the proposal

As stated, M/s Essar Steel Limited was originally incorporated on 01.06.1976 under the Companies Act, 1956 as Essar Construction Limited. As per resolution passed by the Company under Section 21 of the above Act and approval obtained from Government of India thereon, the name of the Company has been changed to M/s Essar Steel India Limited.

The company has 12 MTPA Beneficiation Plant at Dabuna, Joda in Keonjhar district (Odisha), which is strategically established to leverage the rich iron ore deposits in the region.

M/s Essar Steel Limited has submitted the proposal for diversion of 120.838 ha of forest land for iron ore mining under Section 2 (ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land of 126.401 ha including safety zone area of 5.563 ha in favour of M/s Essar Steel India Ltd. within their allotted Ghoraburhani -Sagasahi Iron Ore Block of 139.165 ha located in village Sagasahi, Kalmong, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha.

8. Compensatory afforestation

State Govt. has informed that 120.838 ha of non-forest land has been identified in village Podadihi of Banspal Tehsil coming under BJP Range of Keonjhar Forest division in Keonjhar district for the purpose of raising compensatory afforestation. The DFO, Keonjhar has prepared a C.A. Scheme for taking up plantation over 120.838 ha in ANR mode @1000 plants per ha with 10 years maintenance along with barbed wire fencing around the plantation and provision of soil and moisture conservation with loose boulder check dam. The C.A. Scheme has been technically approved by APCCF (Nodal), Odisha with a total financial outlay of Rs.2,31,06,300/-.

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Comments of Additional Information By :**i. TO Remarks**

The instant proposal has been analyzed by the DSS Cell of FC Division and their detailed report is placed at **F/X**. The major observation in the report are as follows

I. In case of Forest Diversion

- Proposed forest area for diversion falls under Sundargarh district of Odisha State.
- Total Calculated area of Shape file/ KML file of Forest land proposed for diversion is found 126.36 ha and total mining lease is found 139.16 ha.
- Proposed area for Diversion falls under Not-Inviolate zone as per DSS DR-1. However, it is in **inviolate** Zone based on Decision Rule No. 2 because as per 50% Grid Rule of DSS DR-2, only 1 Grid of 1X1 Km size is falling on Mining lease area of that, 1 Grid is having the average score above 70. Thus, the instant project is **Inviolate** as per DSS DR-2.
- As per DSS Records, there is no wildlife sanctuary, Tiger reserve/ Tiger corridor/ National Park and conservation zone is located within 10 Km distance from the instant mining project.
- Forest Cover** Out of total 139.16 ha (**Approx. 140 Ha**) mining lease area, 123 ha of land is characterized with Moderately Dense Forest, 10 ha. of land as Open forest and 7 ha. of land as Non Forest in terms of forest classes (as per the ISFR 2015) based on the interpretation of satellite data period 2013-2014.

II. In Case of Compensatory Afforestation Land

- Compensatory afforestation has been proposed over Non-forest/ Revenue land.
- CA sites has been proposed in two patches located in the Keonjhar district of Odisha State.
- Total area of proposed Compensatory afforestation land is found 120.89 ha. (Software calculated)
- Forest Cover** Out of total 120.89 ha area proposed for CA, 118 ha. area of land is characterized with Open forest and 2 ha. of land as Non Forest in terms of forest classes (as per the ISFR 2015) based on the interpretation of satellite data period 2013-2014.

The facts related to the above proposal may be placed before FAC in its next meeting to be held on 15th January, 2018 for their examination and appropriate recommendation.

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