

1. Government of Odisha vide their letter dated 5th May 2014 submitted a proposal to obtain prior approval of the Central Government, in terms of the Section-2 of the Forest (Conservation) Act, 1980 for diversion of 1,038.187 hectares of Revenue and DLC forest land including 4.051 hectares under safety zone within the lease hold area of 1914.063 hectares allocated for opencast coal project (OCP) by M/s. MNH Shakti Ltd. (Talabira II and III OCP) in Jharsuguda and Sambalpur Forest Division within the jurisdiction of Jharsuguda district and Sambalpur district of Odisha.
2. Details indicated in the proposal submitted by the Government of Odisha are as below:

FACT SHEET

1.	Name of the Proposal	Diversion of 1,038.187 hectares of Revenue and DLC forest land including 4.051 hectares under safety zone within the lease hold area of 1914.063 hectares allocated for opencast coal project (OCP) by M/s. MNH Shakti Ltd. (Talabira II and III OCP) in Jharsuguda and Sambalpur Forest Division within the jurisdiction of Jharsuguda district and Sambalpur district of Odisha.
2	Location:	
	State	Odisha.
	District	Jharsuguda and Sambalpur
3.	Particular of Forests	
i	Name of Forest Division	Jharsuguda and Sambalpur Forest Divisions
ii	Area of Forest land for Diversion	845.561 hectares (Jharsuguda) + 192.626 hectares (Sambalpur) = 1038.187 hectares
iii	Legal Status of Forest land	Jharsuguda Forest Division Revenue Forests: 385.379 hectares DLC forests: 460.182 hectares Sambalpur Forest Division Revenue Forests: 192.626 hectares Total: 1,038.187 hectares

iv	Density of Vegetation	0.30
v	Species-wise and diameter class wise enumeration of trees	1,10,110 trees of different species are available in Jharsuguda Forest Division. 20,611 trees of different species are available in Sambalpur Forest Division.
4.	Vulnerability of area to erosion	Not susceptible to erosion as terrain is fairly flat in Jharsuguda and Sambalpur Divisions.
5	Approximate distance of proposed site for diversion from boundary of forest	Adjoining the Talabira OCP, the following forests are available: Malda DPF: 3 Kms.
6.	Whether forms part of National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor etc. (if so, the details of the area the comments of the Chief Wildlife Warden to be annexed)	Does not form any part of corridor of elephants, wildlife sanctuary or national park, nor any biosphere reserve or tiger reserve in Sambalpur and Jharsuguda Forest Division.
7.	Whether any rare/ endangered/ unique species of flora and fauna found in the area if so, details thereof	No rare/ endangered/ unique species of flora and fauna found in the area.
8.	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	No. The area is not significant from archaeological point of view.
9.	Whether the requirement of forest land as proposed by the User Agency in col.2 of	Yes. The area is coal bearing and therefore, is unavoidable.

	Part-I is unavoidable and bare minimum for the project. If no, recommended area item-wise with details of alternatives examined	
10.	Whether any work in violation of the Act has been carried out (Yes/ No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still under progress	No violation reported.
11.	Details of Compensatory Afforestation Scheme:	<p>Ministry of Coal, Govt. of India vide their letter no 13016/69/2004-CA-I (pt) CA-II dated 14th June 2013 have certified that M/s MNH SHAKTI LIMITED "is a Government Company in terms of Section 617 of the Companies Act 1956 and is a Central PSU/Central Govt. Undertaking, also subsidiary Company of Mahanadi Coalfields Ltd."</p> <p>Therefore as per para 3.2(vii) of guidelines under Forest Conservation Act, 1980, degraded forest land twice in extent i.e. 1692.0 ha has been identified in Bikramkhol PRF (1558.0 ha) and Amkhaman-Sagarpali RF (134.0 ha) under Lakhanpur Tahasil in Jharsuguda district in lieu of 845.561ha. of forest land proposed for diversion for this coal mining project in Jharsuguda district. The Divisional Forest Officer, Jharsuguda has furnished land suitability and non encroachment certificate pertaining to identified degraded forest</p>

		<p>land for raising compensatory afforestation. The relevant field note is at page 365-367/DP. The Divisional Forest Officer, Jharsuguda has prepared a site specific compensatory afforestation scheme in ANR plantation model for identified degraded forest land under his jurisdiction with a financial outlay. of Rs.10,16,55,850/- including the cost of maintenance of Compensatory afforestation of 10 years as per Government of India, MoEF Guidelines F.No. 11-168/2009-FC (Pt) dt. 14.2.2012 as per latest wage rate of Rs. 150/- per day. Besides plantation, the scheme has provisions for trench fencing and soil conservation measures. The species selected for plantation under the scheme are Teak, Bahada, Sisoo, Neem, Gambhar, Amla, Bel, Karanja etc. This scheme has got technical approval of Addl. Principal Chief Conservator of Forests (Forest Diversion)&Nodal Officer, FC Act. The User Agency has furnished an undertaking to bear the cost of the Compensatory Afforestation Scheme which is enclosed.</p> <p>Similarly, as para 3.2(vii) of guidelines under Forest Conservation Act, 1980, degraded forest land twice in extent i.e. 400 ha ha has been identified in Jhargati Garpati RF under Sambalpur district as against requirement of 386ha, in lieu of 192.628ha. of forest land proposed for diversion for this coal mining project in Sambalpur district. The Divisional Forest Officer, Sambalpur has furnished land suitability and non-encroachment certificate pertaining to identified degraded forest land for</p>
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		raising compensatory afforestation. The Divisional Forest Officer, Sambalpur has prepared a site specific compensatory afforestation scheme where he has proposed for undertaking silvicultural treatment of the degraded forest land for improving the crop over an area of 336ha. Besides, 50 ha. of identified degraded forest land shall be covered under Block Plantation Model. Total financial outlay for this CA scheme is estimated at Rs. 2,29,48,855 including the cost of maintenance as per latest wage rate of Rs. 150/- per day. The scheme has been technically approved by APCCF (Nodal). Besides plantation, the scheme has provisions for trench fencing and protection measures. The User Agency has furnished an undertaking to bear the cost of the Compensatory Afforestation Scheme which is enclosed
12.	Recommendation	
	DFO	Recommended
	Regional CCF	Recommended
	PCCF	Recommended
	State Govt.	Recommended

3. Government of Odisha in their said letter dated 5th May 2014 submitted following additional information:

- (i) Ministry of Coal, Govt. of India, New Delhi vide No 13016/69/2004-CA-I dated 10th November 2005 have allocated Talabira II and Talabira III Coal Blocks in the MCL area, over 383.893 ha and 1530.170 ha respectively (total 1914.063 ha) jointly to Mahanadi Coalfields Ltd (MCL), M/s Neyveli Lignite Corporation (NLC) and M/s Hindalco Industries Ltd (HIL) for mining of Coal as one mine to ensure conservation of coal and deployment of optimum technology.
- (ii) It has been reported by the Pr. CCF, Odisha that as per the condition no (iii) of the allocation letter of Ministry of Coal, GoI, a Joint Venture Company (JVC) namely

M/s MNH Shakti Ltd., has been formed between Mahanadi Coalfields Ltd. on one part and M/s Neyveli Lignite Corporation Ltd., and M/s Hindalco Industries Ltd., on the other. The JVC in the name and style of MIs MNH SHAKTI LIMITED, has been incorporated under Companies Act 1956" (No.1 of 1956) on 16.7.2008 with corporate identity Number: 10100OR2008G01010171.

- (iii) Further, as per the condition (iv) of the allocation order of GoI, MCL would have an equity holding of 70% whereas the balance 30% equity shall be equally held by M/s Neyveli Lignite Corporation Ltd., and M/s. Hindalco Industries Ltd. Le., 15% each in the JVC. 70% of annual coal production shall be handed over to MCL by the Joint Venture Company to dispose the same as it chooses. The balance 30% of the annual production shall be handed over to M/s Neyveli Lignite Corporation Ltd., and M/s Hindalco Industries Ltd. equally *i.e.*, 15% each for captive consumption in their end use Plants in Odisha.
- (iv) The area under Talabira II and Talabira III Coal Blocks has been acquired under Coal Bearing Area (Acquisition & Development) Act, 1957. In the Gazette Notification of GoI Ministry of Coal, bearing SO No.1108, dt.26.03.2005, 1530.170 ha has been notified for acquisition located in Rampur, Dumermunda, MaIda and Patrapali villages under Jharsuguda Tahasil in Jharsuguda District. Similarly, vide S.O No.2414, dt.28.08.2009 of Ministry of Coal, Government of India, an area spread over 383.893 ha has been notified for acquisition consisting of Talabira and Khinda villages under Rengali Tahasil in Sambalpur district. The total area of these two blocks is 1914.063 ha. consisting of 1038.187 ha of Revenue and DLC forest land and 875.876 ha is of non-forest land. Out of 1038.187 ha, 845.561 ha of forest land is in Jharsuguda Forest Division and 192.626 ha of forest land in Sambalpur Forest Division. While 845.561 ha. of forest land in Jharsuguda district is comprised of 385.379ha. of Revenue forest and 460. 182ha. of DLC land, 194.626ha. of forest land in Sambalpur division is comprised of Revenue Forest only. The village wise abstract of land required for the Talabira III project in Jharsuguda district is enclosed. Detailed village land schedule of the Talabira III including forest land in Jharsuguda district is also enclosed.
- (v) The coal block area is located in Survey of India Topo Sheet No.64 O/13 and O/14. The lease area is bounded by latitude 21 °44'37" to 21 °47'29" North and longitude 83°56'45" to 83°59'00" East.
- (vi) The JVC *i.e.* M/s MNH Shakti Ltd. have approached the Water Resources Department, Government of Odisha for allocation of water to meet the potable and industrial demand of Talabira OCP vide their letter dt. 11.3.2013. Similarly, the JVC

have taken steps for receiving power from the GRIDCO for this coal project. The Ministry of Coal, Government of India vide their letter No. 34012/(4)/2011.CPAM dt. 11.1.2012 have approved the revised Mining Plan for this coal mining project. There is an estimated 553.98 Million tones of coal reserve. Considering annual production of 20 Million tonnes, the life of mines would be around 34 years including 2 years for construction period.

- (vii) The proposed lease area does not fall within any National park/ Wildlife sanctuary/ Biosphere Reserve/ Elephant Corridor/Tiger Reserve. No archaeological monument or protected defence establishment is located inside the applied area. No rare, endangered and unique species of flora and fauna are found in the area. The applied area is about 3KM from Malda DPF and 18 Km from Rajpur Reserved Forests. The total cost of the project is Rs.447.80 Crores. This project will generate employment opportunity for 427 persons daily and around 10,000 persons will be benefitted directly and indirectly in course of execution of the project.
- (viii) The project involves 1894 no. of Project displaced families including 443 no. of SC families and 575 no. of ST families. R&R Plan prepared concerning this project is enclosed.
- (ix) Out of total area of 1914.063 ha, 845.561 ha of forest land is in Jharsuguda Forest Division and 192.626 ha of forest land in Sambalpur Forest Division. While 845.561ha. of forest land in Jharsuguda division is comprised of 385.379 ha. of Revenue forest and 460.182ha. of DLC land, 192.626ha. of forest land in Sambalpur division is comprised of Revenue Forest only. In all 1038.187ha. of forests land is involved in these two coal blocks that also includes 4.051ha. of forest land in the safety zone within total safety zone of 19.841ha. The purpose wise break up of total land i.e. forest land, non-forest land required for the project is as follows:

Sl. No.	Activities in the mining area	Forest land (in ha)			Non forest land (in ha)	Grand Total (Area in Ha)
		Revenue Forest land	DLC Forest land	Total forest land		
1.	Mine Excavation	382.768	290.442	673.210	299.310	972.520
	SUBTOTAL	382.768	290.442	673.210	299.310	972.520
2	Inside Blasting Danger					
A	Infrastructure (road, mine office, conveyor)	8.236	4.634	12.870	17.860	30.73

	etc.)					
B	External dump	3.760	1.800	5.560	137.160	142.720
C	Embankment			0.000	6.280	6.280
D	Area to be developed as green belt	144.864	64.119	208.983	107.008	315.991
	SUBTOTAL	156.860	70.553	227.413	268.308	495.721
3	Outside Blasting Danger Zone					
A	Infrastructure (road, conveyor, railway, & silo, washery, office, workshop & other utilities etc.)	13.392	1.218	14.610	226.620	241.230
B	Embankment	1.020		1.020	27.890	28.910
C	Other area to be developed as green belt	22.114	95.769	117.883	37.958	155.841
	Other area to be developed as green belt	22.114	95.769	117.883	37.958	155.841
	SUBTOTAL	36.526	96.987	133.513	292.468	425.981
D	7.5m Safety zone inside lease boundary	1.851	2.200	4.051	15.790	19.841
	SUBTOTAL	1.851	2.200	4.051	15.790	19.811
	Grand total	578.005	460.182	1038.187	875.876	1914.063

- (x) Plant species which are commonly noticed in the proposed area are *Sal (Shorea robusta)*, *Mahul (Madhuca indica)*, *Asan (Terminalia tomentosa)*, *Dhaura (Anogeissus latifolia)*, *Jamun (Syzygium cumini)*, *Mango (Mangifera indica)*, *Char (Buchanania lanzan)*, etc. The faunal species noticed in the area are Snake, Squirrel, Jackal, Mongoose etc. No rare or endangered flora or fauna is noticed in the area as per the inspection report furnished by Divisional Forest officers. However as reported by Pro CCF, Odisha, area is highly prone to Elephant movements and a lot of crop raids and

elephant depredation is observed in that area.

- (xi) Though the area does not form part of any National Park/Wildlife Sanctuary/Elephant Corridor, due care is to be taken for conservation of Wildlife available in the area. For this purpose, the User Agency is required to pay @ Rs,43,000/- per hectare of leasehold area as per revised norm towards their contribution for implementing Wildlife Management Plan in the applied area if the said area is rich in wildlife. Besides this, the Site Specific Conservation Plan for this project is to be implemented in the leasehold as well as surrounding area at project cost. The user agency has also furnished an undertaking to bear the cost for implementing the Wildlife Conservation Plan.
- (xii) The total forest land involved in the project is 1038.187ha. Since the area proposed for diversion exceeds 10.0 ha., according to para -2.2 (ii) the guideline to Forest (Conservation) Act, 1980, sample enumeration over 43 sample plots of 2.0 ha. each located in the applied forest land has been carried out in forest area of the block in Jharsuguda division. As such in all, 11199 no. of trees of girth 30 cm and above have been enumerated over 86ha. of forest land. By extrapolating the figures over the entire forest land of 845.561 ha., 1,10,110 no. of trees have been estimated in the forest proposed for diversion. Similarly, sample enumeration over 40 sample plots of 1.0 ha. each located in the applied forest land has been carried out in forest area of the block in Sambalpur division. By extrapolating the figures over the entire forest land 192.628 ha., 20,611 no. of trees have been estimated in the forest land proposed for diversion.
- (xiii) As indicated by the Divisional Forest Officer, Jharsuguda division at page 287-289/DP, the total benefit of this proposal comes to RS.1849.38 crores. The loss on forests including environmental loss, N.P.V cost and other mandatory payments comes to RS.208.69 crores. Hence, the cost benefit ratio comes to 1:9. Details of consolidated C: B Analysis for Jharsuguda and Sambalpur division has been countersigned by the DFO, Jharsuguda.
- (xiv) An area of 19.841 ha. comprising of 4.051 ha. forest land (1.851ha. Revenue Forest + 2.2ha DLC land) and 15.79 ha. non-forest land has been earmarked to be maintained

as Safety Zone of 7.5mts width all around the leasehold area. The User Agency has furnished an undertaking to bear the cost of maintenance of Safety Zone and cost of afforestation over 1.5 times Safety Zone area in degraded forest land elsewhere(Page-314/DP).

- (xv) Expert Committee (Thermal and Coal Mining), Govt. of India in its meeting held on 9th May 2007 have prescribed the Terms of reference (TOR) for preparation of EIA and EMP study for the project, which has been communicated to the user agency vide letter No .11015/215/2007IA.II (M), dt,23.05.2007 of MoEF, GOI.
- (xvi) The phased reclamation plan and afforestation scheme has been furnished at Page-290303/DP. As indicated in the Plan, major part of the quarry will be back filled with overburden. The backfilling will be carried out in a phased manner. Plantation on internal dumping will start from 8th year of operation till 34th year and on external dump from 5th year to 16th year of operation. The user agency has furnished an undertaking for taking up phased reclamation activities
- (xvii) The project involves 1894 no. of Project displaced families including 443 no. of SC families and 575 no. of ST families. R&R Plan prepared concerning this project is enclosed. The R&R Plan is required to be implemented with due approval of the RPDAC/State Government before commencement of project activities on final forest clearance.
- (xviii) The Ministry of Coal, Government of India vide their letter No. 34012/(4)/2011.CPAM dt. 11.1.2012 have approved the revised Mining Plan and progressive mines closure plan for this coal mining project. There is an estimated 553.98 Million tones of coal reserve. Considering annual production of 20Million tonnes, the life of mines would be around 34 years. including 2 years for construction period.
- (xix) As indicated III Part-III of the application form by the Divisional Forest Officer, Sambalpur and Jharsuguda forest division, in their site inspection reports and Site inspection report of RCCF, Sambalpur, no violation of Forests Conservation Act, 1980 has been committed so far in this project.
- (xx) The user agency is required to deposit the cost of NPV for entire forest land of

1038.187ha. in this project. The User Agency has also furnished an undertaking to pay the NPV at revised rate. The Basic Information in respect of Jharsuguda Forest Division, Jharsuguda district, Sambalpur Forest Division, Sambalpur district and the State of Odisha duly signed by the Additional Principal Chief Conservator of Forests (Forest Diversion)& Nodal Officer, FC Act are enclosed. The Site Inspection report of the Divisional Forest Officer, Jharsuguda, Divisional Forest Officer, Sambalpur and the Regional Chief Conservator of Forests, Sambalpur are enclosed.

(xxi) As per Govt. of India, MoEF circular vide F.No. 11-9/1998-FC(Pt.) dt. 3.8.2009 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 Collectors of Sambalpur and Jharsuguda districts have furnished the required compliance in the matter as indicated below.

(xxii) In the instant forest diversion proposal that involves 1038. 187ha. of forest land, the Collector, Sambalpur has furnished the following certificates/documents pertaining to the 192.626ha of forest land proposed for diversion for coal mining in Talabira village under Rengali tehsil within Talabira coal block in Sambalpur district:

- (a) Certificates duly signed by the Collector, Sambalpur for 192-626ha.
- (b) Resolution passed by the Palli sabhas of Talabira village in the meeting held on 12.7.2012 duly signed by the Members present in regional language
- (c) English version of the resolution of Palli sabha submitted by the Collector, Sambalpur

(xxiii) Similarly, the Collector, Jharsuguda has furnished the following certificates/documents pertaining to the 845.56ha. of forest land for coal mining in Rampur, Malda, Dumermunda and Patrapali villages of Jharsuguda tehsil of Jharsuguda district within Talabira coal block of Jharsuguda district

- (a) Certificates duly signed by the Collector, Jharsuguda for 845.56ha.
- (b) Resolution passed by the Palli sabhas of Rampur village in the meeting held on 2.12.2011, Malda village in the meeting held on 2.12.2011, Patrapali village

in the meeting held on 6.6.2012, Dumermunda village in the meeting held on 2.12.2011 duly signed by the Members present in regional language

- (c) English version of the resolutions of Palli sabha submitted by the Collector, Jharsuguda

(xxiv) Ministry of Environment and Forests, Government of India in their letter F. No. 11-9/98 dated 8.7.2011 have issued guidelines that all applications seeking prior approval of the Central Government under Forest (Conservation) Act, 1980 for diversion of forest land for non-forest purpose must be accompanied with Geo-referenced boundary in shape file pertaining to forest land proposed for diversion. These documents/Maps are required to ensure accurate delineation of the forest area to be diverted. The user agency in compliance to this order, has submitted the required digital map duly authenticated by ORSAC and Divisional Forest officer, Jharsuguda Forest Division which is enclosed DP along with the shape file. The soft copy of geo referenced map in CD form is also enclosed for reference.

(xxv) It is further stated the project activities requires more than 500 ha. of forest land. Therefore the user agency is required to carry out the following activities as per requirement of Government of India, MoEF guidelines in their circular F.No. 11-9/1998-FC dtd 4.1.2011 of GoI, MoEF:

- (a) To establish & operate a Vocational Training Institute having capacity to impart training in at least 5 disciplines to be decided by the State Govt. concerned in consultation with the User agency for the benefit of the eligible unemployed youth in the Project after village.
- (b) To set up an independent Social Welfare Department Division and follow the subsequent conditions of the Project affected in such a way as to understand their socio-economic conditions before and after the project and take such corrective measures as are necessary to restore them to their original or better then original condition

4. Government of Odisha in their said letter dated 5th May 2014 finally requested that Government of India, Ministry of Environment, may kindly examine this proposal for

diversion of 1038.187 ha of Revenue and DLC forest land including 4.051 ha under safety zone within the leasehold area of 1914.063 ha of allocated for Open Cast Coal Project (OCP) by M/s MNH Shakti Ltd. (Talabira II and III OCP) in Jharsuguda and Sambalpur Forest Divisions within the jurisdiction of Jharsuguda district and Sambalpur district of Odisha and convey their approval under Section-2 of Forest (Conservation) Act,1980 in favour of the User Agency to this department subject to the following stipulation:

- (a) The User Agency shall pay the proportionate cost of implementation of Regional Wildlife Management Plan at revised cost.
- (b) The forest land earmarked in the safety zone is to be maintained strictly and in no circumstances, it shall be used for mining and other allied activities.
- (c) The user agency shall pay towards the cost of site specific conservation plan approved by the CWL W, Odisha for its implementation in leasehold as well as surrounding area.
- (d) The user agency shall undertake demarcation of the lease area on the ground by 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, Jharsuguda and Sambalpur Forest Divisions for their reference before commencement of work on final forest clearance.
- (e) Felling of trees in the applied area shall be taken up in phased manner strictly as per requirement prescribed in the approved Mining with prior permission of the Divisional Forest Officer, Sambalpur and Jharsuguda.
- (f) User agency shall pay the royalty of numbers of enumerated trees before commencement of work on final forest clearance.
- (g) The user agency shall obtain environmental clearance of MoEF and Consent to establish/Operate from the SPCB, Odisha for the project.
- (h) Duly approved R&R Plan shall be executed at project cost before the Mines is operated on having final forest clearance.
- (i) The user agency shall provide the DGPSIETS map of Coal Block area as per provisions of the Steel & Mines Department Officer order No. 4132/SM dt. 8.5.2013.

- (j) The user agency shall establish & operate a Vocational Training Institute having capacity to impart training in at least 5 disciplines to be decided by the State Govt. for the benefit of the eligible unemployed youth in the Project affected village.
 - (k) The user agency shall set up an independent Social Welfare Department Division and follow the subsequent conditions of the Project affected in such a way as to understand their socio-economic conditions before and after the project and take such corrective measures as are necessary to restore them to their original or better than original condition.
 - (l) Memorandum of Association, Articles of Association of the Joint Venture Company shall be furnished.
 - (m) Applicant Company shall furnish the copy of Mining lease application filed with the State Government.
 - (n) Detailed R&R Plan shall be furnished by the user agency.
 - (o) Copy of Public hearing for environmental clearance for the project, Consent to Establish granted by SPCB, Odisha shall be furnished.
5. The forest land proposed to be diverted has been inspected by the Regional Office (Eastern Zone), Bhubaneswar. Additional information provided in the site inspection report received from the Regional Office (Eastern Zone), Bhubaneswar vide their letter dated 25th July 2014 are as below:

- (i) As reported by Divisional Forest Officer, Jharsuguda Forest Division, the legal status of the forest land is as follows:

Name of the Division	Status of forest land	Area in ha.
Jharsuguda	Rev. Forests	385.379
	DLC forests	460.182
Sambalpur	Rev. Forests	192.626
Total		1038.187

- (ii) As reported by the State Govt., the total cost of the project is Rs. 447.80 Crores.
- (iii) As reported by the State Government, the faunal species noticed in the area are Snake, Squirrel, Jackal, Mongoose etc.

- (iv) Though the area does not form part of any National Park/Wildlife Sanctuary/Elephant Corridor, due care is to be taken for conservation of Wildlife available in the area. For this purpose, the User Agency is required to pay @ Rs. 43,000/- per hectare of leasehold area as per revised norm towards their contribution for implementing Wildlife Management Plan in the applied area if the said area is rich in wildlife. Besides this, the Site Specific Conservation Plan for this project is to be implemented in the leasehold as well as surrounding area at project cost.
- (v) As reported by DFO, Jharsuguda Forest Division, the density of vegetation is 0.3.
- (vi) The total forest land involved in the project is 1038.187 ha. Since the area proposed for diversion exceeds 10.0 ha., according to para -2.2 (ii) of the guideline to Forest (Conservation) Act, 1980, sample enumeration over 43 sample plots of 2.0 ha each located in the applied forest land has been carried out in forest area of the block in Jharsuguda division. As such in all, 11199 no. of trees of girth 30 cm and above have been enumerated over 86 ha of forest land. By extrapolating the figures over the entire forest land of 845.561 ha, 1,10,110 no. of trees have been estimated in the forest proposed for diversion. Similarly, sample enumeration over 40 sample plots of 1.0 ha each located in the applied forest land has been carried out in forest area of the block in Sambalpur division. By extrapolating the figures over the entire forest land of 192.628 ha, 20,611 no. of trees have been estimated in the forest land proposed for diversion.
- (vii) As there are large numbers of trees to be felled, it will naturally adversely affect the general eco-system in the area.
- (viii) As reported by the State Government, plant species which are commonly noticed in the proposed area are *Sal (Shorea robusta)*, *Mahul (Madhuca indica)*, *Asan (Terminalia tomentosa)*, *Dhaura (Anogeissus latifolia)*, *Jamun (Syzygium cumini)* *Mango (Mangifera indica)*, *Char (Buchanania lanzan)* etc.
- (ix) Number of trees of girth below 60 cm are as below:
- (a) Sambalpur division: 6742
- (b) Jharsuguda division: 76248

- (x) Number of trees of girth above 60 cm are as below:
- (a) Sambalpur division: 13869
 - (b) Jharsuguda division: 33862
- (xi) As reported by the State Government, Ministry of Coal, Govt. of India, New Delhi vide No. 13016/69/2004-CA-1, dated 10th November 2005 have allocated Talabira-II and Talabira-III Coal Blocks in the MCL area, over 383.893 ha and 1530.170 ha respectively (total 1914.063 ha), jointly to Mahanadi Coalfields Ltd (MCL), M/s Neyveli Lignite Corporation (NLC) and M/s Hindalco Industries Ltd. (HIL) for mining of Coal as one mine to ensure conservation of coal and development of optimum technology. It has been reported by the PCCF, Odisha that as per the condition no. (iii) of the allocation letter of Ministry of Coal, Govt. of India a Joint Venture Company (JVC) namely M/s MNH Shakti Ltd., has been formed between Mahanadi Coalfield Ltd. on one part and M/s Neyveli Lignite Corporation Ltd. and M/s Hindalco Industries Ltd., on the other.
- (xii) Further, per condition (iv) of the allocation order of GoI, MCL would have and equity holding of 70% whereas the balance 30% equity shall be equally held by M/s Neyveli Lignite Corporation Ltd. and M/s Hindalco Industries Ltd. i.e. 15% each in the JVC. 70% of annual coal production shall be handed over to MCL by the Joint Venture Company to dispose the same as it chooses. The balance 30% of the annual production shall be handed over to M/s Neyveli Lignite Corporation Ltd., and M/s Hindalco Industries Ltd. equally i.e., 15% each for captive consumption in their end use Plants in Odisha.
- (xiii) The area under Talabira -II and Talabira -III Coal Blocks has been acquired under Coal Bearing Area (Acquisition & Development) Act, 1957, in the Gazzette Notification of GoI, Ministry of Coal, bearing SO No. 1108, dt. 26.03.2005, 1530.170 ha has been notified for acquisition located in Rampur, Dumermunda, Malda and Patrapali villages under Jharsuguda Tahasil in Jharsuguda District. Similarly, vide S.O. No. 2414; dt 28.08.2009 of Ministry of Coal Government of India, and area spread over 383.893 ha has been notified for acquisition

consisting of Talabira and Khinda villages under Rengali Tahasil in Sambalpur district. The total area of these two blocks is 1914.063 ha consisting of 1038.187 ha of Revenue and DLC forest land and 875.876ha is of non-forest land . Out of 1038.187 ha of forest land is in Jharsuguda Forest Division and 192.626 ha of forest land in Sambalpur Forest division. While 845.561 ha of forest land in Jharsuguda district is comprised of 385.379 ha of Revenue forest and 460.182 ha of DLC land; 192.626 ha of forest land in Sambalpur division is comprised of Revenue Forest only. The Divisional Forest Officer, Jharsuguda and Sambalpur division on Part-II of the application form have indicated that forest area proposed for diversion for the project is unavoidable as these are within the coal bearing area.

- (xiv) The JVC i.e M/s MNH Shakti Ltd. have approached the Water Resources Department, Government of Odisha for allocation of water to meet the potable and industrial demand of Talabira OCP vide their letter dt. 11.03.2013. Similarly the JVC have taken steps for receiving power from the GRIDCO for this coal project. The Ministry of Coal, Government of India vide their letter No. 34012/(4)/2011.CPAM, dt. 11.01.2012 have approved the revised Mining Plan for this coal mining project. There is an estimated 553.98 Million tons of coal reserve. Considering annual production of 20 Million tones, the life of mines would be around 34 years including 2 years for construction period.
- (xv) The D.F.O., Jharsuguda Forest Division has certified that the land identified for C.A. is suitable for plantation from management point of view.
- (xvi) The Divisional Forest Officer, Sambalpur South Division has certified that the land selected for the purpose of C.A. is suitable for plantation from management point of view.
- (xvii) The Divisional Forest Officer, Jharsuguda Forest Division has certified that the land identified for C.A. is free from all sorts of encumbrances and encroachment.

- (xviii) The Divisional Forest Officer, Sambalpur South Division has certified that the land selected for the purpose of C.A. is free from all sorts of encumbrances and encroachment
- (xix) Land identified for compensatory afforestation is not reported to be important from Religious/Archaeological point of view.
- (xx) The land identified for C.A. is in three patches and all the three patches are compact.
- (xxi) Divisional Forest Officer, Jharsuguda has prepared a site specific compensatory afforestation scheme in ANR plantation model for identified degraded forest land under his jurisdiction with a financial outlay of Rs. 10,16,55,850/- including the cost of maintenance of Compensatory afforestation of 10 years as per Govt. of India, MoEF Guidelines F. No. 11-168/2009-FC(Pt.), dated 14.02.2012 as per latest wage rate of Rs. 150/- per day.
- (xxii) The Divisional Forest Officer, Sambalpur has prepared a site specific compensatory afforestation scheme where he has proposed for undertaking silvicultural treatment of the degraded forest land for improving the crop over an area of 336 ha. Besides, 50 ha of identified degraded forest land shall be covered under Block plantation model. Total financial outlay for this CA scheme is estimated at Rs. 2,29,48,855/-including the cost of maintenance as per latest wage rate of Rs. 150/- per day.
- (xxiii) As reported by the State Government, the project involves 1894 no. of Project displaced families including 443 no. of SC families and 575 no. of ST families. R&R Plan has been prepared concerning this project and the plan is required to be implemented with due approval of the RPDAC/State Government before commencement of project activities on final forest clearance.
- (xxiv) The phased reclamation plan and afforestation scheme has been furnished. As indicated in the Plan, major part of the quarry will be back filled with overburden. The backfilling will be carried out in a phased manner. Plantation on

internal dumping will start from 8th year of operation till 34th year and on external dump from 5th year to 16th year of operation.

- (xxv) The mining project is site specific; hence alternative alignment is not possible.
- (xxvi) As reported by the State Government, this project will generate employment opportunity for 427 persons daily and around 10,000 persons will be benefitted directly and indirectly in course of execution of the project.
- (xxvii) The land being diverted is not reported to have any socio-cultural/ religious value..
- (xxviii) Sacred grove or very old growth trees/forests is not reported to exist in the areas proposed for diversion:
- (xxix) No rare or endangered flora or fauna is noticed in the area as per the inspection reports furnished by Divisional Forest officers. However, the PCCF, Odisha while recommending the proposal has stated that the area is highly prone to crop raiding and depredation by wild Elephants and other wild animals.
- (xxx) The nearest protected area Debrigarh Wildlife Sanctuary is more than 40 km from the project site.
- (xxxi) DGPS maps 85 Topo-sheets are enclosed as Annexures - I, I (A) & II, II (A) respectively. However, DGPS survey has been done for the entire lease boundary without segregation between the two divisions. The User agency was advised to complete the DGPS boundary separately prior to Stage-II approval.
- (xxxii) Ib river is flowing at a distance of about 500m from the mining boundary and adjacent to the lease boundary. The other river which is flowing near the lease boundary is Bheden River. The User agency has assured that an embankment will be constructed along the Bheden River. The water from Ib river will be used for mining operation. Therefore, the User agency was instructed to ensure that the quality of both the rivers should not deteriorate during the mining operation.
- (xxxiii) Habitation in Malda village will be relocated to Hirma, which is situated on the other side of the river Bheden. The User agency has informed that a bridge will be constructed on the river later on.

- (xxxiv) The User agency has reported that the production will be started after two years. A silo will be set up in northwest direction of Talabira-II within 5 years. Hence, transportation will be carried out by truck for 3 years, after the production starts. Once silo is constructed, the transportation will be done from the pit head to the Silo which will act as a siding, through the Belt conveyor from which the materials will be sent through rail to destinations.
- (xxxv) Hirakud reservoir is at a minimum distance of 150m from the lease boundary. However, the mining operation will be carried out at a larger distance.
- (xxxvi) A green belt will be created all along the mining lease boundary, except at the eastern boundary where an external OB dump has been demarcated.
- (xxxvii) Besides creating the green belt, the User agency has been advised to transplant trees of girth up to 30 cm from the forest land to any vacant land available in the lease area.
6. Specific observations of the Addl. Principal Chief Conservator of Forests (Central), Regional Office (Eastern Zone), Bhubaneswar on the proposal are as below:
- (i) **Transplantation of trees up to 30 cm girth:** Trees having girth up to 30 cm should not be felled as far as possible; rather they should be transplanted to nearby suitable places with utmost care under the supervision of State Forest Department.
 - (ii) **Transport system:** The transport from the mine should be through closed conveyor system up to the railway siding as soon as the silo is set up and from there by train so that there is little disturbance on the road. Thus the ancillary problems like congestion, dust pollution, inconvenience to local population, etc. will be minimized. However, the trucks which may be used within the mines should be covered with tarpaulin.
 - (iii) **Water pollution & conservation:** The major source of water pollution in the coal mines is the carryover of the suspended solids in the drainage system of the mine sump water, storm water drainage and waste water. Necessary measures should be taken to avoid water pollution caused due to all such possible sources. The user agency should take appropriate measures for creation of ponds, for rain water harvesting structures, so that more water can be stored around, which in turn will recharge the ground water.

- (iv) **Reclamation:** It is impossible to replenish the minerals once mined out, however; the user agency should reclaim the derelict land by establishing self-sustaining vegetation cover with pre-determined end use. A successful biological reclamation restores the natural capital of flora and fauna and productivity of land, which have been previously destroyed through mining. The user agency should prepare a long term plan so that after the end of mining lease, the reclaimed land may be put to optimum productivity which may include agriculture, horticulture, afforestation, pisciculture and ecotourism.
- (v) **Top soil management:** The user agency should keep topsoil separate from overburden, and the sub soil to ensure that the materials are used in the same order as it was removed. Generally, the upper part of the soil that is the richest in organic matter is most valuable natural resource and ensure better growth of vegetation over dumps or for reclamation purpose.
- (vi) **Environmental awareness programme:** The user agency should arrange environmental awareness programme to create awareness among the employees as well as nearby people regarding better environmental management and its safeguards. There should be programs, weeks for the forests and wildlife, to be celebrated by the miners and other stakeholders, the wildlife lovers. Officials involved in the process should participate in such functions, and the idea of protection of precious natural resources like forest, wildlife, etc. should leave an indelible impact in the minds of the people so that people voluntarily and enthusiastically work for the protection and enrichment of the forests and wildlife of the region.
- (vii) **CSR activities:** The user agency should implement a corporate plan for the overall development of the people in the vicinity like providing quality education, skill development, creating employment opportunities & health care facilities. Sanitation aspect, literacy drive, etc. should also be taken care of by them. The CSR activities undertaken by the user agency for the development of people should be uploaded in the website of the company in details.
- (viii) **Establishment of environmental laboratory:** The user agency should establish a modernized environmental laboratory with adequate number of pollution

monitoring and analysis equipment in consultation with the State Pollution Control Board for regular monitoring of the environmental status as well as taking remedial measures for maintaining better ecological balance.

7. The Addl. Principal Chief Conservator of Forests (Central), Regional Office (Eastern Zone), Bhubaneswar finally recommended that with the above observations, this proposal for diversion 1038.187 ha of Revenue and DLC forest land including 4.051 ha under safety zone within the leasehold area of 1914.063 ha, allocated for Open Cast Coal Project (OCP) by M/ s MNH Shakti Ltd. (Talabira II and III OCP) in Jharsuguda and Sambalpur Forest Divisions is forwarded with recommendation for consideration.
8. The proposal along with the site inspection report received from the Regional Office (Eastern Zone) Bhubaneswar may be placed before the Forest Advisory Committee for their examination and appropriate recommendations.