

ANNEXURE-21

PARAMETERS FOR EVALUATION OF LOSS OF FOREST

Sl No	Parameters	Monetary equivalence in Project period
1.	Loss of value of timber, fuel wood and M. F. P. on annual basis including loss of man/hours per annum of people who derived livelihood and wages from the harvest of those commodities.	
a)	Loss of Timber	14.6 lakh
b)	Loss of fire wood	2.2 lakh
c)	Loss of M. F. P. 2000/ha/annum for 30 years	52.18 Lakh
d)	Loss of man/hours for working of timber, firewood and collection of M. F. P. items	70.44 lakh
2	Loss of animal husbandry productivity, including loss of fodder (over 86.972 ha @ Rs. 1500/- per Ha./annum over 30 years	39.13 lakh
3.	Cost of human re-settlement (Rs 1,50,00,000/- over 30 years) =	5 Lakh
4.	Loss of public facilities and administrative infrastructures (roads, buildings, schools, dispensaries, electric lines, railways, etc.) on forest land or which would require forest land, if these facilities were diverted due to the project.	-
5.	Environmental losses (soil erosion, effect on hydrological cycle, wildlife habitat, micro-climate up setting of ecological balance). As per thumb rule prescribe environmental loss due to loss of forest over 86.972 ha. Of forest area of density 0.2 to accrue over a period of 50 years (181 Lakhs x 0.2 x 91.929 Ha./50) =	66.55 lakh
6	Suffering of oustees 1010 x 1 (earner) x Rs. 90/- per day x 30 days x 12 months x 1.5 =	490 lakh
7	Total cost of the project 600 crores (for 1048 ha assumed for 30 years lease period) proportionate cost for 86.972 ha.	166 lakhs
8	NPV cost (91.929 x 7.3 lakh) Cost per annum for 30 year lease period	671.08 Lakh
.	Total Loss (1-8)	Rs 1577.18 Lakhs

For Radhikapur (W) Coal Mining Pvt. Ltd.

For Radhikapur (W) Coal Mining Pvt. Ltd.
Authorized Signatory
Vice President


Divisional Forest Officer
Divisional Forest Officer
Angul Division

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ANNEXURE-22

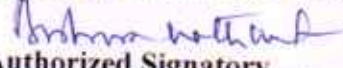
PARAMETERS FOR EVALUATION OF BENEFIT NOT WITHSTANDING LOSS OF FOREST

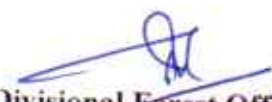
Sl. No.	Parameters	Compliance
1.	Increase in productivity as attribute to the specific projects 6 million ton of Coal @ 1100/ton (average).	Rs. 660 Crore.
2.	Benefit to Economy: a) Rs 4370 Crore in terms of production of 2.08 MTPA steel, b) Rs 50 Crore in terms of production of 1.1 LTPA cement and c) Rs 380 Crore in terms of electricity generation from 163 MW power plant.	Rs. 4800 Crore
3.	No. of population benefited	20,400
4.	Employment potential	1702
5.	Cost of compensatory afforestation.	0.922 crores
6.	Loss of (a) agricultural and (b) animal husbandry production due to diversion of forest land.	Nil
7.	Cost of rehabilitation of displaced persons as different from compensatory amounts given for displacement.	Rs. 90 Crore
8.	Cost of supply of free fuel wood to workers residing in or near forest area during the period of construction	$1702 \times 0.1 \times 150 \times 365 = 0.93$ Crore
	Grand Total	Rs. 5551.85 Crore

Considering the life of the Project as 50 years the benefit per annum = 5551.85 crores / 50 years = 111.037 crores

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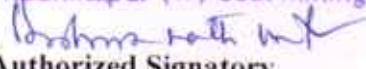
ANNEXURE-23

SUMMARY OF COST BENEFIT ANALYSIS (RATIO)

1.	Total loss per annum due to loss of timber, firewood and minor forest produce and environmental loss due to loss of forest, cost of human resettlement.	Rs 15.77 Crore
2.	Total benefit to the economy due to annual production of 6.0 million tons of coal from the mine.	Rs. 111.037 crores
	Hence, the cost-benefit ratio of the mining project is (Loss : Benefit)	= 1 : 7.04

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