FOREST DIVERSION PROPOSAL FOR EXPANSION OF EXISTING INT. STEEL PLANT FROM 0.221MTPA TO 1.0MPTA INTEGRATED STEEL PLANT

SUMMARY OF COST BENEFIT ANALYSIS (Please see Annexure VI (b) & VI (c)

| | • | 11 | | | • 1 |
|------------|----------------------|--|------------|--------------------|----------------|
| SI. No. | Parameter | Benefit Per Annum | SI. No. | Parameter | Loss Per Annum |
| 1. | Value of Produce | Rs. 4279.11 Lakh | 1. | Value of Timber | |
| | Benefit of | Rs. 769.97 Lakh. | | | , |
| | Economy | 1 | | | |
| | | | | | 1 |
| | i) Production | 28.5 Million Tons (@ 95 % PLF) | | | , |
| | | Life of project - 30 years | | | |
| | ii) Infrastructure | Good roads shall be constructed | | | · · |
| | ii) iiiii astructure | Good roads shall be constructed in and around the project. Other | | 15 | • |
| | | facilities such as medical, water | | | |
| | | supply etc. shall be provided. | | , | |
| | | | | | |
| | , mark or the co | Automobile & Engineering | | | i |
| | المعاصل المعاصل | Grade steel will be produced | | | |
| | • | which will boost our Automobile, | | | 1. |
| | • | Infrastructure Industries of our | | | 4 |
| | | State and Nation. And shall export the excess quantity | | It is a case of | •• |
| | | available in stock. | | diversion of fresh | Value of timbe |
| 2. | • | available in stook. | | forest land over | is not assess |
| ۷. | iii)Industries | Apart from above, ASPL will be | | 34.83 ha. | as yet. |
| | benefited | supporting the total national grid | | | 1. |
| | | in mitigating the power crisis in | | | · a- |
| | · | the time of national need. | | | }.· |
| | | No minerals shall be exported | | | 4 |
| | iv) Export of | but special grade alloy steel | | | |
| | minerals | shall be exported to mitigate the | | | |
| | | international demand, which will | | | • |
| | | strengthen nation foreign | | | 7 |
| | 20,20 | revenue. | | | |
| | | , | | | |
| | v) Government | Government Revenue in shape | | | j. · |
| | revenue | of Royalty, GST, VAT & Other | | | |
| | 10001140 | Tax etc. | | | |
| | | Govt would get benefit of | | 1 - 2 | |
| | • | approx. Rs.769.97 Crores / | | | |
| | | annum on continuous basis. | | - 7 | |
| | | Direct employment - 1000 | | 7 | |
| 3. | Population | Indirect employment – 1000 | | | |
| J. | benefited | Total population | | | Ţ.· |
| | | Benefited – 6000 persons | | | |

For Amalgam Steel & Power Ltd.

AMALGAM STEEL & POWER LTD. DIST. SARAIKELA KHARSAWAN

FOREST DIVERSION PROPOSAL FOR EXPANSION OF EXISTING INT. STEEL PLANT FROM 0.221MTPA TO 1.0MPTA INTEGRATED STEEL PLANT

| | | | • • |
|----|-------|--|-----|
| 4. | , , , | This will increase with stepping up of production. | |

Thus it can be seen from the above that it is necessary in the overall public interest to divert the forest land for non-forest use.

V S V CIRIDHAR

Procident

(Project & Business Dovelopment)

AMALGAM STEEL & POWER LTD.

For Amalgam Steel & Power Ltd.

PARAMETERS FOR EVALUATION OF LOSS OF FOREST

| iv. | | |
|---|--|--|
| Parameters | Medium and Major Irrigation Hydroelectric, Large Mining and Other Miscellaneous Projects | Loss Rs (in Lakh) |
| Loss of anticipated imaginary value of Timber, fuel wood and other minor forest produce due to annual lease in respect of loss in man hours per annum of stake holders (people) who would have derive the benefit from the harvest. | This is a case of diversion of 34.83 ha of fresh forest land (Inclusive of safety zone). So, there will be a loss due to value of timber etc. This can be calculated only after the enumeration work in the said forest area. | Value of timber is not assess as yet. |
| Loss of animal husbandry productivity including loss of fodder | | Nil. |
| Cost of human resettlement | No human displacement. | Nil |
| Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric lines, railway, etc.) on forest land or which would require forest land if these facilities are diverted due to the project. | No public facilities exist in the applied forest area. | Nil |
| Environmental losses (soil erosion effect on hydrological cycle, wild life, habitant, micro climate upsetting) | one hectare of fully stocked forest (density = 1.0) would be taken as Rs. 181 lakhs to acquire over a period of 50 years. (ii) In the instant case, the average forest density of the crop has been assumed to be 1.0 iii) Area proposed to be diverted = 35.03 hectares. Therefore, environmental loss for 30 years = 35.03 ha x 181 lakh x 1.0 x 30/50 years) = Rs. 3804.258 Lakh. Recurring annual cost for environmental Protection as per EIA/EMP for 30 Yrs. | 3782.54 Rs. 126/annum |
| forest land (Only in case of permanent diversion such as Irrigation, Roads, Tramline and other infrastructure etc. | land for 30 years only. Therefore, the N.P.V. of the forest land under diversion for 30 years will be 9.2 lakh /ha x 34.83 = Rs. 322.276 Lakh | 320.436 Rs. 10.68/annum Rs. 4300.976 Lakh |
| ing ing | Total losses | or 143.36Lakh/annum |
| | Loss of anticipated imaginary value of Timber, fuel wood and other minor forest produce due to annual lease in respect of loss in man hours per annum of stake holders (people) who would have derive the benefit from the harvest. Loss of animal husbandry productivity including loss of fodder Cost of human resettlement Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric lines, railway, etc.) on forest land or which would require forest land if these facilities are diverted due to the project. Environmental losses (soil erosion effect on hydrological cycle, wild life, habitant, micro climate upsetting) Cost/Net Present worth of forest land (Only in case of permanent diversion such as Irrigation, Roads, Tramline and other infrastructure etc. | Loss of anticipated imaginary value of Timber, fuel wood and other minor forest produce due to annual lease in respect of loss in man hours per annum of stake holders (people) who would have derive the benefit from the harvest. Loss of animal husbandry productivity including loss of fodder Cost of human resettlement Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric lines, railway, etc.) on forest land of which would require forest land if these facilities are diverted due to the project. Environmental losses (soil erosion effect on hydrological cycle, wild life, habitant, micro-climate upsetting) Environmental losses (soil erosion effect on hydrological cycle, wild life, habitant, micro-climate upsetting) Environmental losses (soil erosion effect on hydrological cycle, wild life, habitant, micro-climate upsetting) Environmental losses (soil erosion effect on hydrological cycle, wild life, habitant, micro-climate upsetting) Cost/Net Present worth of forest land (Only in case of permanent diversion such as Irrigation, Roads, Tramline and other infrastructure etc. Total losses |

For Amalgam Steel & Power Ltd.

AMALGAM STEEL & POWER LTD. DIST. SARAIKELA KHARSAWAN FOREST DIVERSION PROPOSAL FOR EXPANSION OF EXISTING INT. STEEL PLANT FROM 0.221MTPA TO 1.0MPTA INTEGRATED STEEL PLANT

PARAMETERS FOR EVALUATION OF BENEFIT NOT-WITHSTANDING LOSS OF FOREST

| SI. No. | Parameters | Sub-Parameters | Quantification & Expression i.e. Benefit per annum in monetary terms |
|------------|--|--|---|
| 1. | Increase in productivity attributable to the specific project | Value of plant product transports. | Rs. 4279.11 Lakh |
| 2. | Benefits to economy | Government Earns Revenue in shape of Royalty, GST, VAT & Other Tax etc. Govt would get benefit of approx. Rs.769.97 Crores / annum on continuous basis. | Rs. 769.97 Lakh. |
| 3. | Detailed estimation of laying out the railway line etc layout and construction with materials. | enumeration work. | This will be calculated after the enumeration work. |
| 4. | Cost of acquisition/ purchase of non-forest land. | (i) Employment generated on nonforest land for afforestation programme @ Rs. 2,50,000/ha for 34.83 hectares. (ii) Cost of the non-productive nonforest land purchased for equivalent compensatory afforestation and registration fee etc. | Rs. 8.70 lakh Rs. 50 lakh |
| 5. | Loss due to diversion of forest land with respect to: | (i) Agricultural Production (ii) Animal husbandry production. | Nil : |
| 6. | Number of population benefited | Company will engage 1000 direct and 1000 indirect employment. Total expenses on employment has been estimated which comes to Rs 3600 Lakh per annum. | Rs. 3600 lakh |
| 7. | Cost of rehabilitation of displaced person as different from compensatory amount given for displacement. | ; - | Nil. |
| 8. | Cost of supply of Fuel wood to workers residing in or near forest area during the period of construction | - | Nil |
| | | Total Benefit: | Rs. 8705.79 Lakh. |

For Amalgam Steel & Power Ltd.

COST BENEFIT ANALYSIS.

(A) BASED ON VALUE OF PRODUCT:

Benefit (Rs in Lakh)

Loss (Rs in Lakh)

Value of Product

4279.11

Loss of Timber

(Environmental Loss)

Cost of the project

(2171.2/30)

72.37

Total Benefit

4279.11

Total

215.73

Cost benefit ratio:

Benefit / Loss = 4279.11 / 215.73 = 19.83 i.e. approx. 20

Ratio = 1:20

(B) BASED ON BENEFIT TO NATIONAL ECONOMY

Value of Product 4279.11 lakh Govt. Revenue 769.97 lakh

Total Benefit 5049.08 lakh

Total Loss

215.73 lakh

Cost benefit ratio: Benefit / Loss = 5049.08 / 215.73 = 23.40 i.e. approx. 23

Ratio = 1:23

For Amalgam Steel & Power Ltd.