

AFFORESTATION SCHEME IN THE BLANK AREA OF BAILADILA  
DEPOSIT - 14 MINING LEASE AREA

The Govt. of India Ministry of Environment and Forests, New Delhi vide their letter No.8-41/97-FC dtd.11.6.98 have agreed in principle for renewal of Mining Lease over 322.368 hectare of forest land in favour of M/S. NMDC in District Bastar under section - 2 of forest (Conservation) Act 1980 subject to fulfilment of various conditions. In the letter of approval by MOEF condition No.(VII) reads that "Afforestation will be carried out over 79.048 ha. of blank area at project cost. A detailed afforestation scheme of native species in this regard including phasing will be prepared in consultation with state forest department and submitted to Ministry."

Accordingly, above matter was constantly pursued with local State Forest Authorities and the draft scheme for afforestation in blank area with native tree species could be finalised during 1st week of August '97.

The scheme for afforestation in blank area of deposit 14 M.L. having an area of 79.048 ha. with native tree species is as follows:

The total blank area of 79.048 ha. is proposed to be covered by planting native tree species with an area divided into 8 compartments of approximately 10 hectares area each. Plantation will be carried out for each compartment as marked in the enclosed drawing. The native tree species, for plantation indicated by local state forest dept. is as follows:

- |                 |             |
|-----------------|-------------|
| 1. Teak         | (8) Aonla   |
| 2. Khamar       | (9) Harra   |
| 3. Kanta Bamboo | (10) Bahera |
| 4. Mahua        | (11) Bija   |
| 5. Tamarind     |             |
| 6. Mango        |             |
| 7. Guava        |             |

The spacing of plants for above species is proposed to be 2m\*2m for the Teak species and 4m\*4m for other species mentioned above. The spacing of plants may vary depending upon the forest density in the compartments. The number of plants required for 2m\*2m spacing is 2500 nos. per hectare and 625 nos. for spacing of 4m\*4m. It is also proposed to subdivide the compartments into two to three sections for arranging the plantation in such a manner that each compartment will have fruit

contd..2..

Bearing quality species, all purpose quality species and commercial quality species. Accordingly the compartment is divided in the sections having one hect. area for fruit bearing quality species, three hect. area for all purpose quality wood species and balance four hect. area for commercial quality wood species. Thus, the total number of plants in each compartment will be covered by plantation.

For the purpose of plantation in each compartment the following activities are to be carried out in a cycle of 7 years each.

1st Year :-

1. Survey and demarcation, preparation of treatment map and identify in demarcation.
2. Barbed wire fencing  
(a) Cost of barbed wire  
(b) Digging of pit, cost of RCC post, filling with cement concrete.
3. Site clearance by cutting of malformed, unwanted growth collection & burning.
4. Lantana, pipeterium uprooting, collection & burning.
5. Digging of pit. + construction of soil conservation structure.
6. Replacement of 50 % soil in pit.
7. Nursery cost for raising seedlings.
8. Labour huts.
9. Contingencies.

2nd year

1. Nursery cost including raising seedling for casualty replacement.
2. Transportation of plants from Nursery.
3. Plantation.  
(a) Putting fertilizer  
(b) Weeding twice.  
(c) casualty replacement.
4. Watch and ward.
5. Fire protection.
6. Contingencies.

3rd Year

1. Nursery cost (part) and transportation of plants.
2. One weeding plus casualty replacement.
3. Repairing of soil conservation structures.
4. Fire protection.
5. Watch and ward.
6. Contingencies.

contd..3..

4th year

1. One weeding and casualty replacement.
2. Watch and ward.
3. Contingencies.

5th year

1. Watch and ward.
2. Fire protection.
3. Contingencies.

6th year

1. Watch and ward.
2. Fire protection.
3. Contingencies.

7th year

1. Watch and ward.
2. Fire protection.
3. Contingencies.

The expenses for above plantation activities per hectare works out to be Rs.33000/= approximately. The total expenditure for 79.048 ha. will therefore be Rs.26.09 Lakhs approximately.

The plantation in the blank area of 79.048 ha. will be completed by 6th year of the start. The starting year is proposed to be the year 1999-2000. The survival rate for the plants per year in a compartment will initially be 80 % to 90 % but after 7th year the survival rate may decrease to 50 to 60 % when all the above activities are completed. Thus, the maximum forest density achieved could be 0.6. The civil / Environment department of the project will take care of implementation of proposed afforestation scheme, as qualified staff are available in the said departments. However, time to time technical help/guidance will be taken from the local state forest department in case of problems for improving in the method of work and to achieve higher survival rate. Any improvement as suggested by forest authorities from time to time will also be implemented.

It may be mentioned here that afforestation over an area of 32.50 ha. has already been done in the "Blank area" after the year


contd..4..

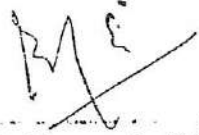
1993, when the application for renewal of Mining lease was subm. ted. Since then a total of about 75000 no. of trees have already been planted with in the Blank area and an amount of, about Rs.17 Lakhs. has been spent on the said plantation. This afforestation has been done under the afforestation programme of the project, which was started from 1986-87 for the purpose of Environment protection to create environment friendly atmosphere.


Deputy General Manager  
Deposit-14 & 11C

*W. Singh*  
13-8-99  
Executive Director  
Deposit-14 & 11 C

Tree species included in the above project are native to the area in question, which have been incorporated in the project in consultation with us.

  
Range Officer  
Forest Deptt.  
Bacheli.

  
Sub Divisional Forest Officer  
Forest Department  
Dantewada

  
Divisional Officer  
Forest Department  
Dantewada





नेशनल मिनेरल डेवलपमेंट कॉर्पोरेशन लि.  
National Mineral Development Corporation Ltd.  
(भारत सरकार का उपक्रम / A GOVT. OF INDIA UNDERTAKING)

पंजीकृत कार्यालय: 'मिनि भवन', 10 3 311/A, कैसल हिल्स, मंसूर बाग, हैदराबाद - 500028  
Regd. Office: 'Khanij Bhawan', 10 3 311/A, Castle Hills, Mansab Bagh, Hyderabad - 500 028

संदर्भ सं. / Ref : No.

ENV/BLD/MOEF/2.1/Pt-V/2000

दिनांक / Date :  
*Shri R.K. Gupta*  
2/6/2000

To  
Asst. Inspector General of Forests  
Government of India  
Ministry of Environment & Forests  
Paryavaran Bhawan  
CGO Complex, Lodi Road  
New Delhi 110 003

Kind Attn: Shri.R.K.Gupta

Sub: Afforestation in Blank areas of Bailadila iron ore mining leases, Dantewada district, M.P.

Ref: Your letter no: 7-32/99-FC dated 10/4/2000 addressed to Secretary (Forests), Government of M.P and copy endorsed to us.

Sir,

This has reference to your letter referred to above asking us to furnish the details of afforestation that has already been raised in blank areas of Bailadila iron ore mining leases.

As per condition laid down in 1<sup>st</sup> stage forest clearance letters dated 22/4/98 & 11/6/98, afforestation scheme in blank areas in respect of 5 Bailadila Mining Leases has been finalized in consultation with M.P. State Forest department. The afforestation schemes in respect of five Bailadila mining leases duly signed by Range Forest officer, Bachel, Sub - Divisional Forest officer, Dantewada, Divisional Forest Officer, Dantewada and our respective project heads have been submitted to Divisional Forest Officer, Dantewada with a copy endorsed to your goodself as per the details shown below:

S.no	Name of M.L.	M.L. area in Ha	Blank areas in Ha	Afforestation scheme submitted on
1	Bailadila Deposit-10	309.34	91.81	24/7/99
2	Bailadila Deposit-5	540.05	292.19	24/7/99
3	Bailadila Deposit-14	322.368	79.048	28/8/99
4	Bailadila Deposit-14NMZ	506.742	168.435	28/8/99
5	Bailadila Deposit-11	874.924	662.28	28/8/99
6	Bailadila Deposit-10 Float ore	142.80	Nil	Not Applicable
	<b>TOTAL</b>	<b>2696.224</b>	<b>1293.763</b>	

Copies of the afforestation schemes are enclosed for your ready reference. The updated status of afforestation, which has already been raised and proposed to be raised during coming years, is described below lease wise:

**Bailadila. Deposit-10 ML:**

As per afforestation scheme, the plantation works in 91.81 ha of blank areas has to be carried out in a phased manner over a period of 9 years by planting native tree species. The area is divided into 9 compartments of approximately 10Ha area each. **The start year for carrying out plantation works in blank areas is from year 2000-01 onwards.** Accordingly, afforestation in one of the compartments measuring about 9Ha is proposed to be taken up during year 2000-01. Letter of Intent dated 15/4/2000 has already been issued to The Divisional Forest Officer, Social Forestry Division, Jagdalpur for undertaking plantation of trees works in blank areas of Bailadila. 10 Mining Lease area.

**Bailadila. Deposit-5 ML:**

As per afforestation scheme, the plantation works in 292.19ha of blank areas has to be carried out in a phased manner over a period of 10 years by planting native tree species. The area is divided in 10 compartments of approximately 25-30Ha area each. **The start year for carrying out plantation works in blank areas is from year 1999-2000 onwards.** Accordingly, 50,000 tree saplings over an area of 25Ha have been planted during the year 1999-2000 through Social Forestry Division, Jagdalpur. During the year 2000-01 we have already given a LOI dated 15/4/2000 to Social Forestry Division, Jagdalpur for afforestation in compartment no:10 measuring 25Ha.

**Bailadila Deposit-14, Deposit-14NMZ and Deposit-11 Mining Lease areas:**

As per the afforestation scheme, afforestation over 79.048Ha in Deposit-14 is to be covered in 8 years where as in Deposit-14NMZ (168.435Ha) and deposit-11ML (662.28Ha) area is to be covered in 10 years by planting native tree species. To meet the above requirement i.e plantation of trees in blank areas of 909.763Ha in all the three mining lease areas, the afforestation over 91Ha per year for 10 years has to be done. **The afforestation will be taken up during the year 2000-01 and completed by 2009-10.**

The total area of 909.763Ha has been divided into 91 compartments of approximately 10Ha area each. Thus plantation over 9 such compartments will be done each year for 9 years from the year 2000-01 onwards. The total area covered upto 2008-09 would be 810Ha. During the year 2009-10, the balance area of 100Ha would be covered.

**During the year 2000-01, the compartment nos: 1 to 8 of Deposit-14 and compartment no:17 of Deposit-14NMZ is proposed to be taken up for plantation of native trees in 90Ha blank area and this work would be awarded to Social Forestry Division of Jagdalpur very shortly.**

Thus, during the year 2000-01, tree plantation will be undertaken in a total of 124Ha of forest blank areas by planting native tree species.

Hope the above information is in order.

Thanking you

Yours faithfully,

  
(G.S. Naidu) 3/16

Dy. General Manager (Environment)

Copy for kind information to:

1. Secretary (Forests), Government of M.P, Bhopal
2. Chief Conservator of Forests (Central), MOEF, Regional Office, Bhopal.
- ✓ 3. Executive Director, Bailadila.14/11C Project, Kirandul
4. General Manager, Bailadila.5 Project, Bachel
5. Chief Regional Manager, NMDC Ltd, Bhopal

  
DGM (Env) 3/16