BRIEF OF MAINPAT BAUXITE MINES PROJECT.

Mainpat Bauxite Mines of BALCO is located about 55 Kms in SW of Ambikapur, the district headquarter of Surguja District. It is situated over Mainpat Plateau on 1060 MSL height. The area is located at Toposheet no 64N/1 and 64N/5, between Latitude N20° 46' to N22° 53' and Longitude between E 83° 14' to E83° 18'. Mainpat Bauxite Mines is a captive mine of Balco, meant for meeting out the Bauxite requirement of 5.70 LTPA after expansion of Aluminium Plant at Korba at Chhattisgarh State.

The State Government has sanctioned the Mainpat mining lease vide order No. 3/74/89/12/3 (1) Bhopal dated 27/3/92, over 639.169 Ha land of Kesra, Kudardih and Sapnadar village of Mainpat plateau of Sitapur Taluk, of Surguja district of CG State to Balco for 20 years w.e.f. 9th July'1992. The company is operating mines since 1993, after obtaining all clearances, and with all valid licenses. All required infrastructure facilities for mines operation have been fully developed.

Now the lease period is completed from 8th July'12, and the reserve balance on lease expiry date will be about 4.20 million tons on 42% Alumina cut-off grade. Now with a view of mineral conservation, we have started taking Bauxite of low grade (+) 42% Alumina grade against the earlier acceptance grade of + 44% Alumina grade. The annual production capacity of mines is 0.75 million ton / annum.

In view of aforesaid balance Bauxite reserve, we have applied for mining lease renewal for further 10 years period from 9th July'12, vide our application No. Kb/Mining & Geology/2010/119 dated 7th July’10 and amendment letter of dated 12.06.2012, and now it is in process at Secretariat CG Govt. We have applied for Mining lease renewal for diversion of this 376.924 Ha revenue forest land in favor of Balco.

Out of total 639.169 Ha leasehold area, 376.924 Ha land is of Revenue Forest (Chhote bade Jhad Ka Jungle) Land and remaining is non Forest land (40.107 Ha rocky Govt Land + 222.138 Ha Pvt revenue land). We have already obtained clearance of Forest Division of MoEF, vide order No. F.No 8 -31/97-FC, New Delhi dated 24/5/2000 for diversion of this 376.924 Ha revenue forest land in favor of Balco.

The Forest clearance is co-terminus with lease period therefore , we have applied for renewal of Forest clearance vide application dated 4th July’2011 for only 222.473 Ha area and later on revised for renewal of entire revenue forest land of 376.924 ha vide application dated renewal 5th March 2014. The balance un-mined revenue forest land has Bauxite reserve of about 2.58 Million Ton of Bauxite on 42% Alumina cut off grade.

(RAJESH MISHRA)
Head-Mines
BALCO,KORBA (C.G.)
The Bauxite deposit is occurred in lensoid form in laterite profile; generally occur below soil and laterite. The average thickness of overlying overburden is 4.80 M and the thickness of Bauxite zone is 2.15 M on average.

The existing mining practice is semi mechanised open cast mining method. The thickness of top soil ranges from 0 to 1.0 m, thereafter overburden of murrum, laterite is lying with thickness ranging from 0 to 6.2 m after which there is a ore zone which is 0.40 m to 3.0 m thick. In general mines working are of shallow depth of 5 to 6 m, therefore we have adopted concurrent backfilling method.

The general practice is to scrap the top soil separately by dozer, or excavator dumper combination and will be temporarily dumped to mined out /reclaimed area, for top spreading over the already backfilled and leveled area. When the backfilled and leveled area is available then the top soil scrapped will be directly used for spreading over in such area. There after the overburden is excavated by excavator dumper combination and directly dumped to mined out area for backfilling. Leveling and compaction of backfilled area is carried out time to time by loader or dozer. In this way the concurrent back filling method has been adopted. The top soil stacked separately is then spread over to backfilled leveled area. There after during monsoon season plantation is being carried out. Till March’14, the total mined out area is 375.060 Ha, and out of which 352.760 Ha, has been reclaimed and out of this 350.500. Ha has been afforested with more than 10.9 lakhs trees. In this way we are mitigating the land degradation caused by mining, and increasing the greenery of the area by doing afforestation regularly. All preventive measures have been taken up for keeping air, noise and water pollution to minimum permissible limit.

After removal of overburden, the ore zone is loosened by blasting and then subjected to manual sorting of Bauxite lumps. The big bauxite boulders (above 50-60 cm size) found after blasting is further reduced in size by rock breakers. The sorted out clean bauxite is manually loaded into trucks for taking to the plant.

In this way most of the work is carried out by manual method; therefore the most advantage of our mining method is providing employment opportunities to more than 1500-2000 local people in the Mainpat plateau. Our mining practice also provides business to more than 200 truck owners and direct – indirect benefits to thousands of people. In this way the mines is providing employment & business to the locals which in turn causing financial enrichment of locals and ultimately resulting to their social up liftmen. Our mines contribute more than 7 Crores in Govt exchequers annually.

The surface of reclaimed area is having more porous surface, therefore the rain water get absorbed more and help in increasing the ground water table. Six mined out pits have been converted into ponds, which help in recharging of ground water, and also used by locals, and also useful for meeting the Industrial water requirement.

In this way the continuation of mining beyond July’12 will definitely remain beneficial for development of such remote place.