CHAPTER-II

Environmental protection and mineral conservation

2.1 Mineral policy of the State

2.1.1 The country's accelerated growth rate warranted a rapid development of the mining sector. The world mineral scenario had changed significantly, which required reorientation of mining laws and policies to attract global investments. Mineral Policy, 1993 had not been able to achieve the aim of encouraging the flow of private investment and introduction of high end technology for exploration and mining because of procedural delays.

The Central Government in consultation with the State Governments formulated (March 2008) legal measures for the regulation of mines and the development of mineral resources to ensure uniformity in mineral administration and to ensure that the development of mineral resources keeps pace and is in consonance with the national policy goals. To give a fillip to private investment in the mining sector, and to attract technology, the National Mineral Policy, 2008 was announced in March 2008.

A model State Mineral Policy was circulated (December 2009) to all the State Governments requiring them to develop suitable mineral policies within the ambit of the National Mineral Policy for their States keeping in view their local requirements.

2.1.2 The State Government had enunciated (28 January 2011) Rajasthan Mineral Policy, 2011. The Government has considered appropriate to promote proper use of mineral resources for sustainable economic development of its people and the nation by amending its existing Mineral Policy, 1994. To achieve this, it has been decided to simplify the rules and procedures so as to ensure scientific, safe and eco-friendly mining, productivity, conservation and cost effectiveness, social commitment, zero waste mining, health and welfare of the people.

2.1.3 The Rajasthan Mineral Policy, 2011 mainly enumerates: creation of favorable environment for value addition of minerals, enhance employment opportunities, explore mineral wealth adopting modern exploration techniques, promote mechanised and scientific mining in view of environmental measures and minerals conservation, development of human resources, de-mystify procedures and achieve transparency in decisions allocating of concessions, speedy disposal of concession applications, greater transparency in inter departmental correspondence, speedy disposal of appeals or revisions, strengthen infrastructural facilities in mineral bearing areas, promote prospective and mining of noble and base metals and fertilizer, create environment for establishment of lignite base industries as well as petroleum refineries, simplify rules and procedures to remove hurdles and bottlenecks of mineral development, implement welfare measures for mine worker, develop proper inventory of resources and reserves, enforcement and closely monitor of mining plans, mine closure plans and proper mining methods for optimum utilisation of minerals, adequate provisions for reclamation and restoration of

land to best possible potential, monitor data filing requirements, use of old disused mining sites for plantation or other useful purposes, involving State Public Sector undertakings in mining sector, regulate mining in proper way and check illegal mining through deterrent actions, optimise revenue of the State by reserving 50 *per cent* areas to different categories and allotting remaining 50 *per cent* by auction.

2.2 Ecological balance and conservation of minerals

Minerals are valuable natural resources being finite and non-renewable, but their exploitation is essential for development of country's economy and improving life of people living in the mining areas. Since, mining activity is closely linked with forestry and environmental issues, as most of the mines are situated either in forest or its nearby, therefore, it is a direct intervention in the environment and has potential to disturb the ecological balance. Further, minerals are non-renewable; therefore, their conservation by economic manner and efficient use is uttermost necessity which includes scientific method of mining, beneficiation and zero waste mining. National Environment Policy, 2006 and National Mineral Policy, 2008 take care of these concerns and try to create a balance between the environmental needs of the country and the mineral exploitation, by framing guiding principles.

The MMDR Act and rules made there under also redress such concerns by prohibiting the mining operations without permission and setting guidelines for environmental protection and ecological balance, *inter alia* conservation of minerals. These also provide for reclamation and rehabilitations of the area put to use in mining and allied activities. Rule 16 of the MCDR requires separate stacking of non-saleable minerals. Rule 23F of *ibid* requires depositing financial assurance money for reclamation of the area put to use in mining and allied activities.

All such provisions have been made for authorised excavation of minerals. However, illegal excavation is settled by only recovering cost of minerals along with royalty under Section 21(5) of the MMDR Act and Rule 48 of RMMC Rules. There is no provision for recovery of damages caused to environment and reclamation required after mining activity. This is not consistent with the National Environment Policy, 2006 and guiding principles 'polluter pays'.

We noticed non-observance of the above provisions in the following cases:

2.3 Non-observance of conservation rules

Rule 16 of the MCDR provides that overburden and waste material obtained during mining operation shall not be mixed with non-saleable or sub-grade ore/minerals and it shall be dumped and stacked separately.

We found (October-December 2009) from the records of four ME offices that in four cases, non-saleable or sub-grade minerals obtained during mining operation were not stacked separately, as such their retrieval was not possible. This resulted in

loss of mineral costing ₹ 120.74 crore as shown below:

Sl. no.	Name of ME office	Name of mineral	Quantity of mineral (MT)	Cost rupees per MT	Total cost of mineral (₹ in crore)
1.	Sojat city	Quartz	40,48,708	202	81.78
		Felspar	2,13,090	168	3.58
2.	Rajsamand II	Dolomite	34,539	450	1.56
		Dolomite	1,88,326	450	8.48
		Dolomite	2,52,707	450	11.37
3.	Sirohi	Felspar	4,33,993	192	8.33
4.	Udaipur	Dolomite	1,25,351	450	5.64
Total					120.74

The cost of mineral Felspar and Quartz have been worked out on the basis of prevailing rates published by Indian Bureau of Mines (IBM). The cost of mineral Dolomite has been taken as 10 times of the prevailing rates of royalty, as the rates were not published by IBM. The rates for sub-grade/non-saleable minerals are not separately published.

In reply to our query, the ME, Udaipur replied (October 2009) that action would be taken in this regard.

The Government stated (August 2010) that policy of mineral Dolomite would be revised to dispose of it. In respect of remaining minerals, we have not received replies (October 2010).

2.4 Irreparable damages to environment

We also noticed 87 cases involving cost of ₹ 352.95 crore (as mentioned in this report) of illegal excavation and despatch of minerals where, no scientific mining could be adopted as the process was undertaken clandestinely with a view to evade payment of royalty and other charges. In such cases, irreparable damages were caused to environment but in absence of provisions no compensating amount could be recovered.

No provisions have been made for recovery of damages caused to environment and reclamation of the areas, due to illegal excavation of minerals.

2.5 Non-recovery of financial assurance

Rule 23 F of the MCDR provides that financial assurance (cost of rehabilitation of environment) is to be deposited as security at prescribed rates. If the authority competent has reason to believe that reclamation and rehabilitation measures had not been or will not be carried out by the lessee in the event of closure of mines he shall forfeit the sum assured.

We observed from the records of the Deputy Secretary (Mines) that working permissions, for area covering 3,133 hectare, were granted in favour of the Rajasthan State Mines and Minerals Ltd. and Fertilizer Corporation of India in the jurisdiction of ME/AME Barmer, Jaisalmer, Bikaner and Sriganganagar for the mineral

gypsum. However, the financial assurance of ₹ 4.70 crore was not deposited by the permission holders.

The Government stated (August 2010) that action was being taken in this regard.

Due to non-obtaining of financial assurance from the lessee as provided in the rules, the State Government may have to reclaim/rehabilitate the spoiled mining areas at their own cost.

2.6 Recommendations

- ***The Government may consider stacking of non-saleable or sub-grade minerals in such a manner so that they can be retrieved easily in future and also ensuring zero waste as envisaged in the National Mineral Policy, 2008.***
- ***A provision may be made for recovery of damages caused to environment and cost of reclamation of the area due to illegal excavation of minerals.***