



भारत सरकार
GOVERNMENT OF INDIA
खान मंत्रालय
MINISTRY OF MINES
भारतीय खान ब्यूरो
INDIAN BUREAU OF MINES

Circulars

Issued to

Recognised Qualified Persons

(from 25-3-1991 to 1-10-2007)

By
The Chief Controller of Mines
NAGPUR

APRIL, 2008

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PREFACE

As per Mines & Minerals (Development & Regulation) Act 1957, the Mining Plan is a pre-requisite for grant of Mining Lease. The Mining Plan is also mandatory for renewal of mining leases. On behalf of the Central Government, Indian Bureau of Mines has been assigned the function of approval of Mining Plans. Mining Plan ensures that the minerals resources are developed in scientific manner with due regards to the conservation of minerals and protection of environment. As per Mineral Conservation and Development Rules 1988, it is also necessary to review the Mining Plan and submit a Scheme of Mining for the next five years period. Further, in pursuance to the amendment in April 2003, it is obligatory on the part of the mine owner to submit Progressive Mine Closure Plan (PMCP) as a component of Mining Plan and also Final Mine Closure Plan (FMCP) before determination of mining lease. The sole objective of the concept of Mine Closure Plan is to carry out the protective, reclamation and rehabilitation measures so that once the mining operations cease, the lease area does not pose threat to the environment and can be returned to the society for safe use.

For preparations of Mining Plans, Schemes of Mining and Mine Closure Plans, Indian Bureau of Mines has issued guidelines and formats from time to time. IBM has been organizing the Training Programmes for the RQPs on these aspects as well. Further each regional office of IBM is also organizing the annual '**RQPs Meet**' for closer interaction and solutions to the common issues on preparations of Mining Plans, Schemes of Mining and Mine Closure plans.

For guidance and information, Chief Controller of Mines has issued Circulars to the RQPs on various issues of preparations of these documents. For ready references of these circulars, IBM brings out compilation of all these circulars in the form of Booklet namely '**Circulars Issued to RQPs**'. The last edition was released in the year 2001. Since then many more circulars were issued. To have updated compilation of all these circulars, I am happy to bring out the Fifth edition in the series. I am sure this edition will find use for all concerned and fulfill the demand from the mining industry to have updated circulars under one cover for ease of reference.

Nagpur
Dated 29th November 2007


(**C.P.AMBESH**)
Chief Controller of Mines
Indian Bureau of Mines

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**GOVERNMENT OF INDIA
MINISTRY OF STEEL AND MINES
INDIAN BUREAU OF MINES**

No. N-11013/3/90-CCOM

Nagpur, the 25th March, 1991

CCOM'S CIRCULAR No. 2/91

Sub : Outline of the Mining Plan - guidelines in respect thereof, including environmental management plan issued to Recognized Qualified Persons (RQP's) by the RCOMs/COMs, IBM - clarifications regarding.

It has come to the notice of the undersigned that draft mining plans submitted by the RQPs often do not indicate the ultimate pit limit or ultimate size of the pit. Determination of the ultimate size of the pit is necessary before starting mining operations as per rule 16(3) of MCDR, 1988, to facilitate the identification of suitable dumping sites for mine waste and sub-grade minerals and incidentally also to facilitate implementation of tree plantation programmes at the requisite sites in leaseholds from the initial stage of mining operations itself or for planning any other post-mining land use which is required to be prepared in the beginning itself as per para 13.3 of the above guidelines to the RQPs.

2. In order to ensure proper compliance with the aforesaid rule and guidelines, it is clarified that the ultimate pit limit boundaries should be shown on the relevant plans and sections while preparing draft mining plans. This should be done on the basis of conceptual Mining Plan for the anticipated life of the mine. In determining the ultimate pit limit boundary, a final slope angle between 30° to 60° would be applicable in a large number of cases, but where pronounced ground stability problems are involved, geo-technical investigations may be necessary to determine the slope angle/design of the ultimate pit limit.

3. Mineable reserves and anticipated life of the mine (item No. 4.4 of the guidelines) should be determined on the basis of factors mentioned specifically in the guidelines as well as the techno-economics of the mining in depth (read prevailing practices in the field in the case of small opencast mines without beneficiation facilities).

4. The above clarifications are applicable in all cases inclusive of those mines to which simplified guidelines for the preparation of mining plans are applicable.

Sd/-
O.P. Sachdeva
Chief Controller of Mines,
Indian Bureau of Mines

To
All Recognized Qualified Persons.

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES**

(Office of the Chief Controller of Mines)

No. N-11013/64/MP/89-CCOM

Indira Bhawan
2nd floor, Block "A"
Civil Lines, Nagpur-440 001

Dated the 17th September, 1991

CCOM's CIRCULAR NO. 3/91

Sub : Requirement of exploration for establishing the existence of mineral base on due evidence and Environmental Impact Assessment (EIA) for formulating a reasonably good scientific mining plan.

Attention is invited to the guidelines in respect of the outline for the mining plan including Environmental Management Plan which are also applicable to the separate outline of mining plan for small opencast mines excluding mines with mineral beneficiation plants, wherein under para 3.3 (i) it has been enjoined to detail the exploratory work done and make it as the basis for preparation of the geological map of the leasehold/area applied for M.L. The guidelines indicate the nature of exploratory operations viz., pitting, trenching, aditing and boreholes, which should be taken into account for the purpose. Some doubt has been expressed in certain quarters on the desirability of insisting on the preparation of geological maps and estimation of reserves on the basis of pitting, trenching, core drilling or non-core drilling, in the case of outcropping deposits of a simple nature in the case of small leaseholds. The matter has been examined carefully in IBM and the following relaxation in respect of the requirement of exploration in such cases have been agreed to by the Controller General, IBM.

2. Geological information of the mineral deposit gathered from old or existing workings, nalla cuttings and outcrops/escarpments, examination of the adjoining mines, if any, and as also study of the regional geology of the area through reconnaissance by an experienced geologist accompanied by chemical analysis of adequate number of representative samples from the unweathered zones along with detailed geological mapping of the area can be considered adequate for assessment of reserves for the purpose of mine planning in case of regular, bedded outcropping deposits of simple nature, i.e. without appreciable structural disturbances or geological complexity and with, more or less, uniform tenor or grade distribution (if duly established on the basis of such an examination) in the case of small lease area with limited scale of operations. However, in all other cases, there may be need for more formal exploration involving trenching, pitting or drilling as per the needs.

3. Mining operations will be allowed to be carried out for the first five years provided mineral reserves for this period have been established on the basis of outcrops etc. as mentioned above. However, minimal exploration involving deep pitting and/or non-core drilling/core drilling, as may be necessary for preparing a conceptual mining plan for the entire lease period as also for planning mining for the next five years' period (in case necessary on genuine technical reasons) should be provided for and included in the mining plan, for carrying out the same concurrently over the period of five years of actual initial mining with further exploratory work spread over the remaining life of the mine in accordance with the future production plans.

4. Environmental Impact Assessment Statement

Kind attention of the RQPs is also invited to item 12.2 of the separate outline of mining plans for small opencast mines under reference. The items to be covered under this item are clarified as under :-

(a) Land Environment

- (i) Land scape.
- (ii) Aesthetic environment.
- (iii) Soil and land use pattern.
- (iv) Agriculture.
- (v) Forest.
- (vi) Vegetation.
- (vii) Public building, places and monuments.

(b) Water Environment

- (i) Surface water.
- (ii) Ground water.
- (iii) Water quality.

(c) Air Environment

- (i) Noise.
- (ii) Air.
- (iii) Climatic condition.

(d) Socio-economic Environment

- (i) Social and demographic profile.
- (ii) Occupational health and safety.
- (iii) Human settlement.
- (iv) Recreational facility.

Sd/-
O.P. Sachdeva
Chief Controller of Mines
Indian Bureau of Mines

To
All Recognized Qualified Persons
for preparation of mining plans under MCR 1960 and MCDR, 1988

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

No. N-11013/3/90/CCOM

Indira Bhawan,
2nd floor, Block "A"
Civil Lines, Nagpur-440-001
Dated the 30th October, 1991

CCOM's CIRCULAR NO. 4/91

"Guidelines in respect of the Outline for the Mining Plan including Environmental Management Plan" vide items 4.1 and 4.2 require the preparation of yearwise developmental plans for the first 5 years and thereupon indicate the yearwise production in the first 5 years. It may be recalled that it was made clear in the above guidelines that the above mentioned yearwise developmental plans & etc. are to be supported by plans and sections indicating the position of development which are to form the basis for arriving at the quantum of production, the grade expected, O/B quantum to be handled, etc. It has been seen in some cases that the plans and sections as mentioned above are not reflecting the geological features. In the absence of the same, it becomes difficult to examine the production plans from the point of view of accuracy as well as feasibility of proposed mining. You are, therefore, advised to ensure that the transverse sections, etc., duly show the lithology and geological structure apart from the outline of the mineable zone while showing the pit development position on the yearwise basis in respect of all mining plans prepared by you henceforth.

2. Vide item 13.0 of the Environmental Management Plan as per the guidelines referred above, the details regarding base line information, environmental impact statement and management plan are to be furnished clearly bringing out the impact of mining on the environment and the protection measures to be taken to mitigate. Generally it is observed that the above details are furnished in the text of the mining plan without supporting plans i.e. key plan and the environmental plan of the area as prescribed under rule 28(5)(a)&(b) of MCDR, 1988. It is, therefore, advised that the key plan and the environmental plan with details prescribed under MCDR, 1988 as amended vide gazette notification No. GSR No. 227(E), dated 22.4.91, may invariably be enclosed with the mining plan prepared under rule 11 of MCDR, 1988, in future. In the case of mining plans under MCR, 1960, also, it would be desirable to supplement the text with similar plans.

Sd/-
O.P. Sachdeva
Chief Controller of Mines
Indian Bureau of Mines

To
All Recognized Qualified Persons.

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
(Office of the Chief Controller of Mines)**

No. N-11013/3/MP/91-CCOM

Indira Bhawan
2nd floor, Block "A"
Civil Lines,
NAGPUR-440 001
Dated the 14 November, 1991

CCOM's CIRCULAR No. 5/91

Sub : Standardization of map and plan symbols

After scrutinising the mining plans submitted by various mineowners/intending mineowners, it has been realised that there is a need for standardising the map and plan symbols. Since these maps and plans are prepared by Recognized Qualified Persons it will be necessary for them to be familiar with standard symbols. The Bureau of Indian Standards has already prepared standard symbols for geological plans and cross-sections and has issued them in five volumes, IS : 7974, Part I, Part II, Part III, Part IV and Part V. They are :

- Part - I : General rules of representation.
- Part - II : Representation of sedimentary rocks.
- Part - III : Representation of magmatic rocks.
- Part - IV : Representation of metamorphic rocks.
- Part - V : Representation of minerals.

2. These are priced publications and may be obtained from the Director General, Bureau of Indian Standards, Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi - 110 002. The other set of symbols are given in MMR, 1961.

3. It is advised that henceforth plans and sections of all mines plans may be prepared using the symbols as given in the BIS standards and MMR, 1961. In case there are deviations or any other rock types which are not explicitly covered in these symbols, combination symbol(s) or new symbol(s) may be used. In case of combination symbols the principle may be that the main symbols may be prominent and the qualifying symbol(s) may be less prominent. In case new symbol is used, it would be helpful if it is mentioned that it is a new symbol.

4. The plans and sections should invariably depict the index which should be complete.

Sd/-
O.P. Sachdeva
Chief Controller of Mines
Indian Bureau of Mines

To
All Recognized Qualified Persons
for preparation of mining plans
under MCR, 1960, and MCDR, 1988.

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
Office of the Chief Controller of Mines**

No. N-11013/1/MP/91-CCOM

Nagpur, dt. 9/16.10.92

CCOM's CIRCULAR No. 3/92

Sub : Outline of the Mining Plan including Environmental Management Plan (EMP) - Guidelines in respect thereof already issued to RQPs by IBM-Clarifications regarding.

In order to guide the work of collection of baseline information regarding environmental aspects for a more meaningful preparation of environmental management plan in connection with the preparation of mining plan of mechanised mines or mechanised mining projects in non-forest areas, the following tables detailing the manner of sample collection inclusive of selection of sampling station or measurement point, seasons to be covered, number of samples to be collected for station and parameters to be tested, etc. are enclosed herewith.

<u>Table No.</u>	<u>Title</u>
Table No. -1	: Ambient air quality survey
" " -2	
(i)	: Water quality survey
(ii)	: Water quantity survey
Annexure to table-2	: Parameters to be tested for water quality.
Table No. -3	: Soil quality survey
" " -4	: Noise level survey
" " -5	: Ground vibration measurement
" " -6	: Ground water survey.

2. Kind attention of the RQPs is also invited to item 13.2 (Environmental Impact Assessment Statement) of the guidelines in respect of outline of the mining plan already issued to them. The items to be covered under this head are clarified as under :

(a) Land Environment :

- i) Landscape and land subsidence
- ii) Aesthetic environment and tourist spots (if any)
- iii) Soil & land use pattern
- iv) Agriculture
- v) Forest
- vi) Vegetation
- vii) Public buildings, places and monuments including archaeological sites.

(b) Water Environment :

- i) Surface water
- ii) Ground water
- iii) Water quality

* Circular Letters Nos. 1/92 and 2/92 do not relate to RQPs

(c) Air Environment :

- i) Noise
- ii) Air
- iii) Climatic conditions

(d) Socio-economic environment :

- i) Social and demographic profile
- ii) Occupational health and safety
- iii) Human settlement
- iv) Recreational facilities.

3. It may be mentioned that while describing the impact assessment not only the baseline information or the prevailing environmental status would be taken into account, but likely impacts of proposed mining operations would have to be carefully described with particular reference to the sampling stations or measurement points recommended in the enclosed tables to clearly bring out the adverse environmental changes. On the basis of such a statement, it would be easily possible to propose ameliorative or protective measures under the environmental management plan wherever the impact is likely to result in the permissible limits of environmental parameters being exceeded.

4. One of the chief purposes of collecting the baseline information is to monitor changes in the environmental parameters consequent to mining by taking up periodical measurements of the same after the initial or baseline study. Therefore, the environmental management plan should invariably include suitable proposals for organising the periodical monitoring of the relevant environmental parameters in the manner indicated in the enclosed tables. It is also expected that the EMP will be adequately supported by diagrams, plans and sections, etc. to the extent necessary.

5. The above guidelines do not have any retrospective effect and shall be applicable in respect of mining plans to be submitted in respect of the mechanised mines or mechanised mining projects in non-forest areas, after the receipt of this circular.

6. As far as mechanised mines or mechanised mining projects located in forest areas are concerned, the guidelines of the Ministry of Environment & Forests issued from time to time shall be applicable. It is clarified that in case of any public or private sector units if the party opts for norms of the EAC to facilitate the preparation of Environmental Management Plan for clearance by the Ministry of Environments & Forests, the EAC norms shall be acceptable.

7. It is also clarified herewith that in no case either in respect of forest or non-forest lands, the above norms of minimum data requirement shall be applicable in respect of such mines to which simplified guidelines for preparation of mining plans of small mines apply. (Circulated vide letter No. T-41008/1/CGBM/89, dt. 21.6.90).

Sd/-
O.P. Sachdeva
Chief Controller of Mines
Indian Bureau of Mines

To
All RQPs concerned.

Minimum data required for ascertaining prevailing environmental status: environmental baseline information in connection with preparation of mining plan of mechanised mines/projects in non-forest areas (in the case of ISU mines, if party opts for EAC norms to facilitate preparation of EMP for Department of Environment, the EAC norms may be accepted instead).

Table - 1 : Ambient Air Quality Survey

Location of stations	Seasons to be covered	Actual period of survey per season	No. of samples per day	Duration of sampling in hours	Total no. of samples per station to be collected in each season	Parameters to be tested
I. Leeward side of the following locations:						
i) At quarry edge at the point of max. dust concentration.	(i) The worst month of summer i.e. the month having the lowest humidity.	2 days per week for two weeks	2 samples per day	8 hours per samples	8	Respirable dust SPM (wherever applicable hydrocarbons and heavy metals in SPM may also be required), SO ₂ , CO, NOX
ii) Drilling sites	(ii) Post-monsoon					-40-
iii) Close to crusher	(iii) Winter					-40-
iv) Close to loading points						-40-
v) Near mine haulage roads, in the vicinity of human settlements, potato patches, forest, orchards or cultivated lands.						-40-
II. Meteorological data : A wind rose diagram to be prepared at a station located near to the centre of the property.						
The following to be recorded for all the 4 seasons.						
- Air temperature.						
- (Max/min.)						
- Relative humidity (%)						
- Rainfall : Monthly data of last 10 years collected from nearest block development office, etc.						
Nearby villages/human settlement around the quarry within predominant wind direction.						

**Table -2 (i)
WATER QUALITY SURVEY**

Location of sampling points	Seasons to be covered	No. of samples to be collected per station in each season	Parameters to be tested
(1)	(2)	(3)	(4)
<p>1. At discharge point into natural water courses or inland water bodies of the following :</p> <p>(a) mine or quarry water</p> <p>(b) workshop effluents</p> <p>(c) tailing dams or beneficiation plant effluents</p> <p>(d) township/sewage/office complex/ waste water after sewage treatment where treatment plant exists or otherwise the point of discharge of untreated water into natural water courses or inland water bodies or agricultural field.</p>	<p>(i) Post monsoon/winter</p> <p>(ii) Summer for monitoring of perennial water sources or in the case of effluent discharge into natural water courses of inland water bodies or agricultural field, affected seasonal courses, etc.</p> <p>iii) Monsoon for sampling water course near the waste dumps and quarries (and at check dams), both upstream and downstream as well as mine or quarry water discharged into natural water courses, etc.</p>	<p>Three spot samples per season at the rate of one sample each on 3 different days.</p>	<p>The parameters to be tested are based upon IS:2490 (Part-I) 1981 and are given in the Annexure to this note.</p>
<p>2. All more or less perennial water courses or water bodies such as rivers, streams, ponds, springs, water tanks (i.e. excluding seasonal water courses) passing through or located in or near the lease area. However, in the case of base-metal, pyrite, dolomite, fluorite or other mines having toxic mineral content, all water bodies or water courses whether perennial or seasonal may be sampled.</p>			

Table-2 (ii)
WATER QUANTITY

Rate of discharge per minute (litres/second). During-	
Summer Winter, and Monsoon seasons	<ol style="list-style-type: none"> 1) Discharge from mine/water into natural water courses or inland water bodies, etc. 2) Discharge from springs/water ways, rivers, within 5 km buffer zone area. Wherever there are rivers/water ways within 5 km area, measurement to be taken as it enters the 5 km zone boundary and before the boundary. 3) Quantity of water drawn for mining and processing operations.
During the year	

ANNEXURE TO TABLE-2

i) The following parameters as relevant may be tested for water quality

Sl.No.	Characteristic	Standard	Method of test reference
1.	Colour (Hazen units)	IS : 2490	IS : 2488, Part-I, 1966
2.	Ambient temperature (0°C)	-do-	-do-
3.	pH Value	-do-	-do-
4.	Suspended solids, mg/l max.	-do-	-do-
5.	Particle size suspended solids	-do-	-do-
6.	Dissolved solids (inorganic) mg/l max.	-do-	IS : 2488, Part-V, 1976. To be omitted except in the case of ferrous and non-ferrous metal mines.
7.	Oil and grease mg/l max. only (for workshop effluents)	-do-	IS : 2488, Part-I, 1966
8.	Chloride (as Cl), mg/l. max.	-do-	IS : 2488, Part-III, 1968
9.	Fluoride (as F), mg/l, max.	-do-	IS : 2488, Part-II, 1968
10.	Dissolved phosphates (as P) mg/l, max.	-do-	IS : 2488, Part-IV, 1974
11.	Sulphates (as SO ₄ - 2), mg/l max.	-do-	IS : 2488, Part-III, 1968
12.	Nitrates (as NO ₃), mg/l	IS : 10500-1983	IS : 2488, Part IV, 1974
13.	Total Hardness (CaCO ₃)	-do-	-
14.	BOD	IS : 2490	IS : 2488, Part-IV, 1974
15.	COD	-do-	IS : 2488, Part-V, 1976
16.	Ferrous iron, mg/l	-	-
17.	Ferric iron, mg/l	-	-
18.	Calcium (as Ca), mg/l, max	IS : 10500	-
19.	Magnesium (as Mg), mg/l max.	-do-	-
20.	Total coliform count/100 ML in drinking water.	-do-	-

Other parameters/characteristics should be tested in accordance with the IS : 2490 (Part-I, 1981) as may be applicable such as copper, nickel, cadmium, arsenic, cyanides, etc. based on the toxic or polluting effect of the proposed or on-going mining projects taking into account the leaching characteristics of the ore or mineral or sub-grade minerals generated as well as the overburden and waste rocks produced/to be produced.

ii) Following details shall be submitted for water analysis reports

- 1) Location (name of the mine, etc.)
- 2) Sample identification/sample code.
- 3) Date and time of sample taken
- 4) Sample collected by
- 5) Copies of certified analysis are to be enclosed.

Table - 3

SOIL QUALITY SURVEY

Location and No. of samples	Season to be covered	Parameters to be tested
Soil samples are to be collected at the rate of one each representing different land-use areas.	During the dry season avoiding rainy season or very hot season.	Soil is to be analysed and tested for suitability for reclamation purposes (e.g. soil characteristics-particle size distribution, water holding capacity, pH and conductivity, organic matter, free ammoniacal nitrogen, potassium, phosphorus, heavy metals (in PPM), e.g. copper, lead, cadmium, hexavalent chromium, etc.), as may be relevant.

Table - 4

NOISE LEVEL SURVEY

Location of stations	Standard	Season to be covered	No. of readings
i) Near the mine or quarry equipment and fixed plant installations or mobile plants.	DGMS circular No. 18 (Tech) of 1975 and (Tech) (S) of 1990 (d) R(A) and maximum exposure (ours per day)	One season preferably dry season	One reading per station or measurement point. Measurement to be done in the general shift.
ii) Noise produced by mine byes at nearby village or township or public place or road.			

For recording noise level results, place of measurement and time of measurement to be indicated.

Table - 5

Ground Vibrations Measurement

Location of measuring stations. (1)	Seasons to be covered (2)	No. of measurements per station (3)	Parameters to be monitored (4)
At the nearest human settlement and near all important structures such as, archeological monuments, public roads and places, sanctuary, etc.	Dry and Rainy seasons.	At least 3 corresponding to 3 heavy blasts with varying changes on three different days. However, in the case of important public structures liable to be damaged by mining a min. of 30 measurements at different distances with max. charge per delay will be required for statistical analysis to predict the vibration level at the specific site.	Peak particle velocity (ppv) with different frequencies.

Foot Note : 1) For the purpose of this study, the area to be covered will also include a buffer zone of 5 km radius from the area under mining activity/proposed under mining activity.

2) In case of virgin areas/sites, baseline environmental data will be collected for the various seasons adopting frequency of sampling or measurements as per the foregoing in respect of air, water and soil but number and location of sampling stations may be suitably modified. In regard to noise and ground vibrations measurements, these will be introduced within one year of the commencement of the project.

3) i.e. base-line information collected for ongoing mining projects or virgin sites in accordance with the above will be utilised in formulation of the environmental management plan in accordance with the item 13 of the guidelines in respect of the outline for the mining plan circulated to the RQPs.

Table - 6

GROUND WATER SURVEY

A Ground Water Survey report of the area will be submitted.

4 to 5 control points will be fixed so as to monitor the water level and water quality in dug wells within 5 km buffer zone for all the 4 seasons in a year.

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

No.N-11013/1/MP/89-CCOM-Vol.II

Nagpur, the 10.2.93

CCOM'S CIRCULAR No. 1/93

All the recognised qualified persons registered under Rule 22(C) of the Mineral Concession Rules, 1960 are hereby advised that while submitting the mining plans prepared by them for approval to the concerned authorities of Indian Bureau of Mines, they should enclose a certificate that, "The provisions of Mineral Conservation and Development Rules, 1988 have been observed in the mining plan of.....mine for an area of.....Hectares in.....district. of State of/applied by and wherever specific permissions are required, the applicant will approach the concerned authorities of Indian Bureau of Mines."

This certificate will be in addition to the certificate presently being given by the recognised qualified persons regarding observance of provisions of Mines Act, Rules and Regulations made thereunder.

Sd/-
(O.P. Sachdeva)
Chief Controller of Mines

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
Office of the Chief Controller of Mines**

No.N-11013/1/MP/91-CCOM

Nagpur, dated 11.2.93

CCOM CIRCULAR No. 2/93

Sub : Outline of the Mining Plan including Environmental Management Plan (EMP) - Guidance in respect thereof already issued to RQPs by IBM -Clarifications reg.

In continuation to the CCOM's earlier circular No. 3/92 issued vide letter of even No. dated 9/16.10.92 on the above subject, RQPs are requested to collect the following baseline information also for incorporation in EMPs pertaining to the mechanised mines or mechanised mining projects in non-forest areas while carrying out the environmental baseline information survey.

1. Air Quality :

- a) Dust fall or precipitation rate
- b) Respirable free silica

It is clarified that this information is to be collected and incorporated in the mining plan in addition to the information required to be furnished vide CCOM circular No. 3/92 dt. 9/16.10.92.

2. Land reclamation and Afforestation programme :

The planning to reclaim land to be mined over the next 5 years may be given attention at the time of mine excavation planning for the similar period. In the conceptual mine planning covering the remaining life of the mine, the aspect of land reclamation and rehabilitation in regard to land to be mined in future should also be covered together with the mine excavation planning. The afforestation programmes should also be similarly dealt with giving yearwise plantation programme for the first five year period and for the remaining life of the mine a conceptual plan of afforestation for successive blocks of five year periods (including any remaining part thereof). These actions at the planning stage are considered necessary for meaningful compliance with rule 34 relating to Reclamation and Rehabilitation of Lands of the Mineral Conservation and Development Rules, 1988, and should be given particular attention in respect of mining plan of category "A" mines (as defined under rule 42 of MCDR'88).

Yours faithfully
Sd/-
(O.P. Sachdeva)
Chief Controller of Mines
Indian Bureau of Mines

To the recognised qualified person concerned

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No. N-11013/3/MP/90-CCOM

Nagpur, Dt/- 21 April, 1993

CCOM'S CIRCULAR NO. 3/93

Sub. : Outline/guidelines for preparation of the mining plan including environmental management plan for mica mines.

As the Recognised Qualified Persons are aware that outline/guidelines are already in force for the preparation of mining plans, In respect of mining plans of mica mines, difficulties have been experienced in complying with the requirements of the prescribed outline and guidelines. In order to overcome the situation, separate outline/guidelines for preparation of mining plan inclusive of environmental management plan for mica mines have now been prepared by IBM. A copy of the same is forwarded for your information and use in the preparation of mining plan of mica mines in future.


(OP SACHDEVA)
CHIEF CONTROLLER OF MINES
INDIAN BUREAU OF MINES

INDIAN BUREAU OF MINES

OUTLINE/GUIDELINES FOR PREPARATION OF THE "MINING PLAN" INCLUDING ENVIRONMENTAL MANAGEMENT PLAN FOR MICA MINES

1.0 INTRODUCTION

This is the opening chapter of the mining plan. It should give the background information about the exploration and development carried out in the area, which has formed the basis for the preparation of the mining plan. It may also give any other introductory information about the purpose of seeking the grant of mining lease, the applicant's basic experience in mining areas already held on mining lease, etc.

2.0 GENERAL

2.1 NAME OF THE APPLICANT WITH COMPLETE ADDRESS

The complete postal address of the applicant should be given with pin code, telegraphic address, telephone and telex number, if any. Name of the nominated owner and a list of Board of Directors with their addresses may also be given.

2.2 STATUS OF THE APPLICANT

The status of the applicant should indicate whether the applicant is a private individual, co-operative, private company, public company, public sector undertaking, joint sector undertaking or any other profession or nature of business of the applicant may be stated.

2.3 MINERAL OR MINERALS WHICH THE APPLICANT INTENDS TO MINE

The name of the mineral/minerals/ore which the applicant intends to mine or apply for and extent should be indicated.

2.4 NAME, ADDRESS AND REGISTRATION NUMBER OF THE RECOGNISED PERSON WHO PREPARED THE MINING PLAN

Name and complete postal address of the person who prepared the Mining Plan in accordance with Rule 22 B of MCR 1960 (as amended upto February 1987) alongwith the registration number granted under Rule 22 C of the same Rule along with its date of validity may be furnished.

2.5 NAME AND ADDRESS OF THE PROSPECTING AGENCY

The name(s) and complete postal address(es) of the agency/agencies who carried out the prospecting in the area should be indicated. This agency may be the applicant, Geological Survey of India, the State Directorate of Geology and Mining, the Mineral Exploration Corporation Ltd. , or any other agency.

2.6 DETAILS OF THE AREA

The mining plan should indicate the details of the Area in the following manner :

(a) The area should be marked on a Survey of India Topo sheet or on a cadastral map or forest map as the case may be. In case neither of these maps is available the Area should be marked on a plan prepared specially for the purpose on a scale 1:5000 linking it with any important reference point available in or around the area.

(b) The details of the land covered in the "Area" should be indicated in the following proforma :

District and State	Taluka	Village	Khasra No./Plot No./ Block/forest range/ Felling series etc.	Area in Hect.	Area under forest land	Ownership and occupancy status
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2.7 PERIOD FOR WHICH THE MINING LEASE IS REQUIRED

The number of years for which the applicant proposes to apply for the mining lease of the "Area" should be indicated.

2.8 INFRASTRUCTURE

The information about the infrastructure should inter-alia include availability of water and electric supply at the mine site, the means of communication, and transport, the nearest processing plant, godown or rail head for despatch of minerals, schools, dispensary, etc. including the distance therefrom.

3.0 GEOLOGY AND RESERVES

This will indicate the location of the deposit with latitude and longitude (with Survey of India toposheet number). Broad physiographic features, summarised account of regional geology with sequence, local geological peculiarities of the area under reference, details of exploration already carried out/proposed to be carried out etc. under various sub-headings as given below shall be described in this chapter.

3.1 PHYSIOGRAPHY

This should contain a description of the relief of the area, such as prominent physiographic features, drainage pattern, natural water courses, PWD road passing through the area, situation of villages, forest areas and agricultural land, irrigation works, etc.

3.2 GEOLOGY

Summarised account of the regional geology of the area such as lithology, succession of rocks, structural disposition of the pegmatite (s), nature of emplacement, the controls of mineralisation, nature of the wall rocks, dip and strike of the pegmatites and wall rocks should be described on a regional level.

Description of local geology of the area applied may be given covering broad physiographic features, lithological formations encountered, structural features, nature of mineralisation, disposition of pegmatite(s), internal structure of pegmatite or any other control of mineralisation and wall rocks may be described. Physical and mineralogical characteristics of the associated/constituent minerals should also be described. Preferably chemical characteristics of such minerals should also be discussed.

3.3 DETAILS OF EXPLORATION

(i) Already carried out in the area

Exploratory operations such as pitting, trenching, aditing, bore holes, their spacing, quantum of work carried, size and shape of the pegmatite body (ies) alongwith mica bearing portion(s), if any, should be discussed.

In virgin areas, where no previous mining activity has taken place within a co-relatable distance or where there are abandoned mines for which plans & sections and other details of mineralisation are not available, the surface geological map shall be prepared for orienting future course of development. Additional information on prospecting/exploration carried out by GSI, State Govt. or NGRI in the area, if any, may also be included in the relevant maps, if possible.

The results of the exploratory operations should be synthesized and brought out in the form of a geological map on the topographic map of the lease area prepared on a scale of 1 : 1000. At strategic points, cross sections should be prepared on a scale of 1 : 200 as per the Central Govt's general directives to mica mines issued vide directive No. 8(G)/CBM/67, dated 7th November, 1967 published in Govt. of India Gazette, Part-III, Section-I, dated 2.12.1967 issued to mica mine owners in Andhra Pradesh for submission and maintenance of plans etc. Similar directives were also issued to the mica mine owners in the States of Bihar and Rajasthan vide directive No. 287(24)/Dio/66, dated 30th Nov., 1966 published in Govt. of India Gazette, Part-III, Section-I, dated 24th Dec., 1966 and No. 8(6)/CBM/67, dated 17th October, 1967 published in Govt. of India Gazette, Part-III, Section-I, dated 11th Nov., 1967 respectively and the amendments issued to the above directives subsequently vide T-43007/CGBM/84, dated 9.9.1988 published in Govt. of India Gazette, Part-III, Section-I, dt. 7th Nov., 1987 (copy enclosed).

In running mines, the available geological information from the developments carried till then, may be synthesized to give the available picture on the size and shape of the pegmatite/portions thereof, along with the attitude of mineralisation, likely persistence in strike & depth, quality of mica expected and favourable locales of mica mineralisation supported by plans and sections.

(ii) Proposed to be carried out

The future programme of exploration may be broadly indicated taking into consideration the future development/production programme.

In the underground mines exploration for parallel/sub-parallel pegmatites by means of cross cuts and/or ETC drilling at 30 to 40 m intervals (or at structurally delineated locales) in the same level, should be proposed. Staggered pattern may be adopted while proposing drilling at lower levels at 20 to 25 m vertical intervals to precisely help in establishing extent of delineating the shape of pegmatite or portion(s) thereof. The length of the ETC drill holes may be 10 to 15 m placed across at right angles to the drives or along crosscut end points.

For tracing an echelon pegmatites in the strike extension, exploration for concealed pegmatites by means of horizontal ETC drills, particularly in places of closures (suspected or otherwise) over a length of 10 to 15 m from the schist pegmatite contact may also be included.

Maximum stress should be laid on future geological mapping, for gathering basic information on the delineation of mineral assemblages and internal structures of the pegmatites etc to decipher favourable places of mica mineralisation. The location of drill holes as well as the ETC drill logs based on drill cuttings may be shown on the levelwise plans and sections on an yearwise basis.

3.4 METHOD OF ESTIMATION OF RESERVES

Methodology of estimation of reserves should be described. Estimates of mica reserves should be attempted only in cases where underground geological plans and sections together with the assay plan showing the incidence of mica recovery in Kg per m. length of underground development are available. It is expected that all the working mines do possess these plans and sections in pursuance of the above referred directives, and as such the reserve estimates should be incorporated in respect of the mining plans submitted under MCDR and under MCR (for renewal cases). This should broadly be based upon the physical limits of the mica mineralisation or portions thereof as established in strike or depth with width, and also possible depth extension. In underground working, it is preferable to work out levelwise reserves. Where assay plans are still not prepared or not upto-date, no such attempt should be made. However for future use, maintenance of such records should be immediately commenced.

4.0 MINING

In the case of mica mines, usually the areas taken up for mining leases/operations are either virgin areas or old mines. In case of virgin areas (where previous mining activity has not taken place within correlatable distances) a surface geological map should form a base for formulating the mode of development. The geological map of the area should depict the exploration work already carried out and that proposed (refer para 3.3(i)).

In areas where old mines are to be reclaimed, a time schedule for activities such as setting up of the site services, dewatering and reclamation of the mine and re-establishment of mine support and necessary mine facilities is to be proposed even though tentatively along with the scheme of further development of the mine.

The location of drives/winzes/cross-cuts on plans and sections may be indicated if the workings are already mapped, otherwise it can be attempted only after the workings are re-mapped.

In both the above cases it is better if an attempt is made in the mining plan, to describe the basis of selection of pegmatite or portions thereof for taking up underground development work. As far as possible use should be made of the assay plan (if available), knowledge of the internal structure of pegmatite, favourable mineral assemblages, loci of mineralisation, inferences from the behaviour of mica mineralisation in the adjoining mines and areas etc. alongwith expectation of the quality of mica.

4.1 YEARWISE DEVELOPMENT FOR THE FIRST 5 YEARS

Generally under this head the minimum linear meterage of development work anticipated levelwise and yearwise for the first one or two years is to be indicated besides describing the mode of entry and development and development workings to be established. Quantum of rock/overburden etc. to be excavated in the case of upperchala workings may also be assessed tentatively.

Before the end of each one or two years as the case may be, the results achieved may be reviewed against the basis of projected development and for this the programme of yearwise development for the ensuing period of one or two years (depending on the persistence of mineralisation) may be furnished, and so on.

While preparing the plans to be submitted under MCDR or for the purpose of renewal of lease i.e. in the case of the existing mines, where surface and underground geological plans and sections along with assay plans are available; the plan of development should be prepared on the basis of these plans and sections. In case of old mines where such plans and sections are

not prepared/available, fresh mapping/remapping of the old workings may be undertaken. Only geological plans and sections of the area covering the immediate vicinity of the proposed development as necessary to guide development work shall be adequate. Old production records, however, should be consulted as far as available for any planning for future development.

The following aspects would be covered.

(a) Mode of entry :-

Mode of entry, including second outlet indicating the location and size of shafts/adits/inclines etc.

(b) System of hoisting and ladderways for dealing with waste rock, mica, mesh and material.

(c) Underground layout :-

Level intervals with basis thereof, size of development openings with the basis thereof, size of developed/stope blocks and basis thereof shall be described.

In designing the size of the opening, level interval, and spacing between winzes and raises, the guidelines given in rule 17 and 19 of MCDR, 1988 shall be duly taken into account, also the directives issued by the Central Govt. to mica mine referred above should be carefully followed in the design of the mine and maintenance of underground and surface geological plans should form an integral part of the activity of development of the mine and in this regard a clear indication of the arrangement made by the mineowner for preparation and periodical updation of such plans & sections.

4.2. YEARWISE PRODUCTION FOR THE FIRST 5 YEARS

Production forecast in terms of tonnage is not possible during development. In respect of mines under stoping operations or proposed for stoping operations only, it is possible to give a production forecast provided the blockwise estimates of mica reserves have been attempted based on the levelwise geological plans, assay plans etc. In such cases the yearwise production plans may be incorporated in the mining plans. In other cases it may be difficult to prepare production forecasts.

(a) Method of stoping :-

Proposals if any, for stoping (partial or complete) should be included in the mining plan if considered necessary for maintaining production along with corroborating plans and sections showing the limits of proposed stoping and detailed description of the method of stoping, tentative sequence of operation etc. and the anticipated date of commencement, if possible.

The method of stoping should be planned with due consideration of the geology of the deposit and the geo-mechanical

properties of the pegmatite and the host rock. The stoping practices chosen should be such as to cause minimum disturbance to the surface and ensure optimum recovery of the mineral. The sequence of mining operations at the stage when the mine will reach the level of full rate of production may be described.

(b) Mine support :-

Means of artificial support in shafts/adits, development headings, winzes/raises may be indicated with due sketches of cross-sections.

(c) Drilling and blasting :-

Drilling pattern in barren development alongwith number of holes, explosives to be charged, pull per around etc. may be given.

The arrangements made for safe and secure storage of explosives, the capacity of the magazine vis-a-vis rate of consumption of explosives should be indicated. Location of the explosive magazine may also be furnished.

(d) Mine ventilation :-

Steps for securing adequate supply of air in all parts of the mine and prevention of excessive rise of temperature and humidity may be described, covering natural/mechanical ventilation as the case may be so as to ensure adequate ventilation of the mine.

(e) Mine water :-

Make up of mine water and arrangement for pumping and prevention of inundation may be described, alongwith capacities and location of the pumps in the mine.

(f) Loading and mucking of mica and waste rock.

(g) Scheme of disposal of wall rock including the sites identified for such disposal.

(h) Disposal and proper stacking of waste/sub-grades of mica and associated pegmatite minerals. The type of rejects, their rate of generation annually should be indicated.

Nature and extent of the land chosen for dumping overburden, top soil, sub-grade minerals and tailings, alongwith the type of land as to whether it is barren mineral bearing, agricultural, grazing land, forest land and justification for its choice may be given. The configuration of the dumping ground and its preparation, if any, may be explained. The manner of dumping, proposed configuration of dumps at different stages, extent and maximum height of each dump should be given.

(i) Proposal for utilisation of associated minerals.

Information about the quantity of waste/scrap mica along with its quality in the existing dumps may be furnished, dumpwise showing the locations of such dumps on the surface plan along with precautions taken to prevent the losses due to weathering etc. Similar information should be given in respect of feldspar & quartz. Wherever feasible, quartz should be dumped separately, keeping an account of the tonnages.

(j) Existing dumps :-

Large quantities of free feldspar and quartz interlocked with each other, are generated incidental to mica mining; part of which is utilised as fill materials in stopes, and still considerable quantities are left out. These have to be brought to the surface for proper maintenance of underground mines. As such considerable expenditure is involved in their final disposal. The question of utilisation of these minerals by hand sorting and/or separated by suitable crushing sizing and beneficiation techniques deserves more attention than hitherto given by the mica mineowners. In the mining plan the prospects of promotion of utilisation of the associated minerals as well as greater utilisation of mica scrap and waste should be carefully examined including efforts for conducting market survey and requisite measures indicated in this regard as far as possible.

(k) Extent of mechanisation :-

The extent of manual mining or mining by the use of machinery should be explained. The type of machines and equipment proposed to be used in different mining operations viz. drilling, loading, haulage/transport, hoisting and other miscellaneous operations may be described giving the capacities and numbers of machinery used/to be used.

(l) Misc. operation, if any. :-

Adequacies of the capacity of the hoisting and pumping may be assured. Location of the shaft with reference to the highest flood level which may be decided safely. The quantity of broken pegmatite rock to be used as fill in the stopes shall be estimated and all excess pegmatite rock along with wall rocks obtained in underground workings shall be brought to surface instead of leaving or packing them in the underground. The capacity of the hoist should be adequate for the purpose.

5.0 USE

Generally the mica obtained from underground is hand-dressed for removing adhered rock pieces. Subsequently the crude mica is processed to yield block mica, condenser film and scrap and generally the scrap mica also gets classified as processed scrap and unprocessed scrap. The dressed mica as well as scrap is marketed for indigenous consumption as well as for export. In some of the mica belts like Bihar, the crude mica is auctioned after preliminary hand-dressing. To the extent possible, the use to which the different forms of mica is used may be given.

6.0 MICA DRESSING

In case mica/any other mineral, is processed/graded before despatch, the nature of processing/grading proposed to be undertaken may be described. The methods of dressing, sizing, screening and sorting may also be covered alongwith recoveries of various grades/sizes being obtained.

In case waste and scrap mica is proposed to be recovered/processed from the dumps, the quantity recovered/proposed to be recovered along with avenues of marketing may be indicated.

7.0 SURFACE TRANSPORT

The mode of transport of mica/ore from the mine to factory/processing plant etc. may be given along with the distances, for transport of mineral.

8.0 EMPLOYMENT POTENTIAL

A list of technical personnel with their qualifications, supervisory staff, operating staff, skilled, semi-skilled, unskilled and other category of staff proposed to be engaged should be given. This should also include the organisational chart.

9.0 ENVIRONMENT MANAGEMENT PLAN

Base-Line Information

- (i) Existing land use pattern.
- (ii) Water regime.
- (iii) Human settlements.
- (iv) Quality of water.

ENVIRONMENT IMPACT ASSESSMENT AND MANAGEMENT PLAN

a) Land Environment

- i) Landscape and aesthetic environment.
- ii) Soil & land use pattern and proposal for reclamation of land affected by mining activities during and at the end of mining lease period, including closing and securing of abandoned pits and inclines and stabilisation of dumps.
- iii) Agricultural land & rehabilitation of affected people, if any.
- iv) Forest cover and programme of afforestation.

b) Water Environment

- i) Surface water. Water danger plan.
- ii) Ground water and measures for disposal of water from mine, including treatment, if necessary.
- iii) Water quality.

c) Air Environment

- i) Ambient air.
- ii) Underground mine ventilation.
 - (a) Natural
 - (b) Mechanical
 - (c) Ventilation plan.

d) Socio-economic Environment

- i) Social and demographic profile.
- ii) Occupational health and mine safety.
- iii) Human settlement and socio-economic benefits arising out of mining.
- iv) Recreational facility.

*= In the present day context of plantation of trees including plantation for social forestry purposes, it is highly desirable (i) to make up for the loss of trees in the course of mining and (ii) to improve the ecological and environmental status of the mining area. Proposals may be made accordingly.

The programme should cover the entire lease period to be broken up over the 5 year blocks with the first 5 years period being further broken up into yearwise programme indicating and demarcating the areas to be covered and the number of trees to be planted. The programme should be spelt out with the aid of suitable maps and plans.

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No.N-11013/3/MP/90-CCOM

2nd Floor, 'A' Block
Indira Bhavan,
Civil Lines, Nagpur

Dated/- 4.1.94.

CCOM'S CIRCULAR NO.1/94

Subj: Preparation of mining plan of underground mines other than Mica mines - Outline of the chapter on conceptual mining plan.

The need for conceptual mining plan in respect of opencast mines was spelt out and certain guidelines provided vide CCOM's circular no.2/91 dt.25.3.91 to ROPs.

The outline of the chapter on conceptual mining plan for underground mines (excluding mica mines) is hereby circulated to all ROPs for information and use in connection with preparation of mining plans of such underground mines with immediate effect. The attention of ROPs is also invited to the foot notes appended to the outline.



(O. P. SACHDEVA)

CHIEF CONTROLLER OF MINES
INDIAN BUREAU OF MINES

Encls: As above

To,
All Valid Recognised Qualified Persons.

OUTLINE OF CONCEPTUAL MINING PLAN FOR UNDERGROUND MINE
(EXCEPT MICA)

1.0 Knowledge of Orebody & Its Behaviour

1.1 Size extent and spatial disposition including in depth of the orebody(ies) along with brief mention of the important structural features of the orebody and the wall rocks and changes therein. Demarcation of their outer mineable limits.

1.2 Strata Control

1.2.1 Strata control including behaviour of orebody/wall rocks and need for artificial support - both temp. and permanent.

1.2.2 Choice of size of development openings/size of ore blocks and pillars.

1.3 Geo-technical investigations carried out already, if any, with respect to size of development opening or the method of stoping and the agency engaged for it.

2.0 Future Programme of Expansion, if any

2.1 Proposals for expansion of the production capacity of the mine/beneficiation plant, if any, indicating the need for the same.

2.2 Proposals for introducing new technology as well as induction of new or additional mining or beneficiation equipment, plant or machinery - Brief particulars of the same.

3.0 Future Mine Development

3.1 Location of additional mine entries or extension of existing ones, sizes etc. hoisting capacities and probable time-frame of construction. Also the limits upto which mine will be served by these entries, the location of the subsidiary mine entries either from surface or underground and the limit upto which they will serve the orebody(ies).

3.2 Overall scheme of mine development for exploitation of the orebody upto the outer mineable limits as indicated above along with the likely method and annual rate of development proposed. Envisaged phases thereof.

4.0 Exploration after initial 5-Year Period

4.1 Rational of further exploration.

4.2 Exploration from surface.

4.3 Exploration from underground.

5.0 Overall Scheme of Stopping

5.1 Changes envisaged, if any, in method with increase in depth or other strata conditions.

5.2 General scheme and sequence of stopping, stope productivity, extent of mechanisation etc. to be adopted in the mine as a whole.

5.3 Percentages of production to be obtained from mine development and stopping at different stages of the time.

5.4 Steps proposed to ensure that rate of development inclusive of winzng and raising keeps pace with the rate of stopping over the life of the mine.

5.5 In case of filling, source of fill material and method proposed for underground transport and filling in the stopes.

6.0 Environmental Control Measures

6.1 Longterm measures proposed to protect against damage to land by subsidence, if any. Delineation of the outer limit of the finally stoped out area on the surface plan and minimum planned thickness of cover. Demarcation of the outline of the surface area likely to be affected by subsidence (considering also the angle of draw).

6.2 Proposals for afforestation/plantation.

6.3 Land and tailings pond reclamation proposals.

6.4 Size of protection shaft pillar and demarcation of its outline on plan.

6.5 Monitoring system especially for acid mine drainage, effluents from tailings pond/industrial area, dust, ground water, etc.

6.6 Rehabilitation of displaced persons, if involved.

Foot Note : (1) The conceptual mining plan shall be depicted on plans and sections including longitudinal sections, underground plan, transverse sections, surface plan, surface & underground geological plans, environmental plan incorporating features as prescribed in MCDR, 1988 and other plans as per MMR, 1961, supported and supplemented by tabular and descriptive matter (text) as necessary.

(2) The requirements of information and data for writing this chapter will be much less in respect of small predominantly labour intensive underground mines compared to the well established, mechanised or semi-mechanised or large underground mines.

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No.N-11013/3/MP/90-CCOM

Nagpur, dt/- 7.11.94.

CCOM'S CIRCULAR NO.3/94

Sub: Outline/guidelines for preparation of the mining plan
including environmental management plan for mica mines
- Applicability thereof.

RDPs are aware that the outline/guidelines on the above subject
have been circulated to them vide CCOM's circular No.3/93 dt.21.4.93.

In continuation to this circular, it has been decided that the
mining plans of associated minerals in pegmatite other than mica when
mined by underground methods of mining barring the atomic minerals is
also to be prepared following these guidelines.


(M. MUKHERJI)
AG. CHIEF CONTROLLER OF MINES
INDIAN BUREAU OF MINES


GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No.N-11013/9/RQP/91-CCOM

Nagpur, dated 27/7/1996

CCOM'S CIRCULAR NO.1/96

You are aware that IBM is conducting annual workshops with RQPs in its each region since last 3-4 years. Various issues were raised by RQPs in such workshops and necessary clarification/guidance was given to them by IBM officers. It was felt that the RQPs in one region should also know about the outcome of meetings held in other regions in order to keep themselves informed about the issues raised by the RQPs of other regions. Accordingly a compilation of salient issues raised by RQPs and clarification given to the same by the IBM officers has been made, a copy of which is enclosed herewith for guidance of RQPs.


(M. MUKHERJI)
CHIEF CONTROLLER OF MINES
INDIAN BUREAU OF MINES

To,

All RQPs

COMPILATION OF SALIENT ISSUES RAISED BY RQPS IN MEETINGS AND
CLARIFICATIONS GIVEN BY IBM

Issued raised by RQP	Clarification given by IBM Officers
<p>1. Dumping in non-lease areas</p> <p>If a mining plan with a proposal for dumping in non-lease area is approved by IBM, what would happen, if the State Govt. does not agree to such proposal while granting lease.</p>	<p>Basically it is a matter between State Govt. and mine owner. IBM would have no objection for dumping in non-lease areas, if it is acceptable to State Govt. But most of the State Govts. do not agree to such proposal. So it is better to settle the matter before mining plan is prepared because if at a later date such proposal is not approved by State Govt. a modified mining plan will have to be prepared, which may sometimes lead to complete revision of mining plan.</p>
<p>2. Verification of ownership of land</p> <p>Sometimes IBM officers are going into verification of ownership of land which is the job of State Govt.</p>	<p>Generally verification of ownership of land is not done by IBM which is within the domain of State Govt.</p>
<p>3. Relaxation in exploration norms</p> <p>RQPs wanted relaxation in norms of exploration for small mines.</p>	<p>Mining plan should satisfy the provisions of section 5(2)(a) of MMRD Act regarding establishment of mineral contents within lease area.</p> <p>Further obtaining a prospecting licence is not essential for a grant of mining lease, when sufficient exploratory data are available otherwise.</p>
<p>4. Minimum area required for mining lease /</p> <p>In many workshops RQPs raised the issue of minimum area required for mining dumping and other infrastructure facilities.</p>	<p>Attention of RQPs was invited to CCOM's Circular No. 4/93 dt. 22.7.93 which indicated that area should be such as to favourably predispose the applied area to systematic and complete extraction of the mineral.</p> <p>It was suggested that mining plans can be considered favourably for approval, if 60-70% of reserves can be mined out.</p>
<p>5. Compensatory afforestation</p> <p>Some RQPs suggested to incorporate separate para in mining plan for "compensatory afforestation".</p>	<p>It was clarified that generally compensatory afforestation is done in some other area than mining lease and by the forest deptt. So there is no need to furnish those details in mining plan.</p> <p>However, afforestation in the EMP is a separate requirement and should not be linked with compensatory afforestation.</p>

7. Survey

For topographical survey, it has generally been observed that the toposheet is not available for reference to carry the level from a known point. Under this circumstance, establishing a temporary bench mark should be allowed by IBM as done by PWD.

It was suggested that RL can be transferred from a known permanent bench mark (e.g. Rly. Station) for a cluster of mines by carrying fly levels.

8. Small mines

What is the definition of 'small mine' in the context of simplified format for preparation of mining plan.

It was clarified that the mines have been classified under MCDR, 1988 as 'A' and 'B' categories. The category 'B' mines should be treated as small mines and mining plans prepared accordingly.

9. Reserves

What parameters should be considered while categorising reserves in proved, probable and possible categories.

It was clarified that where degree of confidence is +80%, it should be proved category, if it is +50% it should be probable category and below 50% it should be in the possible category. It was also advised to refer to IS/2595-1983 where terminology and categorisation of reserves have been standardised.

10. Mapping

How mapping could be done in an area covered by soil.

It was clarified that a geological map is to show the concealed outcrops of rocks available below the soil cover. For this purpose, if necessary trial pitting may have to be done on the soil to expose the rocks below the soil cover. Inferred contacts of various litho units can be shown based on the projections from boreholes, mine workings, natural or artificial cuttings in the ground exposing the rocks. A map showing only soil could not serve the purpose of understanding the geology of the area. However, soil cover should be shown on the surface map so that it was possible to know the occurrence of soil in the area which is useful, as it supports vegetation and has to be preserved.

11. Mining plans within CRZ

What will be the status of mining plans submitted for renewal of leases in CRZ, which have been granted prior to the notification.

It was clarified that mining has been banned within 500 m of High Tide line, vide CRZ notification, except in case of rare minerals not available outside the CRZ. As such the mining plans of all other minerals will not normally be approved by IBM.

12. Balanced development & simultaneous backfilling

Questions were raised by the RQPs on this issue.

It was clarified that generally the mine managements have been found to be interested in short term gains instead of planning for sustained development. If balanced development of the deposit is taken up by having benches from surface to deepest mineable depth from the earlier stages, it would definitely go a long way in conserving the mineral resources and recovering more mineral from the ground besides helping in resorting to simultaneous back-filling along with mining. If simultaneous back-filling is possible, it is a very good system because there is generally shortage of space for dumping on the surface, which can be overcome if the waste debris can be backfilled. It also helps to reduce the degradation of land caused by dumps and in restoring the excavated ground to its near original contours and thus reclamation of the disturbed area is possible by afforestation over backfilled pits. The distance of dumping of waste is also likely to be reduced in this system. However, it was also clarified that this method can be suggested where it is techno-economically feasible. It can not be easily applied in case of steeply dipping deposits of limited strike length. If several places have to be mined simultaneously in the deposit for the purpose of blending to obtain the desired grade of ore, this system may not be possible. But in case of deposit having uniform grade of ore over a long strike length it should be easily possible to mine from one end of the strike to the other upto the economic mineable limit of mining and carry out simultaneous backfilling without any difficulty. In the case of more or less flat deposits or deposits with gentle dips, it should not be difficult to adopt simultaneous backfilling in worked out portions, if the mineral has been extracted upto economic limit of depth.

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

No.N-11013/1/95-CCOM

Nagpur, dated 3/5/1996

CIRCULAR

Consequent to the deliberations of regional seminars on Liberalisation of Mineral Sector organised by FIMI with active participation of Ministry of Mines, Ministry of Environment & Forest as well as State Governments, a working group on mining plan was constituted by FIMI pursuant to the recommendation of the seminars for the purpose of simplification of outlines/guidelines of mining plan, in which alongwith other members from industry, IBM was also represented.

Accordingly, a simplified format in respect of very small 'B' category mines was devised and circulated amongst members of working group and discussions held with the Secretary General, FIMI subsequently. A finalised mining plan format for very small 'B' Category mines (manual, open cast mines not using explosives and where the average employment as per the explanation furnished in MCDR, 1988 does not exceed 25) approved by CG, IBM is circulated herewith for adoption with immediate effect.

Encl.As above


(M. MUKHERJEE)
CHIEF CONTROLLER OF MINES
for CONTROLLER GENERAL

To,

All Recognised Qualified Persons

INDIAN BUREAU OF MINES
MINING PLAN FORMAT
(For very small 'B' category mines)

INTRODUCTORY NOTES

1. Very small 'B' Category mines : manual, opencast mines not using explosives, and where the average employment (as per the explanation furnished in MCDR, 1988) does not exceed 25.
2. Chapters 3-8 should be supported by necessary plans and sections.
3. If more space is needed to fill out an item of information, it may be suitably adjusted. All the plans and sections should be in accordance with MCDR'88.

1. GENERAL

- a) Name of applicant -----
 Address -----
 Distt. ----- State ----- Pin Code -----
 Phone -----
- b) Status of applicant
 Private Individual ----- Cooperative -----
 Private Company ----- Public Company -----
 Public Sector Undertaking -----
 Joint Sector Undertaking -----
 Other -----
- c) Mineral/s which applicant intends to mine -----
- d) Period for which the mining lease is required or granted/
 renewed -----
- e) Name of RQP preparing mining plan -----
 Address -----
 Phone ----- Fax -----
 Registration No. -----
 Valid upto -----
- f) Name of prospecting agency -----
 Address -----

2. LOCATION

- a) Details of area (with location map)
 District and State -----
 Taluka -----
 Village -----
 Khasra No./Plot No./Block Range/Felling Series etc. -----
 Area (Hectares) -----

Whether the area is in forest (please specify whether protected, reserved, etc.) -----
Ownership/Occupancy -----
Toposheet No. with latitude & longitude -----

Land use pattern -----

- b) Attach a location map showing boundaries of the mining lease adjoining area, roadways, railways, natural drainage system and other surface features, if any. It is preferred that the area be marked on a Survey of India topographical map or a cadastral map or forest map as the case may be. However if none of these are available, the area should be marked on a plan prepared especially for the purpose on a scale of 1:5000 linking it with any important reference point available in and around the area.

3. GEOLOGY AND EXPLORATION

- (a) Describe briefly the general topography explaining whether it is a plain land or a hilly area and local geology of the mineral deposit within the leasehold. Attach a geological plan on 1:1000/1:2000 scale with 3-10 m contour interval.

- (b) Describe briefly prospecting/exploration work done to date viz. geological mapping with scale of mapping, pitting, trenching etc. alongwith the evidence already existing about the mineral deposit in the area or in the vicinity.

- (c) Describe briefly, exploration proposed to be carried out yearwise, for the next five years indicating same on the geological plan .

4. RESERVES

- (a) Give estimates of geological reserves alongwith grade under Proved, Probable and Possible categories by standard method of estimation supported by analytical reports.

5.a) DEVELOPMENT AND PRODUCTION PROGRAMME

Outline briefly, yearwise, development and production programme for the first five years including precautions to be observed to prevent haphazard excavation of pits, scattering of waste and sub-grade mineral and avoidable loss of mineral in ground.

- 5.b) Manpower Deployment : State average daily employment and statutory personnel under MCDR '88**

- 5.c) Use of mineral : Describe the utilisation of mineral and the type of industry (please specify) to whom it will be sold or is being sold.**

6. WASTE DISPOSAL ARRANGEMENTS

Describe briefly the arrangements made for top soil, mineral rejects and waste disposal including precautions taken in selection of disposal site(s) along with their respective quantity likely to be generated for the five years. (Indicate locations of the same on surface plan)

7. RECLAMATION PLAN

Describe briefly the yearwise reclamation plan, giving the proposed plantation programme, scope of backfilling worked out pits.

8. STRATEGY FOR PROTECTION OF RIVER COURSES, NALAS, WATER TANKS, VILLAGES, IMPORTANT MONUMENTS, IF ANY

Briefly outline the proposed strategies (if any) for protection of the following :

a) river courses -----

b) nalas -----

c) water tanks -----

d) villages/houses/hutments/agricultural land -----

e) important monuments -----

9. ANY OTHER RELEVANT INFORMATION

Signature of Recognised Qualified Person

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

Nagpur. dated 20.2.1997

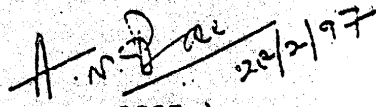
M-11013/1/MP/95-COM

C I R C U L A R

Consequent to the deliberations of regional seminars on Liberalisation of Mineral Sector organised by FIMI with active participation of Ministry of Mines, Ministry of Environment & Forest as well as State Governments, a working group on mining plan was constituted by FIMI pursuant to the recommendation of the seminars for the purpose of simplification of outlines/guidelines of mining plan, in which alongwith other members from industry, IBM was also represented.

Accordingly, a simplified format in respect of A & B Category Mines other than very small 'B' category mines was devised and circulated amongst members of working group and discussions held with the Secretary General, FIMI subsequently. A finalised mining plan format is circulated herewith for adoption with immediate effect. The mining plan format in respect of very small 'B' category mines has already been circulated vide this office circular of even No. dated 3.6.96.

Encls. above


(A.N. BOSE)
CHIEF CONTROLLER OF MINES

To

All Recognised Qualified Persons

MINING PLAN FORMAT
('A' and 'B' Category Mines)
As per MCDR, 1988
INTRODUCTORY NOTES

1. 'A' category mines : all mines excluding 'B' category mines
'B' category mines : all 'B' category mines excluding very small 'B' category mines i.e. manual opencast mines not using explosives and where the average employment (as per explanation furnished in MCDR,1988) does not exceed 25.
2. If more space is needed to fill out a block of information, use additional sheets and attach to form. All the plans and sections should be in accordance with MCDR'88 and or MMR'61.

1. GENERAL

- a) Name of applicant -----
Address -----
District-----State-----Pin code-----
Phone -----Fax -----Gram-----Telex-----
- b) Status of applicant
Private Individual ----- Cooperative Association -----
Private Company ----- Public Company -----
Public Sector Undertaking -----
Joint Sector Undertaking -----
Other (pl. specify)-----
- c) Mineral/s which are occurring in the area and which the applicant intends to mine -----
- d) Period for which the mining lease is granted/ renewed/proposed to be applied -----
- e) Name of RQP preparing Mining Plan -----
Address -----
Phone ----- Fax -----Telex-----
Registration No. -----
Date of grant/renewal -----
Valid upto -----
- f) Name of prospecting agency -----
Address ----- Phone -----
- g) Reference No.and date of consent letter from the State Government -----

2. LOCATION AND ACCESSIBILITY

a) Details of area (with location map)

District and State -----
 Taluka -----
 Village -----
 Khasra No./Plot No./Block Range/Felling Series etc. -----
 Lease Area (Hectares) -----
 Whether the area is recorded to be in forest (please specify whether protected, reserved etc.) -----
 Ownership/Occupancy -----
 Existence of public road/railway line, if any nearby and approximate distance -----
 Toposheet No. with latitude & longitude -----
 Land Use Pattern (Forest, Agricultural, Grazing, Barren etc.) -----

- b) Attach a general location and vicinity map showing area boundaries and existing and proposed access routes. It is preferred that the area be marked on a Survey of India topographical map or a cadastral map or forest map as the case may be. However if none of these are available, the area should be shown on an accurate sketch map on a scale of 1:5000.

PART - A

3. GEOLOGY AND EXPLORATION

- a) Briefly describe the topography and general geology and local/mine geology of the mineral deposit including drainage pattern.
- b) The topographic plan of the lease area prepared on a scale of 1:1000 or 1:2000 with contour interval of 3 to 10 m depending upon the topography of the area should be taken as the base plan for preparation of geological plan. The details of exploration already carried out including evidences of mineral existence should be shown on the geological plan.
- c) Geological sections should be prepared at suitable intervals on a scale of 1:1000/1:2000.
- d) Broadly indicate the yearwise future programme of exploration, taking into consideration the future production programme planned in next five years as in table below :-

Year	No. of boreholes	Total metereage	No. of Pits and Dimensions	No. of Trenches and Dimensions
First				
Second				
Third				
Fourth				
Fifth				

- e) Indicate geological and recoverable reserves and grade, duly supported by standard method of estimation and calculations alongwith required sections (giving split up of various categories i.e. proved, probable, possible) .Indicate cut-off grade. Availability of resources should also be indicated for the entire leasehold.
- f) Indicate mineable reserves by slice plan/level plan method, as applicable, as per the proposed mining parameters .

4. MINING

- a) Briefly describe the existing/proposed method for developing/working the deposit with all design parameters.

Note : In the case of pocket deposits, sequence of development/working may be indicated on the same plan.

- b) Indicate quantum of development and tonnage and grade of production expected pitwise as in table below :-

Year	Pit No.(s)	Over-burden	ROM ore	Saleable ore	Sub-grade ore	Mineral Rejects	Ore to Over-burden ratio
------	------------	-------------	---------	--------------	---------------	-----------------	--------------------------

 First

Second

Third

Fourth

Fifth

- c) Attach

- individual yearwise plans & sections (in case of 'A' class mines)

- composite plans & yearwise sections (in case of 'B' class mines)

- d) Attach supporting composite plan and section showing pit layouts, dumps, stacks of sub-grade mineral, if any, etc.
- e) Indicate proposed rate of production when the mine is fully developed, and the expected life of the mine and the year from which effected .

- f) Attach a note furnishing a conceptual mining plan for the entire lease period (for 'B' category mines) and upto the life of mine (for 'A' category mines) based on the geological, mining and environmental considerations.

g) Opencast mines

i) describe briefly giving salient features of the mode of working (mechanised---- ,semi-mechanized---- ,manual----):

ii) describe briefly the layout of mine workings , the layout of faces and sites for disposal of overburden/waste. A reference to the plans enclosed under 4(b) and 4(d) will suffice

h) Underground mines

(i) mode of entry (adit ,incline , shaft , ramp/decline)

briefly describe the reason for choosing the mode of entry indicated above (keeping in mind the considerations of systematic mining and prevention of damage to the environment)

(ii) system of winding/hoisting

attach a note briefly describing the system and linking it with :

- it's adequacy for the desired rate of production and raising/lowering of men and material
- the ventilation system

(iii) underground layout

attach a note briefly describing the underground layout using longitudinal sections and level plans where necessary. Indicate :

- sizes and intervals of levels and raises/winzes with proper reasoning
- proposed extent of development, yearwise, for the first five years alongwith the support system.

(iv) Method and sequence of stoping

- Describe briefly the method of stoping to be adopted illustrated by cross sections and longitudinal sections

(v) mine ventilation

attach a note outlining the steps to be taken for securing an adequate supply of air in all parts of the mine and prevention of noxious gases produced and excessive rise of temperature or humidity so as to ensure adequate ventilation of the mine, accompanied by mine ventilation plan/diagram.

1) Extent of mechanization

Describe briefly including the calculation for adequacy and type of machinery and equipment proposed to be used in different mining operations

(1) Drilling machines :

Type	Nos.	Dia. of hole (mm)	Size/ capacity	Make	Motive power	H.P.
1						
2						
3						

(2) Loading equipment

Type	Nos.	Bucket capacity in cu.m	Make	Motive power	H.P.
1					
2					
3					

(3) Haulage and Transport Equipment :-

(a) Haulage within the mining lease-hold

Type	Nos.	Size / capacity	Make	Motive power	H.P.
1					
2					
3					

whether the dumpers are fitted with exhaust conditioner should be indicated

(b) Transport from mine- head to the destination

Describe briefly the transport system (please specify) :-

- ore transported by : own trucks/ hired trucks
- conveyor/rail/ropeway/pipeline
- main destination to which ore is transported (giving to and fro distance)

Details of hauling /transport equipment :

Type	Nos.	Size / capacity	Make	Motive power	H.P.
1					
2					
3					

(4) Miscellaneous :-

describe briefly any allied operations and machineries related to the mining of the deposit not covered earlier ..

(A) Operations :-

(B) Machineries Deployed

Type	Nos.	Size/ capacity	Make	Motive power	H.P.
1					
2					
3					
4					

5. BLASTING

describe briefly :

a) broad blasting parameters like charge per hole ,blasting pattern ,charge per delay ,maximum number of holes blasted in a round , manner and sequence of firing , etc.

b) type of explosives used /to be used

- c) powder factor in ore and overburden/waste/development heading/stope
- d) whether secondary blasting is needed, if so describe in brief
- e) storage of explosives (like capacity and type of explosive magazine).

6. MINE DRAINAGE

- a) likely depth of water table based on observations from nearby wells and water bodies -----
- b) workings expected to be ----- m above/reach below water table by the year -----
- c) quantity and quality of water likely to be encountered, the pumping arrangements and places where the mine water is finally proposed to be discharged .

7. STACKING OF MINERAL REJECTS AND DISPOSAL OF WASTE

- a) indicate briefly the nature and quantity of top soil , overburden/waste and mineral rejects likely to be generated during the next five years:

Year	Top Soil	Overburden/waste	Mineral Rejects
First			
second			
Third			
Fourth			
Fifth			

* Threshold values in respect of apatite and rock phosphate , bauxite , barytes , chromite , chinaclay/kaolin , fluorite , graphite, gypsum, iron ore, kyanite and sillimanite, limestone, manganese, magnesite, talc/steatite/soapstone, and wollastonite minerals as evolved by IBM may be adopted, as applicable .

- b) land chosen for disposal of waste with proposed justification
- -----

- c) attach a note indicating the manner of disposal, and configuration, sequence of build up of dumps alongwith the proposals for the stacking of sub-grade ore, to be indicated itemwise

8. USE OF MINERAL

- a) describe briefly the end-use of the mineral (sale to intermediary parties , captive consumption ,export , industrial use)
- b) indicate physical and chemical specifications stipulated by buyers
- c) give details in case blending of different grades of ores is being practised or is to be practised at the mine to meet specifications stipulated by buyers .

9. OTHER

Describe briefly the following :

- a) Site services :-

- b) Employment potential :-

Highly Skilled	-----
Skilled	-----
Semi-Skilled	-----
Un-Skilled	-----

10. MINERAL PROCESSING

- a) If processing/beneficiation of the ore or minerals mined is planned to be conducted on site or adjacent to the extraction area, briefly describe the nature of the processing/beneficiation. This should indicate size and grade of feed material and concentrate (finished marketable product), recovery rate .
- b) Explain the disposal method for tailings or waste from the processing plant (quantity and quality of tailings proposed to be discharged, size and capacity of tailing pond, toxic effect of such tailings, if any, with process adopted to neutralise any such effect before their disposal and dealing of excess water from the tailing dam).
- c) A flow sheet or schematic diagram of the processing procedure should be attached.
- d) Specify quantity and type of chemicals to be used in the processing plant.
- e) Specify quantity and type of chemicals to be stored on site/ plant.

- f) Indicate quantity (cu.m. per day) of water required for mining and processing and sources of supply of water. Disposal of waste water and extent of recycling.

PART B

11. ENVIRONMENTAL MANAGEMENT PLAN

- a) Attach a note on the status of baseline information with regard to the following :
- existing land use pattern indicating the area already degraded due to quarrying/pitting ,dumping ,roads, processing plant,workshop,township etc. in a tabular form.
 - water regime
 - flora and fauna
 - quality of air, ambient noise level and water
 - climatic conditions
 - human settlements
 - public buildings, places of worship and monuments
 - attach plans showing the locations of sampling stations.
 - does area (partly or fully) fall under notified area under Water (Prevention & Control of Pollution) Act 1974 ----
- b) Attach an Environmental Impact Assessment Statement describing the impact of mining and beneficiation on environment on the following over the next five years (and upto conceptual plan period for 'A' category mines).
- i) Land area indicating the area likely to be degraded due to quarrying/pitting, dumping, roads, workshop; processing plant; township etc.
 - ii) Air quality
 - iii) Water quality
 - iv) Noise levels
 - v) Vibration levels (due to blasting)
 - vi) Water regime
 - vii) Socio-economics,
 - viii) Historical monuments etc.

c) attach an Environmental Management Plan (supported by appropriate plans and sections) defining the time-bound action proposed to be taken with sequence & timing in the following areas (or diagrams should be used) :

- temporary storage and utilisation of topsoil
- yearwise proposal for reclamation of land affected by abandoned quarries and other mining activities during first five years (and upto conceptual plan period for 'A' category mines) clarifying the extent of back filling and recontouring and/or alternative use of unfilled/partially filled excavations/road sides/slopes and mine.

In case abandoned quarries/pits are proposed to be used as reservoir , their size, water holding capacity and proposal for utilisation of such water be given .

- programme of afforestation , yearwise for the initial five years (and upto conceptual plan period for 'A' category mines) indicating number of plants with name of species to be afforested under different areas in hectares.
- stabilisation and vegetation of dumps alongwith waste dump management yearwise for the first five years (and upto conceptual plan period for 'A' category mines).
- measures to control erosion/sedimentation of water courses
- treatment and disposal of water from mine
- measures for minimising adverse effects on water regime
- protective measures for ground vibrations/air blast caused by blasting.
- measures for protecting historical monuments and for rehabilitation of human settlements likely to be disturbed due to mining activity
- socioeconomic benefits arising out of mining.

d) Monitoring schedules for different environmental components after the commencement of mining and other related activities. (for 'A' category mines only)

Note : Ground vibration studies are to be carried out for virgin areas/new leases after one year from the commencement of mining activities. (for 'A' category mines only).

Note : While preparing mining plans various circulars issued by CCOM particularly the circular No.2/91 regarding conceptual mining plan, 5/91 regarding requirement of exploration and existence of mineral, 3/92 regarding generation of baseline data by mechanised mines etc. may also be referred and taken into account.

GOVERNMENT OF INDIA.
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

Indira Bhavan,
Civil Lines,
Nagpur, dt. 17 /4/1998

No.N-11013/S/MP/90-CCOM

CCOM'S CIRCULAR NO.1/98

Sub. Prospecting or Mining Operations without a valid PL or ML.

A case has been brought to the notice of this office by one of the State Governments where a RQP has prepared a geological report by carrying out survey and collection of sample in a certain area which was not held under PL. On the basis of the report prepared by the RQP, a party submitted an application for mining lease to the State Government.

In this connection, attention is drawn to the provision of section 4(1) of the Mines & Minerals (Regulation & Development) Act, 1957, which reads as follows :

"No person shall undertake any prospecting or mining operations in any area, except under and in accordance with the terms and conditions of a prospecting licence or as the case may be, a mining lease, granted under this Act and the rules made thereunder :

Provided that nothing in this sub-section shall affect any prospecting or mining operations undertaken in any area in accordance with the terms and conditions of a prospecting licence or mining lease granted before the commencement of this Act which is in force at such commencement.

Provided further that nothing in this sub-section shall apply to any prospecting operations undertaken by the Geological Survey of India, the Indian Bureau of Mines, the Atomic Minerals Division of the Department of Atomic Energy of the Central Government, the Directorates of Mining and Geology of any State Government (by whatever name called) and the Mineral Exploration Corporation Limited, a Government company within the meaning of section 617 of the Companies Act, 1956".

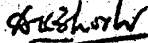
Further, the definition of "Prospecting Operations" given in the MM(R&D) Act, 1957 is also reproduced below :

"Prospecting Operations" means any operations undertaken for the purpose of exploring, locating or proving mineral deposits".

From the above, it can be concluded that though exploration in the form of drilling, pitting, trenching, etc. was not carried out, still the surface survey carried out by the RQP and preparation of report amounts to "prospecting operations" for proving the mineral deposits. And as such the provisions of Section 4(1) of MM(R&D) Act, 1957 has been violated which may invite action by the State Government.

It is, therefore, advised to all the RQPs to undertake prospecting operations in any area only after ensuring that the area concerned is covered precisely under a valid prospecting licence/mining lease.

To all the Valid RQPs.


(D.K. GHOSH)
CONTROLLER OF MINES
I/C CCOM OFFICE

GOVERNMENT OF INDIA
MINISTRY OF STEEL & MINES
DEPARTMENT OF MINES
INDIAN BUREAU OF MINES

No.N-11013/3/MP/90-CCOM

2nd Floor, Block 'A',
Indira Bhavan, Civil Lines,
Nagpur, dated 1/6/1999

CCOM'S CIRCULAR NO. 1/99

So far the mining plans in respect of fresh grant of leases or in respect of existing leases were being prepared by you, keeping only the exploration, development, scale of production and other mining activities in view. The exact land area required for the project were not of much consideration.


But it has now been decided that wherever forest lands are involved, the precise land area that will be necessary for all the activities in the project including the preproduction development, construction as well as ancilliary activities, shall be separately assessed and worked out by the RQPs/consultants and an optimum extent of forest land required to be involved/disturbed for diversion of the forest land has to be established. The Ministry of Environment and Forest is also particular about minimal requirements of forest land in a mining project and hence this has to be worked out by the RQPs as precisely as possible. While processing, this aspect will also be examined by IBM.

It may also be appreciated that if at any stage it is felt by MOEF or other authorities that the area (comprising of forest land) assessed is on the higher side, they may agree for clearance in respect of a reduced area and in that case the entire planning may have to be modified. Such possibilities will be reduced if the assessments made are realistic.

Wherever an exact requirement cannot be assessed either due to change in technology or in scale of operation, or wherever an allowance has to be kept for future expansion, the necessary provision for the same may also be kept while estimating the requirement of forest land.

In view of the above, all the RQPs/consultants are, therefore, required to keep these aspects into consideration so that the processing of mining plans submitted to Indian Bureau of Mines or necessary forest clearance required from the Ministry of Environment and Forest are not delayed, at least due to this specific reason of not assessing the optimum requirements of forest land.

To,
All Recognised Qualified Persons


(D.K. GHOSH)
CONTROLLER OF MINES
IC CCOM OFFICE

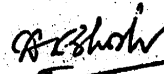
GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No.N-11013/3/RQP/89-CCOM

Indira Bhawan,
Civil Lines, Nagpur
Dated :28-6-2000

CIRCULAR:

All the valid Recognised Qualified Persons are hereby advised that on receipt of the scrutiny letters on any submitted documents, the rectification of the discrepancies pointed out should be taken up immediately and the document be resubmitted within the date specified by the competent authority. In case the time stipulated for modification is felt to be inadequate or in case it does not become possible to adhere to the stipulated time, for the reasons beyond his control, he may so submit to the competent authority, seeking extension of the time limit for submission of the modified document. He may also keep the management informed in this regard. It may be noted that failure to submit document within the time frame given by the competent authority or failure to seek extension of time frame, as the case may be, will constitute an act to attract derecognition.


~~(B.K. GHOSH)~~
Controller of Mines
Incharge CCOM Office

To

All Recongnised
Qualified Persons

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No. M-11013/17/91-CCOM

Indira Bhavan,
Civil Lines, Nagpur,
Dt. 6-10-2000

CCOM'S CIRCULAR NO. 1/2000

Sub. : Mining Plan involving forest areas – Proposals for diversion of forest land.

All the RQPs are informed that the MoEF has decided that all future mining proposals in forest areas in respect of coal and other major minerals should be accompanied with the following documents :

1. In respect of underground mining in stratified deposits in forest areas.

The mining plan in stratified deposits in forest areas should include the predicted subsidence, slope and strain values and their impact on forests and surface and their mitigation. The maximum tensile strain of 20 mm per meter and thereby the surface cracks of width of about 200 – 300 mm is to be permitted in forest areas. Accordingly, the mine plans should be made to restrict the subsidence movement within these limits with the provision of mitigation measures.

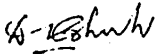
It is, therefore, directed that all mining plans in respect of coal and other major minerals should be got examined by institutes like Indian School of Mines, Dhanbad; CMRL, Dhanbad; IBM, Nagpur and subsidence analysis along with the mitigation measures suggested by them should be submitted along with the proposal. The surface layout of mining area should be designed so as to use minimum possible land and wherever feasible the surface facilities should be planned over non-forest areas.

2. Opencast mining in forest areas :

In respect of opencast mining in forest areas, a comprehensive study of solid waste management and land reclamation with post mining land use plan and de-commissioning should be made and the plan should envisage the minimum possible overburden dumping outside the mine. In place where the non-forest land is available, the external dumping of the overburden should be planned on non-forest land. Special attention should be given to top-soil and sub-soil handling and management.

3. Use of fly ash in reclamation of opencast mines :

Wherever feasible, depending upon the characteristic of fly ash and its availability nearby, use of fly ash in reclamation of open pits should be looked into and planned. Fly ash for this purpose should be characterized from the point of view of leaching potential with special reference to heavy metals.


(D. K. GHOSH)
CHIEF CONTROLLER OF MINES

GOVERNMENT OF INDIA
MINISTRY OF COAL & MINES
DEPARTMENT OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No.O-11011/7/90-CCOM

Nagpur, dated 25/02/2002

CCOM'S CIRCULAR NO.1/2002

Subject : Processing fee for approval of mining plans submitted under Mineral Concession Rules, 1960.

Consequent to the amendment made in the rule 22BB of Mineral Concession rules, 1960 vide GSR 21(E) dated 11-1-2002, every mining plan submitted for approval is required to accompany with a non-refundable fee of Rs.One Thousand for every square kilometer or part thereof of mining area covered under the mining lease.

In pursuance to this, the following procedure is circulated to all RQP's and intending applicants for approval of mining plan.

1. All mining plans submitted under Mineral Concession Rules, 1960 both for fresh grant and renewal of mining lease on or after 11-01-2002 will be charged processing fees. Mining schemes may be considered as mining plans of different stages.
2. The processing fees will be charged at the rate of Rs.1,000/- for every square kilometer (100 Ha.) or part thereof of mining lease area applied for grant or renewal.
3. The following procedure for remittance of processing fees shall be followed in case of mining plans approved by Indian Bureau of Mines. The procedure for remittance of processing fees in respect of 29 notified non-metallic minerals for which the State Governments are authorized to approve the mining plans would be notified by the concerned State Governments.

- i) The processing fees shall be submitted at the time of submission of draft mining plan to concerned Regional office of IBM.
- ii) The processing fees can also be paid to a Government Treasury or any branch of the State Bank of India doing treasury business to the credit of the Central Government under "Major Head - 0853 - Non-ferrous Mining & Metallurgical Industries, 800-other receipts". In this case the original Treasury receipt will have to be submitted at the time of submission of draft mining plan to IBM.



(S.S. DAS)

25/2/02
Controller of Mines
Incharge, MCCM Division.

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

No. O-11011/1/2001-CCOM

NAGPUR, dated 8/8/2003

CIRCULAR NO.14/2003

Subject : Mine Closure Plan – Guidelines thereof

Vide Notification GSR 330(E) dated 10-4-2003, MCDR, 1988 has been amended incorporating preparation of Mine closure plan. Corresponding amendment has also been made in MCR, 1960.

Salient features of the amendment are as follows :

- 1) Every mine shall have two types of mine closure plans i.e.
 - i) Progressive mine closure plan
 - ii) Final mine closure plan.
- 2) In case of fresh grant/renewal of mining lease, the progressive mine closure plan as a component of mining plan should be submitted to the RCOM or authorized officer of the state government, as the case may be.
- 3) In case of existing mining lease, a progressive mine closure plan should be submitted within a period of 180 days of the notification.
- 4) The progressive mine closure plan shall be reviewed and submitted every five years. Final mine closure plan should be submitted for approval one year prior to the proposed closure of the mine. Lessee should submit the financial assurance to the RCOM or the officer authorized by the state government, as the case may be before executing the mining lease deed. The lessee shall submit financial assurance alongwith the progressive mine closure plan in case of existing mine.
- 5) The lessee shall not determine the lease area or part thereof unless final mine closure plan is implemented as per the approval. The lessee shall be required to obtain a certificate from the RCOM or officer authorized by state government, as the case may be, to the effect that protection, reclamation and rehabilitation work in accordance with the approval of mine closure plan has been carried out.

For the purposes of preparation of mine closure plan, the following guidelines is issued :

GUIDELINES FOR MINE CLOSURE PLAN

1 Introduction:

The name of the lessee, the location and extent of lease area, the type of lease area (forest, non-forest etc) the present land-use pattern, the method of mining & mineral processing operations, should be given.

- 1.1 *Reasons for Closure:* The reasons for closure of mining operations in relation to exhaustion of mineral, lack of demand, uneconomic operations, natural calamity, directives from statutory organization or court etc. should be specified.
- 1.2 *Statutory obligations:* The legal obligations, if any which the lessee is bound to implement like special conditions imposed while execution of lease deed, approval of mining plan, directives issued by the Indian Bureau of Mines, conditions imposed by the Ministry of Environment & Forests, State or Central Pollution Control Board or by any other organization describing the nature of conditions and compliance position thereof should be indicated here (the copies of relevant documents may be attached as Annexure)
- 1.3 *Closure Plan preparation:* The names and addresses of the applicant and recognized qualified person who prepared the Mine Closure Plan and the name of the executing agency should be furnished. A copy of the resolution of the board of Directors or any other appropriate administrative authority as the case may be on the decision of closure of mine should be submitted.

2 Mine Description:

- 2.1 *Geology:* Briefly describe the topography and general geology indicating rock types available, the chemical constituents of the rocks/minerals including toxic elements if any, at the mine site.
- 2.2 *Reserves:* Indicate the mineral reserves available category wise in the lease area estimated in the last mining plan / mining scheme approved along with the balance mineral reserves at the proposed mine closure including its quality available (for final mine closure plan only).
- 2.3 *Mining Method:* Describe in brief the mining method followed to win the mineral, extent of mechanization, mining machinery deployed, production level etc
- 2.4 *Mineral Beneficiation:* Describe in brief the mineral beneficiation practice if any indicating the process description in short. Indicate discharge details of any tailings/ middlings and their disposal/utilization practice followed.

3 Review of Implementation of Mining Plan/Scheme of Mining including five years Progressive Closure Plan upto the final closure of mine.

Indicate in detail the various proposals committed with special emphasis on the proposals for protection of environment in the approved Mining Plan/Scheme of Mining including five years Progressive Closure Plan upto the closure of mine vis-a-vis their status of implementation. Highlight the areas, which might have been contaminated by mining activities and type of contaminants that might be found there. The reasons for deviation from the proposals if any with corrective measures taken should also be given.

4 Closure Plan:

- 4.1 Mined-Out Land: Describe the proposals to be implemented for reclamation and rehabilitation of mined-out land including the manner in which the actual site of the pit will be restored for future use. The proposals should be supported with relevant plans and sections depicting the method of land restoration/ reclamation/rehabilitation.
- 4.2 Water Quality Management: Describe in detail the existing surface and ground water bodies available in the lease areas and the measures to be taken for protection of the same including control of erosion, sedimentation, siltation, water treatment, diversion of water courses, if any, measures for protection of contamination of ground water from leaching etc. Quantity and quality of surface water bodies should also be indicated and corrective measures proposed to meet the water quality conforming the permissible limits should also be described. Report of hydrological study carried out in the area may also be submitted. The water balance chart should be given. If there is potential of Acid Mine Drainage the treatment method should be given.
- 4.3 Air Quality Management: Describe the existing air quality status. The corrective measures to be taken for prevention of pollution of air should be described.
- 4.4 Waste Management: Describe the type, quality and quantity of overburden, mineral reject etc. available and their disposal practice. If no utilization of waste material is proposed, the manner in which the waste material will be stabilized should be described. The protective measures to be taken for prevention of siltation, erosion and dust generation from these waste material should also be described. If toxic and hazardous elements present in the waste material the protective measures to be taken for prevention of their dispersal in the air environment, leaching in the surface and ground water etc should be described.
- 4.5 Topsoil Management: The topsoil available at the site and its utilization should be described.
- 4.6 Tailing Dam Management: The steps to be taken for protection and stability of tailing dam, stabilization of tailing material and its utilization, periodic desilting measures to prevent water pollution from tailings etc,

arrangement for surplus water overflow along with detail design, structural stability studies, the embankment seepage loss into the receiving environment and ground water contaminant if any should be described.

- 4.7 *Infrastructure*: The existing infrastructural facilities available such as roads, aerial ropeways, conveyer belts, railways, power lines, buildings & structures, water treatment plant, transport, water supply sources in the area etc. and their future utilization should be evaluated on case-to-case basis. If retained, the measures to be taken for their physical stability and maintenance should be described. If decommissioning proposed, dismantling and disposal of building structures, support facilities and other infrastructure like electric transmission line, water line, gas pipeline, water works, sewer line, telephone cables, underground tanks, transportation infrastructure like roads, rail, bridges, culverts etc, electrical equipments and infrastructures like electrical cables, transformers to be described in connection with restoring land for further use.
- 4.8 *Disposal of Mining Machinery*: The decommissioning of mining machineries and their possible post mining utilization, if any, to be described.
- 4.9 *Safety & Security*: Explain the safety measures implemented to prevent access to surface openings, excavations etc and arrangements proposed during the mine abandonment plan and upto the site being opened for general public should be described.
- 4.10 *Disaster Management and Risk Assessment*: This should deal with action plan for high risk accidents like landslides, subsidence flood, inundation in underground mines, fire, seismic activities, tailing dam failure etc. and emergency plan proposed for quick evacuation, ameliorative measures to be taken etc. The capability of lessee to meet such eventualities and the assistance to be required from the local authority should also be described.
- 4.11 *Care and maintenance during temporary discontinuance*: For every five yearly review (as given in the mining scheme), an emergency plan for the situation of temporary discontinuance or incomplete programme due to court order or due to statutory requirements or any other unforeseen circumstances, should include a plan indicating measures of care, maintenance and monitoring of status of unplanned discontinued mining operations expected to re-open in near future. This should detail item wise status monitoring and maintenance with periodicity and objective.

5 Economic Repercussions of closure of mine and manpower retrenchments.

Manpower retrenchment, compensation to be given, socio-economic repercussions and remedial measures consequent to the closure of mines should be described, specifically stating the following.

- 5.1 Number of local residents employed in the mine, status of the continuation family occupation and scope of joining the occupation back.
- 5.2 Compensation given or to be given to the employees connecting with sustenance of himself and their family members.
- 5.3 Satellite occupations connected to the mining industry - number of persons engaged therein - continuance of such business after mine closes.
- 5.4 Continued engagement of employees in the rehabilitated status of mining lease area and any other remnant activities.
- 5.5 Envisaged repercussions on the expectation of the society around due to closure of mine.

6 Time scheduling for abandonment:

The details of time schedule of all abandonment operations as proposed in para 4 should be described here. The manpower and other resources required for completion of proposed job should be described. The schedule of such operations should also be supplemented by PERT (Programme Evaluation & Review Technique), Bar chart etc.

7 Abandonment Cost:

Cost to be estimated based on the activities required for implementing the protective and rehabilitation measures including their maintenance and monitoring programme.

8 Financial Assurance:

The financial assurance can be submitted in different forms as stated in Rule 23(F)(2) of Mineral Conservation and Development (amendment) Rules, 2003. In the mine closure plan, the manner in which financial assurance has been submitted and its particulars have to be indicated.

9 Certificate:

The above mentioned actions have been taken to be stated clearly in the mine closure plan. A certificate duly signed by the lessee to the effect that said closure plan complies all statutory rules, regulations, orders made by the Central or State Government, statutory organizations, court etc. have been taken into consideration and wherever any specific permission is required the lessee will approach the concerned authorities. The lessee should also give an undertaking to the effect that all the measures proposed in this closure plan will be implemented in a time bound manner as proposed.

10 Plans, sections etc:

The chapters at 1, 2, 3 and 4 should be supported with Plans & Sections.
The Closure plan may also be submitted depicting photographs, satellite images on compact disc etc. wherever possible

NOTE

1. The mine closure plan in progressive stage will be prepared by paragraphs where sub-paragraphs may be added for detailed items whereas the final mine closure plan will be prepared in chapters with sub-chapters as necessary with adequate details.
2. The guidelines for both the documents will be same as above.

Sd/-

(S.S. Das)

Ag. Chief Controller of Mines

To,

The Controller of Mines (CZ)/(NZ)/(SZ)
Indian Bureau of mines,
NAGPUR/AJMER/BANGALORE

The Regional Controller of Mines,
Indian Bureau of Mines,
AJMER/BANGALORE/BHUBANESHWAR/CHENNAI/DEHRADUN/
HYDERABAD/GOA/JABALPUR/KOLKATA/NAGPUR/RANCHI/
UDAIPUR for circulation to the valid RQPs

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES**

No N-11013/3/MP/90-CCOM Vol. VII

Nagpur 18.01.2006


CCOM's CIRCULAR NO. 1/2006

Subject: - Incorporation of United Nations Framework Classification (UNFC) of Mineral Resources and Reserves in Mining Plans/Schemes of Mining.

As you are aware that United Nations Economic Commission for Europe (UNECE) has finalized a system of mineral reserves classification called *United Nations Framework Classification (UNFC)* for implementation by member countries. The objectives of the proposed system are to evolve an internationally uniform system based on market economy criteria, which is understandable in all countries. It is aimed at enhancing communication on a national and international level and provide for better understanding of the confidence levels and true significance of reserves estimation made by different agencies in different countries.

India also opened up the mining sector for private sector initiatives after the adoption of National Mineral Policy 1993 and therefore, also adopted the UNFC system of mineral classification of Reserves and Resources. To create the awareness and to understand the new system of mineral classification, Indian Bureau of Mines conducted number of training programmes for RQP's and also for industry personnel across the country. Consequently, vide G.S.R. 338(E) dated 17.04.2003 the Mineral Conservation and Development (Second Amendment) Rules, 2003 have been notified by which the format of submission of Annual Return under Rule 45 (1)(c) of Mineral Conservation and Development Rules, 1988 have been revised incorporating the UNFC classification of mineral reserves and resources. The detailed Guidelines for UNFC classification of mineral reserves and resources are also enumerated at the end of Mineral Conservation and Development Rules, 1988.

In the meanwhile the concept of UNFC has been widely perceived by the industry and therefore, it is has become necessary that in future Mining Plans and Schemes of Mining including Mine Closure Plans shall invariably incorporate with the UNFC of mineral reserves and resources.


(C.P.AMBESH)
CHIEF CONTROLLER OF MINES

To,
All valid Recognized Qualified Persons and all State Directorate of Mines & Geology

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES

No N-11013/3/MP/90-CCOM Vol. VII

Nagpur 17.02.2006


CCOM's CIRCULAR NO. 4/2006

Subject: - Guidelines for calculation of Financial Assurance as per Rule 23F of Mineral Conservation and Development Rules, 1988.

As per Rule 23F of Mineral Conservation and Development Rules, 1988 every leaseholder is required to submit the Financial Assurance. This financial assurance is calculated per hectare of the mining lease area put to use for mining and allied activities for different category of mines.

There are certain doubts for calculating the area put to use. The area used for ancillary activities apart from the actual mining area is considered as allied activities and therefore, financial assurance is also to be calculated for these activities.

In order to provide uniform approach for calculating the financial assurance, all RQP's are advised to submit a Table as per the format enclosed herewith supported by a plan in Paragraph 8 of the Chapter on 'Mine Closure Plan' issued vide Circular No. 44/2003 dated 8.8.2003. The area arrived at "E" as per the enclosed Table would be considered for calculation of financial assurance.


(C.P. AMBESH)

CHIEF CONTROLLER OF MINES

To,
All valid Recognized Qualified Persons and
all State Directorate of Mines & Geology

Annexure to Circular No. 4/2006

TABLE INDICATING THE BREAK OF AREAS IN THE MINING
LEASE FOR CALCULATION OF FINANCIAL ASSURANCE.

Sl. No.	Head	Area put on use at start of plan. (In Ha.)	Additional requirement during plan period. (In Ha.)	Total (In Ha.)	Area considered as fully reclaimed & rehabilitated (In Ha.)	Net area considered for calculation (In Ha.)
1.	Area under mining					
2.	Storage for top soil					
3.	Overburden/dump					
4.	Mineral storage					
5.	Infrastructure (Workshop, administrative building etc.)					
6.	Roads					
7.	Railways					
8.	Green Belt					
9.	Tailing pond					
10.	Effluent Treatment Plant					
11.	Mineral Separation Plant					
12.	Township area					
13.	Others to specify					
GRAND TOTAL		A	B	C=(A+B)	D	E=(C-D)

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES**

No. N-11013/3/MP/90-CCOM

Nagpur 26.09.2006

CIRCULAR NO. 10/2006

Subject: - Disposal of applications for modifications in the approved Mining Plan and Schemes of Mining under Rule 10 of Mineral Conservation and Development Rules 1988.

It has been observed that some of the mining lessees are applying to the Controller General, Indian Bureau of Mines seeking permission for modifications in the approved Mining Plan and Scheme of Mining under Rule 10 of Mineral Conservation and Development Rules 1988.

In this connection it is reiterated that sub-Rule 1 of Rule 10 of Mineral Conservation and Development Rules 1988 states that a holder of a mining lease desirous of seeking modifications in the approved mining plan shall apply to the Controller General, IBM setting forth the intended modifications and explaining the reasons for such modifications. As per sub-Rule 2 of Rule 10 of Mineral Conservation and Development Rules 1988 the Controller General or the authorized officer is empowered to approve the modifications or approve the same with such alterations as he may consider expedient within a period of 90 days. The Controller General, IBM has already authorized the Controller of Mines and the Regional Controller of Mines to exercise the powers vested under Rule 10(2) of Mineral Conservation and Development Rules 1988 vide letter No. T-43010/CGBM/88 dated 27.04.1989 and published in the Part III Section 1 of the Gazette of India dated 3rd June 1989.

Therefore, it is directed that applications seeking modifications under Rule 10 of Mineral Conservation and Development Rules 1988 in the approved Mining Plan or Scheme of Mining shall be entertained at the level of Regional office and shall be disposed-off by the concerned Regional Controller of Mines/ Controller of Mines or by the Deputy Controller of Mines (in case they have been authorized in respect of Scheme of Mining) as per the system in vogue.

This may be brought to the notice of all mining lessees in their territorial jurisdictions and valid RQP's.


(C.P. AMBESI)

CHIEF CONTROLLER OF MINES

To,

1. The Controllers of Mines/OIC, NZ/SZ/CZ, Indian Bureau of Mines,
Ajmer/Bangalore/Nagpur

2. The Regional Controller of Mines/OIC, Indian Bureau of Mines,
Ajmer/Bangalore/Bhubaneswar/Chennai/Dehradun/Goa/Guwahati/Hyderabad
/Jabalpur/Kolkata/Nagpur/Nellore/Ranchi/Udaipur

3. The Technical Secretary, Indian Bureau of Mines, Nagpur

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES**

No. N-11013/3/MP/90-CCOM

Nagpur 01.10.2007

CIRCULAR NO. 4/2007

Subject: - Processing of Mining Plans for grant of mining lease in respect of mineral(s) specified in the First Schedule to the MMDR Act 1957- Additional Requirements.

As per proviso of clause (b) of sub-Section (1) of Section 5 of the Mines & Minerals (Development & Regulation) Act 1957, previous approval of the Central Government is essential for grant of mining lease of any minerals specified in the First Schedule to the Mines & Minerals (Development & Regulation) Act 1957. Further, as per clause (b) of sub-Section (2) of Section 5 of Mines & Minerals (Development & Regulation) Act 1957, no mining lease shall be granted by the State Government unless there is mining plan duly approved by the competent authority.

For processing of Mining Plan, as required under sub-rule (4) of Rule 22 of Mineral Concession Rules 1960, a communication from the State Government to the applicant of the mining lease, regarding precise area to be granted and advising for submission of mining plan is also essential.

However, some instances have come to the notice of the Indian Bureau of Mines and to the Central Government that the State Governments have issued the communication to the applicant regarding in principle approval of the mining lease in respect of mineral specified in the First Schedule to the Mines & Minerals (Development & Regulation) Act 1957 and sought IBM's approval on the mining plan without first obtaining the prior approval of the Central Government. The Central Government has taken serious note of the same and directed that IBM should approve the mining plan only after the Central Government accords its prior approval for grant of mining lease in respect of minerals specified in the First Schedule to the Mines & Minerals (Development & Regulation) Act 1957.

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In view of this, it is hereby directed to all the Controller of Mines/Regional Controller of Mines/Officer-in-charge that in future all the mining plans for grant of mining lease of any minerals specified in the First Schedule to the Mines & Minerals (Development & Regulation) Act 1957 shall be accompanied by the copies of the (i) Previous approval of the Central Government granted as per proviso of clause (b) of sub-Section (1) of Section 5 of the Mines & Minerals (Development & Regulation) Act 1957 for grant of mining lease and (ii) Communication issued under sub-rule (4) of Rule 22 of Mineral Concession Rules 1960 from the State Governments to the applicant of the mining lease regarding grant of precise area and advising to submit the mining plan.

Further, it is also directed that the mining plans which are under processing as on date for grant of mining lease of any minerals specified in the First Schedule to the Mines & Minerals (Development & Regulation) Act 1957 shall not be disposed off unless and until a copy of the previous approval of the Central Government for grant of mining lease is submitted.

The content of this circular should be brought to the notice of all valid Recognized Qualified Persons of your Region.


(C.P.AMBESH)

CHIEF CONTROLLER OF MINES

To,

1. All the valid Recognized Qualified Persons.
2. The Controllers of Mines/OIC, NZ/SZ/CZ, Indian Bureau of Mines, Ajmer/Bangalore/Nagpur.
3. The Regional Controller of Mines/OIC, Indian Bureau of Mines, Ajmer/Bangalore/Bhubaneshwar/Chennai/Dehradun/Goa/Guwahati/Hyderabad/Jabalpur/Kolkata/Nagpur/Nellore/Ranchi/Udaipur
4. The Technical Secretary, Indian Bureau of Mines, Nagpur
5. Guard File