- (iii) improving quality, purity or assay grade of desired product:
- (e) "**Boring**" or "**drilling**" means the penetration of alluvial material, rocks or formations by holes for obtaining geological information, and for drawing samples therefrom;
- (f) "Chief Controller of Mines" means the Chief Controller of Mines of the Indian Bureau of Mines:
- (g) "**Controller General**" means the Controller General of the Indian Bureau of Mines;
- (h) "Controller of Mines" means the Controller of Mines of the Indian Bureau of mines;
- (i) "development" means the driving of an opening to, or in an orebody or seam or removing overburden or unproductive or waste materials as preparatory to mining or stoping;
- (j) "environment" and "environmental pollution", shall have the same meanings, assigned respectively to these terms in the Environment (Protection) Act, 1986 (29 of 1986);
- (jj) "final mine closure plan" means a plan for the purpose of decommissioning, reclamation and rehabilitation in the mine or part thereof after cessation of mining and mineral processing operations that has been prepared in the manner specified in the standard format and guidelines issued by the Indian Bureau of Mines;
- (jjj) "financial assurance" means the sureties furnished by the leaseholder to the competent authority so as to indemnify the authorities against the reclamation and rehabilitation cost;
- (k) "Form" means a Form set forth in Schedule to these rules;
- (l) "**geologist**" means a person appointed in writing by the owner or agent to perform the duties of a geologist under these rules;
- (m) "manager" when used in relation to a mine, means any person appointed by the owner or agent and includes the owner or the agent if he appoints himself to be such manager, under section 17 of the Mines Act, 1952 (35 of 1952);
- (mm) "mine closure" means steps taken for reclamation, rehabilitation measures taken in respect of a mine or part thereof commencing from cessation of mining or processing operations in a mine or part thereof;
- (n) "mining engineer" means a person appointed in writing by the owner or agent to perform the duties of a mining engineer under these rules;

- (o) "mining plan" means a mining plan prepared under section 5 of the Act and the rules made thereunder:
- (00) "progressive mine closure plan" means a progressive plan, for the purpose of providing protective, reclamation and rehabilitation measures in a mine or part thereof that has been prepared in the manner specified in the standard format and guidelines issued by Indian Bureau of Mines;
- (p) "**prospect**" means an area where prospecting operations for minerals are being carried out and includes any area held under prospecting licence;
- (q) "**recognised person**" means a person granted recognition by the competent authority to prepare mining plan;
- (r) "**Regional Controller**" means the Regional Controller of Mines of the Indian Bureau of Mines;
- (s) "**shaft**" means a vertical or inclined way or opening leading from the surface to workings below ground or from one part of the workings below ground to another, and includes an incline;
- (t) "**stoping**" means making any underground excavation other than development working made for the purpose of winning ores or minerals and includes extraction or splitting or reduction of pillars or blocks of minerals:
- (tt) "temporary discontinuance" means the planned or unplanned suspension of mining operations in a mine or part thereof and where the operations are likely to be resumed after certain time;
- (u) "**year**" means the twelve months period beginning from the first day of April and ending on the thirty-first day of March of the following year;
- (v) all other words and expressions used in these rules but not defined shall have the meanings respectively assigned to them in the Act.

CHAPTER IA

Reconnaissance Operations

3A. Scheme of reconnaissance:

Every holder of a reconnaissance permit shall submit to the Controller General and the Regional Controller or the authorised officer within a period of sixty days from the date of execution of the reconnaissance permit, a scheme of reconnaissance operations indicating the manner in which he proposes to carry out reconnaissance operations in the area covered by the permit and in particular: -

- a. particulars of the area such as aerial extent, boundaries;
- b. the scale of the plan and the area of geological mapping; and
- c. the particulars of the machines and instruments to be used.

3B. Modification of scheme of reconnaissance:

- (1) A reconnaissance scheme prepared and submitted under rule 3A may be modified at any time on geological considerations by the holder of a reconnaissance permit during continuance of the reconnaissance permit.
- (2) Any modification carried out under sub-rule (1) shall be intimated to the Controller General and the Regional Controller or the authorised officer by the holder of reconnaissance permit within a period of fifteen days.

3C. Reconnaissance operations to be carried out in accordance with the scheme of reconnaissance:

Every holder of the reconnaissance permit shall carry out the reconnaissance operations in accordance with the scheme of reconnaissance submitted under rule 3A or with such modifications, if any, as intimated under rule 3B, or as directed by the Controller General or Regional Controller or the authorised officer.

3D. Intimation about reconnaissance operations:

Every holder of a reconnaissance permit shall send to the Controller General, Controller of Mines and the Regional Controller, an intimation in Form-AA of the commencement of reconnaissance operations so as to reach them within a period of fifteen days of such commencement.

3E. Submission of reports about reconnaissance operations:

Every holder of a reconnaissance permit shall send to the Controller General, Controller of Mines and the Regional Controller an yearly report in Form-BB along with all the aerial, photo-geological, geophysical, geochemical and such other data collected by him as per the conditions stipulated in the reconnaissance permit so as to reach them within thirty days after expiry of every year from the date of execution of the reconnaissance permit or the expiry of the reconnaissance permit or the abandonment of the reconnaissance permit or termination of reconnaissance permit, whichever is earlier.

CHAPTER II

Prospecting Operations

4. Scheme of prospecting:

- (1) Every holder of a prospecting licence shall submit to the Controller General and the Regional Controller or the authorised officer within a period of 60 days from the date of execution of the prospecting licence, a scheme of prospecting indicating the manner in which he proposes to carry out the prospecting operations, in the area covered by the licence and in particular:
 - (a) particulars of area;
 - (b) the scale of the plan and the area of geological mapping;
 - (c) the number of pits, trenches, and bore holes which he proposes to put in the area;
 - (d) the particulars of the machines to be used;

- (e) the details of exploratory mining [if any, proposed] to be undertaken:
- (f) the number of samples proposed to be drawn and analysed;
- (g) the beneficiation studies proposed to be undertaken; and
- (h) any other matter relevant for the preparation of scheme of prospecting, as directed by the Controller General or the authorised officer from time to time by a general or specific order.
- (2) Notwithstanding anything contained in sub-rule (1) a scheme of prospecting, shall include:
 - (a) baseline information of prevailing environmental conditions before the beginning of prospecting operations;
 - (b) [steps proposed to be taken for protection of environment which will include] prevention and control of air and water pollution, progressive reclamation and rehabilitation of the land disturbed by the prospecting operations, a scheme for the plantation of trees, and such other measures, as may be directed from time to time by the Controller General or the authorised officer for minimising the adverse effect of prospecting operations on the environment.
- (3) The prospecting scheme under sub-rule (1) shall be prepared by a recognised person or a geologist or a mining engineer employed under clause (a) of sub-rule (1) of rule 42.

5. Modification of scheme of prospecting:

- (1) A prospecting scheme prepared and submitted under rule 4 may be modified at any time on geological considerations by the holder of a prospecting licence during continuance of the prospecting licence.
- (2) Any modification carried out under sub-rule (1) shall be intimated to the Controller General and the Regional Controller or the authorised officer by the holder of a prospecting licence within a period of fifteen days.

6. Prospecting operation to be carried out in accordance with scheme of prospecting:

Every holder of a prospecting licence shall carry out the prospecting operations in accordance with the scheme of prospecting submitted under rule 4 or with such modifications, if any, as intimated under rule 5 or as directed by the Controller General or the authorised officer.

7. Intimation about prospecting operations:

Every holder of a prospecting licence shall send to the Controller General, Controller of Mines and Regional Controller, an intimation in Form-A of the commencement of prospecting operations so as to reach them within a period of fifteen days of such commencement.

8. Report of prospecting operations:

- (1) Every holder of a prospecting licence shall submit to the Controller General, Controller of Mines and the Regional Controller:
 - (a) [Omitted]
 - (b) an yearly report in Form-B so as to reach them within thirty days after the expiry of twelve months from the date of execution of the prospecting licence or the expiry of the prospecting licence whichever is earlier:

Provided that in case the prospecting operations are abandoned, the report in Form-B shall be submitted within a period of thirty days from the date of such abandonment:

Provided further that in case the prospecting operations are continued for a period exceeding one year, the report in Form - B shall be submitted once every year and a final report in Form - B within a period of three months after the completion of the prospecting operations or the expiry of the prospecting licence, whichever is earlier.

(2) Where prospecting operations are carried out by the authorities specified in the second proviso to sub-section (1) of section 4 of the Act without a prospecting licence, such authority shall submit the annual report in Form - B to the Controller General in respect of each area where prospecting operations have been undertaken by them:

Provided that this sub-rule shall not apply in a case where field operation consists of only geological mapping or geo-physical or geo-chemical investigations.

CHAPTER III

Mining Operations

9. Mining Plan:

- (1) No person shall commence mining operations in any area except in accordance with a mining plan approved under clause (b) of sub-section (2) of section 5 of the Act.
- (2) The Controller General or the authorised officer [or the officer authorised in this behalf by the State Government, as the case may be,] may require the holder of a mining lease to make such modifications in the mining plan referred to in sub-rule (1) or impose such conditions as he may consider necessary by an order in writing if such modifications or imposition of conditions are considered necessary-
 - (a) in the light of the experience of operation of mining plan;
 - (b) in view of the change in the technological development.

10. Modification of mining plan:

(1) A holder of a mining lease desirous of seeking modifications in the approved mining plan as are considered expedient, in the interest of safe and scientific mining,

conservation of minerals, or for the protection of environment, shall apply to the Controller General, [or the officer authorised in this behalf by the State Government, as the case may be,] setting forth the intended modifications and explaining the reasons for such modifications.

(2) The Controller General or the authorised officer [or the officer authorised in this behalf by the State Government, as the case may be,] may approve the modifications under sub-rule (1) or approve with such alterations as he may consider expedient within a period of ninety days.

11. Mining plan to be submitted by the existing lessee:

- (1) Where mining operations have been undertaken before the commencement of these rules without an approved mining plan, the holder of such mining lease shall submit a mining plan within a period of one year from the date of commencement of these rules, [to the Regional Controller or the authorised officer or the officer authorised in this behalf by the State Government, as the case may be, for approval].
- (2) If a holder of a mining lease has not been able to submit the mining plan within the specified time for reasons beyond his control, he may apply for extension of time giving reasons to the following authorities:
 - (a) to the Regional Controller for extension of time up to six months;
 - (b) to the Controller of Mines for extension of time exceeding six months but not exceeding one year;
 - (c) to the Chief Controller of Mines for extension of time beyond one year;
 - [(d) to the officer authorised in this behalf by the State Government in respect of mining plan approved by the State Government].
- [(3) The Regional Controller, Controller of Mines, the Chief Controller of Mines or the authorised officer or the officer authorised in this behalf by the State Government, as the case may be, on receiving an application made under sub-rule (2) may, on being satisfied, extend the period for submission of the mining plan for the period mentioned in clause (a),(b),(c) or (d) of the said sub-rule.].
- (4) The Regional Controller [or the officer authorised in this behalf by the State Government, as the case may be,] may approve the plan as submitted by the lessee under sub-rule (1) or may require modifications to be carried out in the plan and the lessee shall carry out such modifications and resubmit the modified plan for [] approval.
- [(5) The Regional Controller or the officer authorised in this behalf by the State Government, as the case may be, shall, within a period of 90 days from the date of receipt of the mining plan or the modified mining plan, convey approval or disapproval to the applicant and in case of disapproval shall also convey the reasons for disapproving the said mining plan or the modified mining plan.]
- (6) If no decision is conveyed within the period stipulated under sub-rule (5), the mining plan or the modified mining plan, as the case may be, shall be deemed to have been provisionally approved and such approval shall be subject of the final decision

whenever communicated.

(7) The mining plan submitted under sub-rule (1) shall be prepared by a recognised person.

12. Review of mining plan:

(1)[]

- (2) The owner, agent, mining engineer or manager of every mine shall review the mining plan as prescribed under sub-rule(1) and submit a scheme of mining for the next five years of the lease to the Regional Controller [or the officer authorised in this behalf by the State Government, as the case may be,] for approval.
- (3) The scheme of mining shall be submitted to the Regional Controller [or the officer authorised in this behalf by the State Government, as the case may be,] at least one hundred twenty days before the expiry of the five years period, for which it was approved on the last occasion.
- (4) The Regional Controller or the authorised officer [or the officer authorised in this behalf by the State Government, as the case may be,] shall convey his approval or refusal to the scheme of mining within ninety days of the date of its receipt.
- (5) If approval or refusal of the scheme of mining is not conveyed to the holder of the mining lease within the stipulated period the scheme of mining shall be deemed to have been provisionally approved and such approval shall be subject to final decision whenever communicated.
- (6) The provisions of rules 9, 10 and 13 shall apply to the scheme of mining in the same way as they are applicable to the mining plan.
- (7) Every scheme of mining submitted under sub-rule (2) shall be prepared by a recognised person or a person employed under clause (b) of sub-rule (1) of rule 42.

13. Mining operations to be in accordance with mining plans:

- (1) Every holder of a mining lease shall carry out mining operations in accordance with the approved mining plan with such conditions as may have been prescribed under sub-rule (2) of rule 9 or with such modifications, if any, as permitted under rule 10 or the mining plan or scheme approved under rule 11 or 12 as the case may be.
- (2) If the mining operations are not carried out in accordance with the mining plan as referred to under sub-rule (1), the Regional Controller or the authorised officer may order suspension of all or any of the mining operations and permit continuance of only such operations as may be necessary to restore the conditions in the mine as envisaged under the said mining plan.

14. Prospecting and mining operations:

The prospecting and mining operations shall be carried out in such a manner so as to ensure systematic development of mineral deposits, conservation of minerals and protection of environment.

15. Open cast working:

- (1) In open cast workings the benches formed shall be so arranged that the benches in ore/mineral and overburden are separate so as to avoid mixing of waste with the ore/minerals.
- (2) The benches in overburden shall be kept sufficiently in advance so that their working do not interfere with the working of ore/minerals.
- (3) Orientation of the workings and sequence of mining operations shall be such that different grades of ore/minerals can be obtained simultaneously for blending with a view to achieve optimum recovery of ore/minerals from the deposit.

16. Separate stacking of non-salable minerals:

- (1) The overburden and waste material obtained during mining operations shall not be allowed to be mixed with non-salable or subgrade minerals/ores. They shall be dumped and stacked separately on the ground earmarked for the purpose.
- (2) The ground selected for dumping of overburden, waste material, the subgrade or non-salable ores/minerals shall be away from working pit. It shall be proved for absence or presence of underlying mineral deposits before it is brought into use for dumping.
- (3) Before starting mining operations, the ultimate size of the pit shall be determined and the dumping ground shall be so selected that the dumping is not carried out within the limits of the ultimate size of the pit except in cases where concurrent back-filling is proposed is proposed.

17. Underground mining operations:

- (1) Mining operations in underground shall be carried out in such a way so as to achieve optimum ore/mineral recovery.
- (2) The method of underground development of the deposit shall be planned in accordance with the method of stoping which shall be selected with due consideration of the geology of the deposit and geomechanical properties of the ore and the adjoining rocks.
- (3) The size of development openings, size of blocks and pillars shall be such that the workings remain stable during the development and stoping stages and between such stages.
- (4) The stoping practices shall be such as to cause minimum disturbance to the surface.
- (5) In case of a doubt as to the optimum ore/mineral recovery under sub-rule (1), or the method of underground development under sub-rule (2), or size of openings, blocks or pillars under sub-rule (3) or the stoping practices under sub-rule (4), it shall be referred to the Chief Controller of Mines for decision.
- (6) The Chief Controller of Mines may order such investigations and tests to be carried out as are considered necessary before arriving at a decision on any matter referred to

him under sub-rule (5).

18. Subgrade minerals to be brought to surface:

- (1) All the subgrade ore/minerals wherever obtained in underground workings shall be brought to the surface instead of leaving or packing them in underground.
- (2) As far as practicable the complete width of the ore/mineral body shall be worked:

Provided that the Chief Controller of Mines may permit in writing leaving of certain portions in underground if it is necessary for the support or protection to the mine workings.

19. Prohibition of reduction of blocks:

All the blocks formed in underground workings shall be regular in size and shape. Once a block is formed it shall not be split or reduced in size until the stage of commencement of stoping:

Provided that the Chief Controller of Mines may permit reduction in the size of blocks on an application in writing made by the owner, agent, mining engineer or manager giving reasons for doing the same.

20. Beneficiation studies to be carried out:

- (1) If the Controller General or the authorised officer, having due regard to the nature of mining operations and grade of ore/mineral is of the view that the sub-grade ore/mineral contains certain recoverable product, he may direct the owner, agent, mining engineer or manager of the mine to get the beneficiation investigations carried out.
- (2) The report of the beneficiation investigations so carried out shall be submitted to the Controller General or the authorised officer, as the case may be, immediately after the investigation is over.
- (3) In a mine having a beneficiation plant, feed products and tailings shall be regularly sampled and analysed at suitable intervals and records of the same maintained in a bound paged book:

Provided that the Controller General or the authorised officer may require the sampling and analysis to be done at any other interval than in practice.

21. Machinery and plant:

(1) Where heavy earth moving machinery is used in mines, the owner, agent, mining engineer or manager of the mine shall maintain Log Books in respect of each machine showing date-wise account of hours worked, hours not worked, reasons for non-working, consumption of fuel/energy and lubricants and output of the machine during the corresponding working hours. The summary of operation of each machine shall be recorded in the Log Book at the end of each month bringing out the percentage availability and percentage utilisatation of the machine, average hourly performance and average fuel/energy consumption per hour.

- (2) Each page of the Log Book shall be numbered and the summary shall be signed and dated by the mining engineer.
- (3) The Log Book shall be made available to the authorised officer on demand.

22. Notice for opening of a mine:

- (1) The owner, agent, mining engineer or manager of every mine shall send to the Controller General, Controller of Mines and the Regional Controller an intimation in Form-C of the opening of a mine so as to reach them within fifteen days of such opening.
- (2) The intimation in Form-C sent to the regional Controller under sub-rule (1) shall be accompanied with a copy of mining plan approved under clause (b) of sub-section (2) of section 5 of the Act only when the mine is being opened after a lapse of 5 years period from the date of approval of mining plan.

23. Abandonment of mines:

- (1) The owner, agent, mining engineer, or manager of every mine shall not abandon a mine or a part of mine during the subsistence of the lease except with prior permission in writing of the Controller General or the authorised officer.
- (2) The owner, agent, mining engineer, or manager of every mine shall send to the Controller General, Controller of Mines and the Regional Controller under registered cover, a notice in Form-D of his intention to abandon a mine or a part of a mine so as to reach them at least ninety days before the intended date of such abandonment.
- (3) Such a notice shall be accompanied by plans and sections on a scale of not less than 1 cm = 10 metres setting forth accurately the work done in the mine upto the time of submission of the notice including the measures envisaged for the protection of the abandoned mine or part thereof, the approaches thereto, and the environment:

Provided that the Controller General may require the plans and sections to be prepared on any other suitable scale.

- (4) The Controller General or the authorised officer may by an order in writing made before the proposed date of abandonment, prohibit abandonment or allow it to be done with such conditions as he may specify in the order.
- (5) The lease holder shall not abandon a mine or part thereof unless a final mine closure plan duly approved by the Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, is implemented. For this purpose, the lessee shall be required to obtain a certificate from the Regional Controller of Mines or the officer authorized by the State Government in this behalf to the effect that protective, reclamation and rehabilitation work in accordance with the final mine closure plan or with such modifications as approved by the competent authority, have been carried out before abandonment of mine.
- **23A. Mine Closure Plan.** Every mine shall have Mine Closure Plan, which shall be of two types:-

- (i) a progressive mine closure plan; and
- (ii) a final mine closure plan.
- **23B.** Submission of Progressive Mine Closure Plan.- (1) The owner, agent, manager or mining engineer shall, in case of fresh grant or renewal of mining lease, submit a progressive mine closure plan as a component of mining plan to the Regional Controller of Mines or officer authorized by the State Government in this behalf as the case may be.
- (2) The owner, agent, manager or mining engineer shall, in case of existing mining lease submit a progressive mine closure plan to the Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, for approval within a period of one hundred and eighty days from the date of commencement of this rule.
- (3) The owner, agent, manager or mining engineer shall review the progressive mine closure plan every five years from the date of its approval in case of existing mine or from the date of opening of the mine in case of fresh grant or from the date of renewal of mining lease, as the case may be, and shall submit to the Regional Controller of Mines or officer authorized by the State Government in this behalf, as the case may be, for its approval.
- (4) The Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, shall convey his approval or refusal of the progressive mine closure plan within ninety days of the date of its receipt.
- (5) If approval or refusal of the progressive mine closure plan is not conveyed to the owner, agent, manager or mining engineer of the mining lease within the period as specified in sub-rule (4), the progressive mine closure plan shall be deemed to have been provisionally approved, and such approval shall be subject to final decision whenever communicated.
- **23C.Submission of final mine closure plan.** (1) The owner, agent, manager or mining engineer shall submit a final mine closure plan to Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, for approval one year prior to the proposed closure of the mine.
- (2) The Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, shall convey his approval or refusal of the final mine closure plan within ninety days of the date of its receipt to the owner, agent, manager or mining engineer.
- (3) If approval or refusal of the final mine closure plan is not conveyed to the owner, agent, manager or mining engineer of the mining lease within the period as specified in sub rule (2), the final mine closure plan shall be deemed to have been provisionally approved, and such approval shall be subject to final decision whenever communicated.
- **23D.** The modification of mine closure plan.- (1) The holder of a mining lease desirous of seeking modifications in the approved mine closure plan, shall submit to the Controller General or the officer authorized by the State Government in this behalf, as the case may be, for approval setting forth the intended modifications and explaining the reasons for such modifications.
- (2) The Controller General or the officer authorized by the State Government in this behalf, as the case may be, may approve the modifications as submitted under clause (1) or approve with such alterations as he may consider expedient.
- 23E. Responsibility of the holder of mining lease.- (1) The owner, manager or mining

engineer shall have the responsibility to ensure that the protective measures contained in the mine closure plan referred to in this rule including reclamation and rehabilitation works have been carried out in accordance with the approved mine closure plan or with such modifications as approved by the Regional Controller or the officer authorized by the State Government in this behalf under this rule.

- (2) The owner, agent, manager or mining engineer shall submit to the Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, a yearly report before 1st July of every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plan, and if there is any deviation, reasons thereof.
- **23F. Financial assurance.** (1) Financial assurance, has to be furnished by every leaseholder. The amount of financial assurance shall be rupees twenty five thousand for A category mines and rupees fifteen thousand for B category mines, per hectare of the mining lease area put to use for mining and allied activities. However, the minimum amount of financial assurance to be furnished in any of the forms referred to in clause (2) shall be rupees two lakh for A category mines and rupees one lakh for B category mines.

Provided that a leaseholder shall be required to enhance the amount of financial assurance with the increase in the area of mining and allied activities.

Provided further that where a leaseholder undertakes reclamation and rehabilitation measures as part of the progressive closure of mine, the amount so spent shall be reckoned as sum of the financial assurance already spent by the leaseholder and the total amount of financial assurance, to be furnished by the lessee, shall be reduced to that extent;

- (2) The financial assurance shall be submitted in one of the following forms to Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, or any amendment to it;
 - (a) Letter of Credit from any Scheduled Bank;
 - (b) Performance or surety bond;
 - (c) Trust fund build up through annual contributions from the revenue generated by mine and based on expected amount sum required for abandonment of mine; or
 - (d) Any other form of security or any other guarantees acceptable to the authority;
- (3) The lessee shall submit the financial assurance to the Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, before executing the mining lease deeds. In case of an existing mining lease, the lessee shall submit the financial assurance along with the progressive mine closure plan.
- (4) Release of financial assurance shall be effective upon the notice given by the lessee for the satisfactory compliance of the provisions contained in the mine closure plan and certified by the Regional Controller of Mines or the officer authorised by the State Government in this behalf, as the case may be.
- (5) If the Regional Controller of Mines or the officer authorised by the State Government in this behalf, has reasonable grounds for believing that the protective, reclamation and rehabilitation measures as envisaged in the approved mine closure plan in respect of which financial assurance was given has not been or will not be carried out in accordance with the mine closure plan, either fully or partially, the Regional Controller of mines or the officer authorised by the State Government in this behalf, shall give the lessee a written notice of his intention to issue the orders for forfeiting the sum assured atleast thirty days prior to the date of the order to be

issued.

- (6) Within thirty days of the receipt of notice referred to in sub-rule(5), if no satisfactory reply has been received in writing from the lessee, the Regional Controller of Mines or the officer authorised by the State Government in this behalf as the case may be, shall pass an order for forfeiting the surety amount and a copy of such order shall be endorsed to the concerned State Government.
- (7) Upon the issuance of order by the Regional Controller of Mines or the officer authorised by the State Government in this behalf, as the case may be, the concerned State Government may realise any letter of credit or bond or any other surety, guarantee provided or obtained as financial assurance for the purpose of performance of protective, reclamation, rehabilitation measures and shall carry out those measures, or appoint an agent to do so."
- **24.** Notice of temporary discontinuance of work in mines and obligations of the lease holders. (1) The owner, agent, mining engineer or manager of every mine shall send to Controller General, Controller of Mines and the Regional Controller of Mines a notice in Form D-1 when the mining or mineral processing operations in the mine or part thereof are discontinued for a period exceeding ninety days so as to reach them within one hundred and five days from the date of such temporary discontinuance.
- (2) Where the discontinuance takes place as a result of the occurrence of natural calamity beyond the control of the owner, agent, mining engineer or manager of a mine, or in compliance with any order or directions issued by any statutory authority established under any law in force or any tribunal or a court, a telegraphic intimation shall be sent to the Controller General and the Regional Controller within a period of twenty-four hours of such discontinuance, and a notice of discontinuance, under this sub rule shall be submitted to the Controller General, Controller of Mines and the Regional Controller within a period of fifteen days of such discontinuance in Form D-1.
- (3) During the temporary discontinuation of mine or part thereof, it shall be the responsibility of the owner, agent, manager or mining engineer to comply with the reasonable prohibitive measures to restrict access for unauthorised entry, provide protective measures to potentially danger sources of electrical and mechanical installations, the mine openings or workings and all other structures. It shall be ensured that all contaminated effluents are controlled and all physical, chemical, biological monitoring programmes have been continued. It shall also be ensured that all rock piles, over burden piles and stock piles and tailings and other water impoundment structure have been maintained in stable and safe conditions.

25. Intimation of reopening of a mine:

The owner, agent, mining engineer or manager of every mine shall send to the Controller General, Controller of Mines and the Regional Controller an intimation in Form-C of reopening of a mine after temporary discontinuance, so as to reach them within fifteen days from the date of such reopening.

26. Stoping of vein, etc.:

- (1) No stoping shall be commenced, conducted or carried out except with prior permission in writing of the Controller General, or the authorised officer.
- (2) The owner, agent, mining engineer or manager of every mine shall send to the Controller General, Controller of Mines and the Regional Controller under registered

cover a notice in Form-E intimating his intention to commence the stoping of any vein, lode, reef or mineral deposit, so as to reach them at least sixty days before the date of commencement of such operations.

(3) Such notice shall be accompanied by plans and sections on a scale of not less than 1 cm = 10 metres showing the details of the block proposed to be stoped, the manner of stoping, the mineralised and barren zones indicating estimated percentages recovery from stopes:

Provided that the Controller General [or the Chief Controller of Mines, as the case may be,] may, by an order in writing and subject to such conditions as he may specify therein, permit or require the plans and sections to be prepared on any other suitable scale.

(4) The Controller General or the authorised officer may by an order in writing made before the proposed date of commencement of stoping operations prohibit the stoping or allow it to be done under such conditions as may be specified in the order.

CHAPTER IV

Plans and Sections

27. General requirements about plans and sections:

- (1) Every plan or section prepared or submitted in accordance with the provisions of these rules shall
 - (a) show the name of the mine and of the owner and the purpose for which the plan or section is prepared:
 - (b) show the true north or the magnetic meridian and the date of the latter;
 - (c) show a scale of the plan at least twenty five centimetres long and suitably sub-divided;
 - (d) unless otherwise provided, be on a scale having a representative factor of-
 - (i) 200:1 in case of mica mines and other mines having small-scale workings below ground;
 - (ii) 2000:1 in case of mines having large open cast working and also in case of surface plans of large leasehold areas; and
 - (iii) 1000:1 in other cases:

Provided that the Chief Controller of Mines may, by an order in writing and subject to such conditions as he may specify therein, permit or require the plans to be prepared on any other

suitable scale;

- (e) Be properly inked in on a durable paper or on tracing cloth or other suitable material and be kept in good condition.
- (2) The conventions prescribed under the Metalliferous Mines Regulations, 1961, shall be used in preparing all plans and sections required under these rules.
- (3) The plans and sections shall be accurate within such limits of error as the Controller General may specify by a general or special order.
- (4) The plans and sections required under these rules shall be maintained up-to-date within three months in case of category 'A' mines as referred to in clause (b) of sub-rule (1)of rule 42, and within twelve months in the case of any other mine.

28. Types of plans and sections:

- (1) The owner, agent, mining engineer or manager of every mine shall keep the following plans and sections-
 - (a) a surface plan showing every surface feature within the mining lease boundaries, such as building, telephone, telegraph or power transmission line, watermain, tramline, railway, road, river, water-course, reservoir, tank, bore-hole, shaft and incline opening, opencast working, dumps and dumping ground, the waste land, forest, sanctuaries, agricultural land and grazing land and subsidence on the surface.
 - (b) a surface geological plan of the area of leasehold, on a scale specified or approved by Controller General by a general or special order in writing showing-
 - (i) all the lithological units exposed in the area, in the pits, trenches and in any other openings made for prospecting and mining operations showing contact between lithological units;
 - (ii) structural details like strike, dip, fold, fault, plunge of ore body;
 - (iii) location of prospecting pits, trenches, boreholes and any other openings made for prospecting and/or mining operations;
 - (iv) existing mine workings, dumps.
 - (c) a transverse section or sections of the workings through the shaft or shafts and main adits indicating clearly the strike and dip of the vein, lode, reef, or mineral bed or deposit at different points, and such sections of the strata sunk or driven through in

the mine or proved by boring, as may be available;

(d) a longitudinal mine section or sections showing a vertical projection of the mine workings including outlines of all stoped out areas, where a reef, vein, lode or mineral bed/deposit or part thereof has dip exceeding thirty degrees from the horizontal plane:

Provided that, with the permission in writing of the Controller General [or the Chief Controller of Mines, as the case may be,] and subject to such conditions as he may specify therein, such sections may be prepared in relation to any other suitable plane.

- (e) an underground plan showing-
 - (i) the position of the workings of the mine below ground;
 - (ii) every borehole and shaft (with depth), drive, cross-cut, winze, raise, excavation(stoped ground) and every tunnel and air passage connected therewith;
 - (iii) every pillar or block of mineral left for the support of any structure on the surface; and underground magazines, if any;
 - (iv) the general strike of the veins, lodes, reefs and mineral beds or deposits;
 - (v) the position of every dyke, fault and other geological disturbance with the amount and direction of throw.
- (2) Whenever the underground plan referred to in clause(e) of sub-rule(1) is brought up-to-date, the then position of the workings shall be shown by a dotted line drawn through the ends of the workings, and such dotted line shall be marked with the date of the last survey:

Provided that that Controller General [or the Chief Controller of Mines, as the case may be,] may, by an order in writing and subject to such conditions as he may specify therein approve any other method of showing the up-to-date position of the workings of the mine.

- (3) Where different reefs, lodes, veins or mineral beds or deposits overlie or run parallel to one another, the workings of each reef, lode, vein or mineral bed or deposit shall be shown on separate plan and/or longitudinal section or sections; however if two reefs, lodes, veins, or mineral beds or deposits are so situated in relation to each other that the parting between workings made therein is less than ten metres at any place, such workings shall also be shown on a combined plan and/or longitudinal section, as the case may be, in different colours.
- (4) The plans kept under clauses(a) and (e) of sub-rule (1) shall also show the

settled boundary of the mining lease, or where the boundary is in dispute, the boundaries claimed by the owner of the mine and by the owners of the mines adjacent to the disputed boundary:

Provided that where it is not possible to show the complete boundary of leasehold on the same plan an additional key plan on any other suitable scale showing such boundaries and the outline of the workings shall also be maintained.

- (5) The owner, agent, mining engineer or manager of every mine shall keep the following:
 - (a) A key plan on a scale of 1:63,000 or 1:50,000 incorporating the following:
 - [(i) an administrative surface map showing the boundary of the mining lease, and the adjoining area lying preferably within five kilometres thereof;]
 - (ii) Contours at not more than twenty metres intervals;
 - (iii) Natural drainage system such as rivers, streams, nalahs, water reservoirs, ponds, lakes, irrigation dams and canals;
 - (iv) Roadways and railways;
 - (v) Places of historical and archaeological importance, monuments, places of worship, pilgrimage and of tourist interest;
 - (vi) Forests with tree density, sanctuaries, wastelands, agricultural lands, grazing lands;
 - (vii) Boundaries of all villages and towns with their population;
 - (viii) Predominant wind direction;
 - (ix) Any other relevant features.

Provided that where topographical map is classified as restricted, the particulars referred to in items (I) to (ix) shall be incorporated in the key plan to the extent available in the administrative [surface] maps.

- b. An environment plan of the area of mining lease inclusive of the adjoining area within five hundred metres of the boundary of a lease area on 1:5000 scale incorporating the following:
 - (i) [An administrative surface map showing the boundary of the mining lease;]
 - (ii) Contour lines at five metres intervals;
 - (iii) All features indicated in sub-clauses (iii) to (ix)of clause (a) above;

- (iv) Area occupied by mine workings, area deforested, area covered by dump with the height of the dump, processing plant, surface building, workshop, mining township;
- (v) Area reclaimed and area afforested, location of protective barriers, check dams erected to contain solid and liquid effluents generated by prospecting, mining, beneficiation or metallurgical operations carried out in the mine;
- (vi) All pumping stations and the courses of discharge of mine water.

Provided that the particulars with regard to items (ii), (iv) and (v) shall be applicable only upto sixty metres beyond the boundary of lease area.

- (6)(a) The Controller General may, by an order in writing, require such additional details to be shown on the plans and sections required to be kept under these rules or the preparation and maintenance of such plans and sections showing such details and on such scale and within such time as he may specify in the order.
- (b) The Controller General or the authorised officer may, by an order in writing, require the owner, agent, mining engineer or manager of a mine to submit to him within such time, such plans and sections, or tracings thereof, as he may specify in the order.

29. Copies of plans and sections to be submitted:

The owner, agent, mining engineer or manager of every mine shall, on or before the 30th day of June every year submit to the Controller General. Controller of Mines and the Regional Controller a copy of the plans and sections maintained under rule 28.

30. Preparation of plans:

- (1) All plans, sections and tracings or copies thereof kept at the mine shall be serially numbered or suitably indexed.
- (2) Every plan, section or part thereof prepared under these rules shall carry thereon a certificate for its correctness and shall be signed by the mining engineer with date:

Provided that the geological plans and sections shall be certified and signed by the geologist employed under rule 42.

(3) Every copy of a plan and section or part thereof submitted or maintained under these rules shall bear a reference to the original plan or section from which it was copied and shall be certified thereon by the owner, agent, mining engineer or manager to be a true copy of the original plan or section.

CHAPTER V

Environment

31. Protection of environment:

Every holder of a prospecting licence or a mining lease shall take all possible precautions for the protection of environment and control of pollution while conducting prospecting, mining, beneficiation or metallurgical operations in the area.

32. Removal and utilisation of top soil:

- (1) Every holder of a prospecting licence or a mining lease shall, wherever top soil exists and is to be excavated for prospecting or mining operations, remove it separately.
- (2) The top soil so removed shall be utilised for restoration or rehabilitation of the land which is no longer required for prospecting or mining operations or for stabilising or landscaping the external dumps.
- (3) Whenever the top soil cannot be utilized concurrently, it shall be stored separately for future use.

33. Storage of overburden, waste rock, etc.:

- (1) Every holder of a prospecting licence or a mining lease shall take steps so that the overburden, waste rock, rejects and fines generated during prospecting and mining operations or tailings, slimes and fines produced during sizing, sorting and beneficiation or metallurgical operations shall be stored in separate dumps.
- (2) The dumps shall be properly secured to prevent escape of material therefrom in harmful quantities which may cause degradation of environment and to prevent causation of floods.
- (3) The site for dumps, tailings or slimes shall be selected as for as possible on impervious ground to ensure minimum leaching effects due to precipitations.
- (4) Wherever possible, the waste rock, overburden etc. shall be back-filled into the mine excavations with a view to restoring the land to its original use as far as possible.
- (5) Wherever back-filling of waste rock in the area excavated during mining operations is not feasible, the waste dumps shall be suitably terraced and stablised though vegetation or otherwise.
- (6) The fines, rejects or tailings from mine, beneficiation or metallurgical plants shall be deposited and disposed in a specially prepared tailings disposal area such that they are not allowed to flow away and cause land degradation or damage to agricultural field, pollution of surface water bodies and ground water or cause floods.

34. Reclamation and rehabilitation of lands:

Every holder of prospecting licence or mining lease shall undertake the phased restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of prospect or mine.

35. Precaution against ground vibrations:

Whenever any damage to public buildings or monuments is apprehended due to their proximity to the mining lease area, scientific investigations shall be carried out by the holder of mining lease so as to keep the ground vibrations caused by blasting operations within safe limit.

36. Control of surface subsidence:

Stoping in underground mines shall be so carried out as to keep surface subsidence under control.

37. Precaution against air pollution:

Air pollution due to fines, dust, smoke or gaseous emissions during prospecting, mining, beneficiation or metallurgical operations and related activities shall be controlled and kept within 'Permissible Limits' specified under various environmental laws of the country including the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the Environment (Protection) Act, 1986 (29 of 1986) by the holder of prospecting licence or a mining lease.

38. Discharge of toxic liquid:

Every holder of prospecting licence or a mining lease shall take all possible precautions to prevent or reduce the discharge of toxic and objectionable liquid effluents from mine, workshop, beneficiation or metallurgical plants., tailing ponds, into surface water bodies, ground water aquifier and useable lands, to a minimum. These effluents shall be suitably treated, if required, to conform to the standards laid down in this regard.

39. Precaution against noise:

Noise arising out of prospecting, mining, beneficiation or metallurgical operations shall be abated or controlled by the holder of prospecting licence or a mining lease at the source so as to keep it within the permissible limit.

40. Permissible limits and standards:

The standards and permissible limits of all pollutants, toxins and noise referred to in rules 37, 38 and 39 shall be those notified by the concerned authorities under the provisions of the relevant statutes from time to time.

41. Restoration of flora:

- (1) Every holder of prospecting licence or a mining lease shall carry out prospecting or mining operations, as the case may be, in such a manner so as to cause least damage to the flora of the area held under prospecting licence or mining lease and the nearby areas.
- (2) Every holder of prospecting licence or a mining lease shall
- (a) take immediate measures for planting in the same area or any other area selected by the Controller General or the authorised officer not less than twice the number of trees destroyed by reason of any prospecting or mining operations;
- (b) look after them during the subsistence of the licence/lease after which these trees shall be handed over to the State Forest Department or any other authority as may be nominated by the Controller General or the authorised officer and:
- (c) restore to the extent possible, other flora destroyed by prospecting or mining operations.

CHAPTER VI

Employment of Qualified persons

- 42. Employment of geologist and mining engineer:
 - (1) For the purpose of carrying out prospecting and mining operations in accordance with these rules:
 - (a) every holder of a prospecting licence shall employ a part-time or whole-time geologist or mining engineer; and
 - (b) every holder of a mining lease shall employ-
 - (i) in case of the following category 'A' mines, a whole-time mining engineer, namely:-
 - (A) fully mechanised category 'A' mines which shall be such mines where the work is being carried out by deployment of heavy mining machinery for deep hole drilling, excavation, loading and transport, and
 - (B) other than fully mechanised category 'A' mines which shall be such mines where the number of average employment exceeds one hundred and fifty in all or seventy-five in workings below ground, or a mine where any of the mining operations like deep hole drilling, excavation, loading and transport is carried out with the help of heavy machinery.

Provided that if any doubt arises as to whether any mine is a category 'A' mine, it shall be referred to the Controller General for decision.

(ii) in the case of any other mine, referred to as category 'B' mine, either a part-time mining engineer or a full-time person permitted to be employed in terms of the provisions of subrule (6).

Explanation: The expression 'average employment' means the average per day of the total employment of the mine during the preceding quarter (obtained by dividing the number of mandays worked by the number of working days).

- (2) The part-time geologist or mining engineer may be employed up to a maximum of six prospects or mines, provided that all such prospects or mines are located within a radius of 50 kilometres.
- (3) The Controller General may, if he is considers necessary on geological considerations, require the holder of a mining lease to also employ a part-time or whole-time geologist.
- (4) If the holder of a prospecting licence or mining lease is a geologist or mining-engineer, he may appoint himself as the geologist or mining engineer for the purpose of sub-rule (1).
- (5) A mining engineer or geologist employed by the holder of a prospecting licence or mining lease shall possess the qualifications specified below:-

Geologist: A postgraduate degree in Geology granted by a University established or incorporated by or under a Central Act, a Provincial Act or a State Act, including any institution recognised by the University Grants Commission established under section 4 of the University Grants Commission Act, 1956 or any

equivalent qualification.

Mining Engineer: A degree in Mining Engineering granted by a University established or incorporated by or under a Central Act, a Provincial Act or a State Act, including any institution recognised by the University Grants Commission established under section 4 of the University Grants Commission Act, 1956 or any equivalent qualification.

- (6) (a) []
 - (b) []
 - (c) []
 - [(d) Persons possessing the qualifications and experience corresponding to the category of mines as laid down in the Table below shall be eligible to be employed in respect of the category of mines specified:

TABLE

Qualifications	Experience	Category of Mines
(1)	(2)	(3)
(i) Diploma in Mining or Post- graduate Degree in Geology with First Class Matelliferrous Mine Manager's Certificate	Nil	All category 'B' Mines
(ii) Holder of First Class Metalliferrous Mine Manager's Certificate		All category 'B' Mines
(iii)Diploma in Mining or Post- graduate Degree in Geology or equivalent	1	
(iv) Graduate in Geology or holder of Second Class Metalliferrous Mine Manager's Certificate	graduation or one year's	
(v) Secondary School Leaving Certificate with Mines Foreman's Certificate		All open cast mines of Category 'B']

- (e) The person permitted to be employed in lieu of mining engineer shall be bound by these rules in the same way as the mining engineer.
- (7) Where, due to reduction in average employment in the mine, a category 'A' mine qualifies to become a category 'B' mine, the employment of a mining engineer as required for category 'B' mine may be done only with previous permission in writing of the Controller General or the authorised officer and subject to such conditions as he may specify.

43. Duties of geologist:

(1) It shall be the duty of the geologist to conduct prospecting operations in accordance with the provisions of these rules.

(2) He shall -

- (a) prepare the necessary geological plans and sections which are required to delineate the ore body;
- (b) calculate ore reserves and its grade;
- (c) be responsible for providing all the necessary information required for controlling the quality of the minerals produced;
- (d) maintain proper records of the prospecting operations and records of sinking of shafts and boreholes as provided under these rules;
- (e) work out the appropriate method of sampling and ensure preparation of samples accordingly;
- (f) maintain an assay plan in cases of underground workings;
- (g) maintain all technical data for determining the shape and size of each stope block.
- (h) update the reserve figures, grade-wise and category-wise at the end of every year in case of a working mine;
- (i) identify the associated rocks and minerals and maintain proper records of the stacks of non-salable/sub-grade ores and minerals produced.
- (j) carry out all such orders and directions as may be given in writing under these rules by the Controller General or the authorised officer and shall forward a copy of all such orders or directions to the holder of the prospecting licence or, as the case may be, the mining lease.

44. Duties of mining engineer:

- (1) It shall be the duty of the mining engineer to take all necessary steps to plan and conduct mining operations, so as to ensure conservation of minerals, systematic development of the mineral deposits and protection of environment in and around the mining lease area in accordance with these rules.
- (2) He shall be responsible for the preparation and maintenance of plans, sections, reports and schemes in accordance with these rules.
- (3) He shall be responsible for carrying out the study of the associated rocks and minerals, identifying them and stacking the various minerals produced separately.
- (4) He shall carry out all such orders and directions as may be given in writing under these rules by the Controller General or the authorised officer and shall forward a copy of such orders or directions to the holder of prospecting licence or, as the case may be, the mining lease.
- (5) Wherever the mining engineer is appointed to supervise the prospecting operations under rule 42, he shall also carry out the duties of the geologist.
- (6) (a) The mining engineer shall ensure that there is sufficient provision of proper materials, appliances and facilities at all times at the mine for the purpose of carrying out the provisions of these rules and orders issued thereunder and where he is not the owner or agent of the mine, he shall make requisition in writing to the owner or agent for anything required for the aforesaid purpose. A copy of every such requisition shall be recorded in a bound paged book kept for the purpose.

(b) On receipt of a requisition under clause (a), the owner or agent shall provide as soon as possible the materials and facilities requisitioned by the mining engineer.

CHAPTER VII

Notices and Returns

- 45. Monthly, quarterly and annual returns:
 - (1) The owner, agent, mining engineer or manager of every mine shall submit to the Controller General, Controller of Mines and the Regional Controller, returns in respect of each mine as per category A or B specified in clause (b) of sub-rule(1) of rule 42, in the relevant form and within the time specified in respect of such returns, namely:
 - (a) a monthly return which shall be submitted before the 15th of every month in respect of preceding month in the Form as indicated below:

In respect of category A mines

- (i) for iron ore in Form F-1;
- (ii) for manganese ore in Form F-2;
- (iii) for bauxite and laterite in Form F-3;
- (iv) for chromite in Form F-4;
- (v) for copper, lead, zinc, pyrites, gold and tungsten in Form F-5;
- (vi) for mica in Form F-6
- (vii) for precious and semi-precious stones in Form F-7;
- (viii) for all other minerals in Form F-8; and

In respect of category B mines

- (ix) for all minerals in Form F-9;
- (b) a quarterly return in Form G which shall be substituted before the 1st July each year for the preceding year in respect of mines using explosives.
- (c) an annual return which shall be submitted before the 1st July each year for the preceding year in the Form as indicated below:

In respect of category A mines

- (i) for iron ore in Form H-1;
- (ii) for manganese ore in Form H-2;
- (iii) for bauxite and laterite in Form H-3;
- (iv) for chromite in Form H-4;
- (v) for copper, lead, zinc, pyrite, gold and tungsten in Form H-5;
- (vi) for mica in Form H-6;
- (vii) for precious and semi-precious stones H-7;
- (viii) for all other minerals in Form H-8; and

In respect of category B mines

(ix) for all minerals in Form H-9

Provided that in case of abandonment of a mine, the annual return of that mine shall be submitted within ninety days of the date of abandonment.

(2) Where under the provisions of clauses (a) and (c) of sub-rule (1), the monthly and the annual returns have been sent in the form prescribed for category A mine, they shall not, except with the previous permission in writing of the Controller General, be sent in the form prescribed for category B mines, notwithstanding any reduction in the average employment of the mine during the succeeding periods.

46. Notice of certain appointments:

When any new appointment is made of an agent, mining engineer, geologist, manager or any person under sub-rule (6) of rule 42 or when the employment of any such person is terminated or any such person leaves, the said employment or when any change occurs in the address of any such person, the owner of the mine or the holder of the prospecting licence shall within fifteen days from the date of such appointment, termination, leaving or change in address give a notice in Form I to the Controller General, Controller of Mines and the Regional Controller.

47. Notice of shaft sinking and boreholes:

The owner, agent, mining engineer, geologist or manager of every mine or the holder of a prospecting licence shall send intimation in Form J to the Controller General, Controller of Mines and the Regional Controller within fifteen days after the commencement of any of the following operations:

- (a) the sinking of trial shaft or borehole to a depth exceeding ten metres from the surface, or
- (b) the extension of an existing shaft or borehole to a depth

exceeding ten metres, or

(c) the sinking of a new shaft or boreholes commencing from underground workings:

Provided that the Controller General or the authorised officer may permit such intimation to be given collectively within such extended period as may be specified by him.

48. Records of shafts and boreholes:

The owner, agent, mining engineer, geologist or manager of every mine or the holder of a prospecting licence shall keep a record in Form-K of all shafts or boreholes exceeding ten metres in depth and shall retain all records and sample of the strata passed through for a period of not less than twelve months after the completion of the work or abandonment thereof:

Provided that the records of boreholes and shafts exceeding one hundred metres length shall not be destroyed except with the prior approval of the Controller General or the Regional Controller.

49. Change in the name of mine to be notified:

The owner, agent, mining engineer or manager of every mine shall send a notice in Form-C to the Controller General, the Controller of Mines and the Regional Controller, of any change in the name of the mine within thirty days of such change.

50. Notice of transfer of prospecting licence or mining lease:

Without prejudice to the provisions of the Act or any rules made thereunder or the terms and conditions of a prospecting licence or a mining lease, prohibiting or restricting the transfer of a prospecting licence or a mining lease, every holder of a prospecting licence or a mining lease who transfers or assigns his licence or lease or any right, title or interest thereunder to any other person, shall, within thirty days of the date of such transfer or assignment send an intimation thereof in Form-L to the Controller General, the Controller of Mines and the Regional Controller.

50A. Notice of amalgamation of mining lease:- Without prejudice to the provisions of the Act or any rules made thereunder or the terms and conditions of a mining lease, every holder of a mining lease shall within thirty days of the date of amalgamation of mining leases carried out under rule 38 of Mineral Concession Rules, 1960, send an intimation thereof to the Controller General and the State Government.

51. Transfer of records to transferees:

When the ownership of a prospecting licence or a mining lease is transferred, the previous owner or his agent shall make over to the new owner or his agent within a period of seven days of the transfer of the ownership, borehole cores preserved, if any, all plans, sections, reports, registers and other records maintained in pursuance of the Act, Rules or Orders made thereunder, and all

correspondence relevant thereto relating to the prospecting licence or mining lease; and when the requirements of these rules have been duly complied with, both previous and the new owners or their respective agents shall forthwith send to the Controller General, Controller of Mines and the Regional Controller a detailed list of borehole cores, plans, sections, reports, registers and other records that have been transferred.

52. Copies of notices/returns to be submitted to the State Government:

The owner, agent, mining engineer or manager of every mine or a holder of a prospecting licence shall simultaneously submit a copy each of the notice/return/intimation required to be submitted under these rules to the State Government concerned in whose territory the mine or the prospecting area is situated or to such authority as that Government may specify in this behalf.

53. Copies of notices and returns to be maintained :

The owner, agent, mining engineer or manager of every mine or a holder of a prospecting licence shall maintain the labour attendance register, production and despatch register, explosives consumption register, mineral analysis reports and details of mining machinery and copies of all notices and returns, plans, sections and schemes submitted to the Controller General under these rules, at an office established in the area where mining or prospecting operations are carried on, and these shall be made available at all reasonable times to the officers of the Indian Bureau of Mines for inspection.

CHAPTER VIII

Examination of Minerals and issue of Directives

54. Power to issue directions:

- (1) The owner, agent, mining engineer, geologist or manager of every mine shall comply with such directions being directions for purposes of providing for systematic development of mineral deposits, conservation of minerals and for the protection of environment by preventing or controlling pollution which may be caused by prospecting, mining, beneficiation or metallurgical operations, as the Controller General may issue from time to time. A copy of the proposed directions to be issued to any particular mine will be sent by the Controller General to the owner, agent, mining engineer, geologist or manager of the mine concerned, and to the State Government concerned, and any comments received from the owner, agent, mining engineer, geologist or manager of the mine and the State Government within thirty days of the date of service of the notice, shall be duly considered by him before issuing any such directions. General directions applicable to a class of mines shall be issued by the Controller General with the previous approval of the Central Government in consultation with the State Government concerned.
- (2) An order made under sub-rule (1) shall-
- (a) in the case of an order of a general nature or affecting a class of persons, be notified in Official Gazette; and
- (b) in the case of an order directed to a specified individual, be served on such individual, (i) by delivering or

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tendering it to that individual, or if it cannot be so delivered or tendered, by affixing it on the outer door or some other conspicuous part of the premises in which that individual lives, and a written report thereof shall be prepared and witnessed by two persons living in the neighbourhood.

55. Examination of mineral deposits and taking of samples:

The Controller General or any officer duly authorised by the Government to enter and inspect a mine, may examine any mineral deposit in any area under prospecting licence or mining lease and take samples therefrom at any time for the purposes of these rules.

56. Prohibition of deployment in certain cases:

If any mine or part thereof, which in the opinion of the Controller General, Chief Controller of Mines or the Controller of Mines poses a grave and immediate threat to the conservation of minerals or to environment, he may, by an order in writing to the owner, agent, mining engineer or manager, require him to take such measures as may be specified in the order and may prohibit, until the requirements as specified in the order are complied with to his satisfaction, the deployment of any person other than those required for compliance with the requirement of the order.

CHAPTER IX

Revision and Penalty

57. **Revision**:

(1) Any person aggrieved by any order made or direction issued under these rules by any officer subordinate to the Controller General, [or an officer of the State Government, as the case may be,] may within thirty days of the communication of such order or direction, apply to the Controller General for a revision of the order or direction, provided that any such application may be entertained after the said period of thirty days if the applicant satisfies the Controller General that he had sufficient cause for not making the application within time.

[Provided that if any order made or direction issued as aforesaid by an officer subordinate to the Chief Controller of Mines, the application shall be made to the Chief Controller of Mines who shall deal with the application in the manner prescribed hereunder.]

(2) Every order against which a revision application is preferred under sub-rule (1) shall be complied with pending receipt of the decision of the appellate officer:

[Provided that the Controller General or the Chief Controller of Mines, as the case may be, may suspend the operation of the order appealed against, pending disposal of the revision application.]

- (3) On receipt of an application for revision under sub-rule (1), the Controller General [or the Chief Controller of Mines, as the case may be,] after giving a reasonable opportunity of being heard to the aggrieved person, may confirm, modify or set aside the order passed by an officer subordinate to him.
- [(4) Any person aggrieved by any order made or direction issued by the Chief Controller of Mines may within thirty days of the communication of such order or direction, apply to the Controller General for a revision of the order or direction, provided that any such application may be entertained after the said period of thirty days, if the applicant satisfies the Controller General that he had sufficient cause for not making the application within time.].

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- [(5) On receipt of any such application under sub-rule (4), the Controller General may confirm, modify or set aside the order or direction made or issued by the Chief Controller of Mines or may pass such orders in relation to the applicant, as it may deem fit and such decision shall be final.].
- (6) Every order against which a revision application is preferred under sub-rule (4), shall be complied with pending receipt of the decision of the [Controller General]:

Provided that the [Controller General] may, on an application made by the applicant, suspend operation of the order appealed against pending disposal of the revision application.

(7) Every application submitted under the provisions of this rule shall be accompanied by a Treasury Receipt showing that a fee of Rs.1000/- (rupees one thousand) has been paid into 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' or by a Bank Draft on a Nationalised Bank for Rs.1000/-(rupees one thousand) in the name of Pay & Accounts Officer, Indian Bureau of Mines payable at Nagpur.

58. **Penalty**:

Whoever contravenes any of the provisions of these rules shall be punishable with imprisonment for a term which may extend up to two years, or with fine extending to fifty thousand rupees or with both, and in the case of continuing contravention with an additional fine which may extend up to five thousand rupees for every day during which such contravention continues, after conviction for the first such contravention:

Provided that for repeated contravention the punishment should be in the form of imprisonment only:

Provided further that any offence punishable under these rules may either before or after the institution of the prosecution, be compounded by the authorized officer to make a complaint to the court with respect to that offence, on payment to that officer for credit to the Government, of such sum that officer may specify:

Provided also that in case of an offence punishable with fine only, such sum shall not exceed the maximum amount of fine which may be imposed for that offence:

Provided further that where an offence is compounded under these rules, no proceeding or further proceeding, as the case may be, shall be taken against the offender in respect of the offence so compounded, and the offender, if in custody shall be released forthwith.

CHAPTER X

Miscellaneous

59. Preservation of cores, etc.:

The owner, agent, mining engineer, geologist or manager of every mine or the holder of a prospecting licence shall preserve intact all cores and specimens of different types of rocks and minerals obtained during drilling or sinking operations and arrange for them to be laid out in a serial order with identification marks, showing the progressive depth at which they are obtained. Such specimens shall not be broken except for the purpose of analysis and testing in which case, representative samples of the specimens so broken will be preserved for a period of not less than six months from the date of completion of drilling or sinking

operations. The Controller General, by an order in writing, may require the cores or specimens of rocks and minerals obtained from specific boreholes or shafts to be preserved for any specific period or relax the provisions of this rule to such an extent as he may deem fit.

60. Facilities for undertaking research or training:

Every holder of a prospecting licence or a mining lease shall afford all reasonable facilities to persons authorised by the Controller General for the purpose of undertaking research or training in matters relating to mining or geology.

61. Submission of records/reports regarding research in geology or mining:

- (1) Any person, institution or agency carrying on prospecting or mining operations related to any research in geology or mining, shall inform the Controller General and the Regional Controller, within a period of thirty days of commencement of such research related operations, indicating briefly the aspects proposed to be covered under such research together with the name and address of the person, institution, or agency carrying out such research work and the expected duration of the research related operations.
- (2) (a) On completion of the said research work, a report describing the observations, analysis and conclusions reached as a result of the said research work shall be submitted to the Controller General within thirty days of its completion.
 - (b) The information so received will be kept confidential, if required. The Government will, however, be free to utilise the information for general studies, planning or policy making purpose.
- (3) The provisions of sub-rules (1) and (2) shall also apply *mutatis mutandis* to any agency of the Central Government or State Government carrying out the research work.

62. Territorial jurisdiction of Controller of Mines/Regional Controller:

The Controller General may by a notification in the Official Gazette prescribe the limits of the territorial jurisdiction of the Controller of Mines and the Regional Controller for purposes of these rules.

63. Obligation to supply other information:

The holder of reconnaissance permit, prospecting license or mining lease, or his agent shall furnish such information regarding his reconnaissance or prospecting operations or mine or any matter connected therewith as the Controller General or the authorised officer may require by an order in writing and the information shall be furnished within such time as may be specified in the aforesaid order.

64. Provisions of these rules to be applicable to Government:

The Government or its agencies carrying out mining operations without a mining lease shall be bound by the all the provisions of these rules in the same manner as they are applicable to holders of mining leases.

65. Chief Controller of Mines etc. to exercise powers of the Regional Controller of Mines:

Any power granted under these rules to the Regional Controller of Mines may be exercised by the Controller of Mines or the Chief Controller of Mines.

66. Repeal and savings:

The Mineral Conservation and Development Rules, 1958 are hereby repealed:

Notwithstanding such repeal, anything done or any action taken, including any order made, direction given or notice issued under the Mineral Conservation and Development Rules, 1958 shall in so far as it is not inconsistent with the provisions of these rules, be deemed to have been done, taken, made, given or issued, as the case may be, within the corresponding provisions of these rules.

"SCHEDULE"

	FORM-A	
(Notice of commer	ncement of prospecting operations)	
	(See rule 7)	
	То	
	1. The Controller General	
IMPORTANT	Indian Bureau of Mines,	
Nagpur - 440		
This Form, duly filled in must reach the concern		
authorities within fifteen days of the commence		
	ian Bureau of Mines	
	PIN	
*3. The Reg.Co	ontroller Mines,	
Indian Bureau		
PIN		
	nment concerned.	
1. Name of the mineral s for which (a)	(c)	
prospecting licence has been granted. (b)	(d)	
2. Name and address of the licensee		
PIN		
3. In case the licensee is a Company or Partners!	hip Firm	
or Co-operative, please indicate.		
(i) Name and address of the Director-in-charge		
PIN		
(ii) Address of the Registered Office		
PIN		
4. Particulars of Prospecting Licence (PL):		
(i) Date of execution		
(ii) Periodyears, from		
(iii)Area under licence	hectares.	
5. Location of the Prospecting Licenced Area: _		
(i) Topo Sheet Number		
(ii) Cadastral Survey or Khasra Number		
(iii) Village		

(iv) (a) Post Office				
(b) Police Station				
(v) (a) Taluka	-			
(b) District				
(c) State				
(vi) (a) Nearest Railway Station				
(b) The distance therefrom				
(kilometres)				
(vii) (a) Nearest Rest House/Dak Ban	galow			
(b) Its distance from				
(1) The Railway Station				
(kilometres)				
(2) The prospecting area				
(kilometres)				
6. Particulars of Geologist or Mining	Engineers			
employed for the Prospecting Licence				
(i) Name and address:				
PIN				
(ii) Qualifications				
(iii) Date of appointment				
	(iv) Nature of appointment Whole time () Part time () (Please tick mark ne of the boxes whichever is applicable).			
·	ting operations:			
Place:	ang operations.			
Date:	Signature			
	Name in full:			
	Designation:Owner/Agent/			
ľ	Mining Engineer/Manager			
* This should be sent to the Controller of Mines/Regional Controller of Mines in whose territorial jurisdiction the area/mine falls as notified from time to time by the Controller General, Indian Bureau of Mines, under rule 62 of the Mineral Conservation and Development Rules, 1988.				
	FORM-AA			
(Notice of	commencement of reconnaissance operations)			
	(See rule 3D)			
IMPORTANT				
<u>IMPORTANT</u>	(See rule 3D) To,			
<u>IMPORTANT</u>				
<u>IMPORTANT</u>				
-	То,			
IMPORTANT This Form, duly filled in must reach the	То,			
This Form, duly filled in must reach the	To, he 1. The Controller General,			
-	To, he 1. The Controller General,			

operations.		
	*2. The Controller of Mines,	
	Indian Bureau of Mines,	
	*3. The Regional Controller of Mines	
	Indian Bureau of Mines	
	4. State Government concerned,	
1. Name of the mineral or minerals for		
which reconnaissance permit has		
been granted		
2. Name and address of the permit holder _		
3. In case the permit holder is a Company		
or Partnership Firm or Co-operative,		
please indicate.		
(i) Name and address of the Director		
in-charge		
(ii) Address of the Registered Office		
4. Particulars of reconnaissance permit.		
(i) Date of execution		
(ii) Period years,		
fromto	_	
(iii) Area under permit	hectares.	
5. Location of the reconnaissance permit area (A map showing the location on Scale		
1:250,000 should be enclosed).		
(i) Topo Sheet Number(s)	<u>-</u>	

(ii) eo oraniates or con	rner points		
(iii) (a) District(s)			
(b) State			
6. Particulars of Geolo	gist or Mining Engineer,	if any, employed for the reconnaissance.	
(i) Name and address:			
(ii) Qualifications			
(iii) Date of appointme	nt		
(iv) Nature of appointr	nent Whole time () Part	time ()	
(Please tick (□) mark	one of the boxes which	ever is applicable).	
7. Date of commencement	nent of reconnaissance op	perations	
Place:			
Date:		Signature:	
Name in full:			
Designation: Owner/Agent/MiningEngineer/Manager			
FORM-B (Yearly Report of the Prospecting Operations carried out) [See rule B(1)(b) and B(2)] To			
		FORM-B the Prospecting Operations carried out) the rule B(1)(b) and B(2)] To	
IMPORTANT	[See	FORM-B te Prospecting Operations carried out) trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines,	
IMPORTANT	[See Ind Nagpur - 44	FORM-B te Prospecting Operations carried out) trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001	
IMPORTANT This Form, duly filled authorities within thirty	Ind Nagpur - 44tin must reach the concerty days after expiration of	FORM-B the Prospecting Operations carried out) the rule B(1)(b) and B(2)] To To The Controller General ian Bureau of Mines, 0 001 thed 2. The Controller of Mines,	
IMPORTANT This Form, duly filled authorities within thirty of one year from the day.	Ind Nagpur - 44tin must reach the concerty days after expiration of ate of execution of	FORM-B the Prospecting Operations carried out) the rule B(1)(b) and B(2)] To To The Controller General ian Bureau of Mines, 0 001 thed The Controller of Mines, Indian Bureau of Mines	
IMPORTANT This Form, duly filled authorities within thirty of one year from the daprospecting licence or	Ind Nagpur - 44e in must reach the concer y days after expiration of ate of execution of the expiry of	FORM-B te Prospecting Operations carried out) trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001 thed 2. The Controller of Mines, Indian Bureau of Mines PIN	
IMPORTANT This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations	Ind Nagpur - 44th in must reach the concern y days after expiration of the of execution of the expiry of abandonment of , whichever is	FORM-B the Prospecting Operations carried out) To trule B(1)(b) and B(2)] To the Controller General ian Bureau of Mines, to 001 and the controller of Mines, to 1001 and the controller of Mines and the controller Mines are the controller Mines are the controller Mines and the controller Mines are t	
IMPORTANT This Form, duly filled authorities within thirty of one year from the day prospecting licence or prospecting licence or	Ind Nagpur - 440 in must reach the concerty days after expiration of the expiry of abandonment of	FORM-B the Prospecting Operations carried out) To trule B(1)(b) and B(2)] To the Controller General ian Bureau of Mines, 2001 The Controller of Mines, Indian Bureau of Mines PIN 3. The Reg.Controller Mines Indian Bureau of Mines	
IMPORTANT This Form, duly filled authorities within thirty of one year from the daprospecting licence or prospecting licence or prospecting operations earlier.	Ind Nagpur - 444 in must reach the concert y days after expiration of the of execution of the expiry of abandonment of , whichever is PIN	FORM-B the Prospecting Operations carried out) To trule B(1)(b) and B(2)] To the Controller General ian Bureau of Mines, the controller of Mines, the controller of Mines, the controller of Mines of Mines of Mines Indian Bureau of Mines Indian Bureau of Mines Indian Bureau of Mines Indian Bureau of Mines 4. State Government con.	
This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations earlier. 1. Name of the mineral	Ind Nagpur - 440 in must reach the concerty days after expiration of the expiry of abandonment of the whichever is PIN Is for which (a)	FORM-B te Prospecting Operations carried out) Trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001 The Controller of Mines, Indian Bureau of Mines PIN 3. The Reg.Controller Mines Indian Bureau of Mines Indian Bureau of Mines 4. State Government con. (c)	
IMPORTANT This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations earlier. 1. Name of the mineral prospecting licence is	Ind Nagpur - 440 in must reach the concerty days after expiration of the expiry of abandonment of the whichever is PIN Is for which (a)	FORM-B te Prospecting Operations carried out) Trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001 thed 2. The Controller of Mines, Indian Bureau of Mines PIN 3. The Reg.Controller Mines Indian Bureau of Mines 4. State Government con. (c) (d)	
IMPORTANT This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations earlier. 1. Name of the mineral prospecting licence is	Ind Nagpur - 44th in must reach the concern y days after expiration of the expiry of abandonment of , whichever is PIN as for which (a) has been granted. (b)	FORM-B te Prospecting Operations carried out) Trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001 thed 2. The Controller of Mines, Indian Bureau of Mines PIN 3. The Reg.Controller Mines Indian Bureau of Mines 4. State Government con. (c) (d)	
This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations earlier. 1. Name of the mineral prospecting licence h. 2. Name and address o	Ind Nagpur - 440 in must reach the concert y days after expiration of the of execution of the expiry of abandonment of , whichever is PIN Is for which has been granted. (b) f the licensee	FORM-B te Prospecting Operations carried out) Trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001 thed 2. The Controller of Mines, Indian Bureau of Mines PIN 3. The Reg.Controller Mines Indian Bureau of Mines 4. State Government con. (c) (d)	
This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations earlier. 1. Name of the mineral prospecting licence is 2. Name and address of the second of the s	Ind Nagpur - 44th in must reach the concern y days after expiration of the expiry of abandonment of the whichever is PIN Is for which (a) that been granted. (b) f the licensee PIN	FORM-B te Prospecting Operations carried out) Trule B(1)(b) and B(2)] To 1. The Controller General ian Bureau of Mines, 0 001 thed 2. The Controller of Mines, Indian Bureau of Mines PIN 3. The Reg.Controller Mines Indian Bureau of Mines 4. State Government con. (c) (d)	
This Form, duly filled authorities within thirty of one year from the da prospecting licence or prospecting licence or prospecting operations earlier. 1. Name of the mineral prospecting licence has 2. Name and address of the prospecting licence has 2. Name and address of the prospection of the prospecting licence has 2. Name and address of the prospection of the prospect	Ind Nagpur - 44th in must reach the concern y days after expiration of the expiry of abandonment of the whichever is PIN Is for which (a) that been granted. (b) f the licensee PIN	FORM-B te Prospecting Operations carried out) Trule B(1)(b) and B(2)] To	

Market Mining Regulation States

(iii) Area under licence	hectares.
	Government to (a) Number
	(b) Date
4. Location of the Prospecting Licenced	
(ii) Cadastral Survey or Khasra Number	r
(iii) Village	
(iv) (a) Taluka	
(b) District	
(c) State	
5. Particulars of Geologist for Mining E	ngineers
employed for the Prospecting Licence	
(i) Name and address:	
PIN	
(ii) Qualifications	
(iii) Date of appointment	
(iv) Nature of appointment Whole time	
(Please tick mark ne of the boxes wh	
6. (i) Status of prospecting operation:	
Please tick mark one of the boxes w	
	Abandoned []
(ii) If prospecting operation is complet	
date of such completion or abandon	
7. Total surface area covered by prospec	
work (hectares) as on date	
8. Completion of prospecting work during	
(a) Pitting	ing the year.
(i) Number of pits	
(ii) Depth (metres) Average	
Maximum	
Minimum	
(b) Trenching	
(i) Number of trenches	
(ii) Length (metres) Average	
Maximum	
Minimum	_
(c) Drilling Surface U	– Inderground
(i) Number of boreholes completed	
(ii) Number of boreholes in progress	
if any	
•	
8. (d) Particulars of drilling Machines: T	Type Make Capacity Number of drills
(e) Exploratory mining, if any:	Type Make Supusity Mainter of arms
(3) Mode of entry	
(4) Quantity of ore produced	
(f) Number of samples analysed:	
(1) Main constituent (please specify)	
(2) Complete analysis	
(2) Complete analysis	

Note: Please enclose a geological report describing the prospecting operations undertaken so far along with the detailed geological plans and sections showing

locations of (a) boreholes, (b) pits, (c) trenches, (d) shafts, (e) underground exploratory workings, (f) outcrops, (g) ore zones, (h) faults, (I) folds and other geological features.

The Report shall contain the borehole logs and interpretation and the inferences drawn as a result of the study of the geology of the area and the interpretation of the borehole cores, pits, trenches, assay data, reserves of ore and contain results of complete analysis of at least two representative samples of ore and the blocks proposed for mining operations. The report shall also contain the results of any beneficiation study carried out on the ores or minerals of the area.

Place: Signature Date: Name in full:

Designation:Owner/Agent/ Mining Engineer/Manager

This should be sent to the Controller of Mines/Regional Controller of Mines in whose territorial jurisdiction the area/mine falls as notified from time to time by the Controller General, Indian Bureau of Mines, under rule 62 of the Mineral Conservation and Development Rules, 1988.

FORM-BB

(See rule 3E)

Submitted to:

Progress report of reconnaissance survey in respect of	[the name of
the mineral(s)]for the year	

IMPORTANT

This Form fully filled-in must reach the

1. Controller General,

Concerned authorities within thirty days

Indian Bureau of Mines,

after expiration of one year from the

Indira Bhavan, Civil Lines,

date of execution of reconnaissance permit

Nagpur-440 001

or the expi	ry of reconnaissance permit or	
abandonme	ent of reconnaissance	*2. Controller of Mines
operations.	, whichever is earlier.	Indian Bureau of Mines
		*3. The Regional Controller of Mines
		Indian Bureau of Mines
		4. State Government concerned
 Na Ac Ar 	ldress of the firm	(square kms.)
i ii	ii. Districts(s)	S
	nte of grant of permitriod of permit	
8. Re	econnaissance survey work done	
	escription of the work involved alonst each of the following items)	ng with particulars of the machines and instruments used would be
ii. Ae	egional Survey erial/photogeological work eological Mapping including	
are	ea covered and scale	
v. Ge	eophysical eochemical est drilling : Number, area of influe	ence
meterage a	and sampling.	
10. Ar 11. If a	nture and structure of the ore body nalysis of the ores or minerals abandoned i. Date of abandonment	

(a) Public Sector (b) Joint 4A. Date of opening/reop 4B.In case of reopening, constructions of the Minimum 1997.	ening of mine: late of discontinua		
(i) Date of execution:	Voore from	40	
		to	
(iii) Areas under lease:6. Location of the Mining	I assa:	_ nectares	
(i) Village	Diett	Taluka/Tahsil	
(ii) Post Office	Police Station	Tanaka Tanish	
(iii)Nearest railway statio	1 once station _ on	Distance	
(iv)Nearest Rest House/I	Dak Bangalow		
7. Name and address of pr	revious owner,		
if any and the date of ab			
PIN			
Date			
8. Particulars of Agent:			
Name and address:			
9. Particulars of Mining E	ngineer employed	in the mines:	
(i) Qualification:			
(ii) Date of appointment:	****		
(iii) Status of employment		e Part time	
10. Particulars of the Man	ager of the mine:		
Name and address	marrah vyhiah tha m	sining alon	
11. Letter No. and date the	-	- -	
was approved by the In- Letter No.	uian bureau oi wii Date:		
Letter No.	Date.		
Place:	Signatur	e	
Date:	Name in ful		
Dute.	Designation:C		
	Mining Engine	C	
(Strike out the items which	~ ~	•	
•	**		
		"FORM - D	
(Notice of intention of	f abandonment of	mine or part of the mine)	
		-	
[See rule 23(2)]			
			

То

1. The Controller General Indian Bureau of Mines, Nagpur – 440 001

Notice in Form shall reach the concerned authorities within 90 days of the date of intention of abandonment.	2. The Controller of Mines, Indian Bureau of Mines, PIN
	3. The Regional Controller of Mines, Indian Bureau of Mines.4. State Government Concerned
1. (i) Name of the mineral worked:	
(ii) Name of other mineral worked, if any:	
2. Name of the mine	
3. Name and address of the Lessee/Owner	
 4. Particulars of Mining Lease (ML): (i) Date of Execution: (ii) Period Years, from (iii) Area under lease hectares 	
5 Location of Mine(a) Village:(b) Post Office:(c) District:(d) State	
6. Name and address of Agent:	
7. Name and address of Mining Engineer:	
8. Date of abandonment:	
9. Reasons for abandonment:	[Please tick whichever is applicable]
i) Lack of demand	
ii) Exhaustion of ore/mineral	
iii) Un-economic operations	
10. Reserve of Mineral(s) in Mining Lease area (ini) Provedii) Probableiii) Possible	n tonne):
11. Number of workers employed in the mine:a) Company labourb) Contract labour	Male Female
Total	

Place: Date :	Signature Name in full: Designation: (Owner/Agent/Mining Engineer/Manager);
FORM D-1	
(Notice of temporary discontinuance of mine)	
[See rule 24]	_
	То
IMPORTANT Notice in Form shall reach the concerned authorities within one hundred and five days of temporary discontinuance of work in the mine. If the discontinuance is due to natural calamity beyond the control of the lessee or Government Orders, this notice shall be sent within fifteen days of such occurrence.	 The Controller General Indian Bureau of Mines, Nagpur – 440 001 The Controller of Mines, Indian Bureau of Mines, PIN The Regional Controller of Mines, Indian Bureau of Mines. State Government Concerned.
1. (i) Name of the mineral worked:	
(ii) Name of other mineral worked, if any:	
2. Name of the mine	
3. Name and address of the Lessee/Owner	
 4. Particulars of Mining Lease (ML): (i) Date of Execution: (ii) Period	m to hectares

5. Location of Mine

(a) Village:(b) Post Office:(c) District:(d) State	
6. Name and address of Agent:	
7. Name and address of Mining Engineer:	
8. Date of temporary discontinuance:	
9. Reasons for temporary discontinuance:	[Please tick whichever is applicable]
i) Lack of demand	
ii) Non-availability of Labour	
iii) Rains	
iv) Transport bottleneck	
v) Strike/Lockout	
vi) Operation becoming uneconomic vii) Other reasons (specify)	
10. Probable date of re-opening of the mine:	
Place: Date:	Signature Name in full: Designation: (Owner/Agent/Mining Engineer/Manager)";

FORM-E

(Notice of commencement of stoping) (See rule 26(2))

MINE CODE_____

	1. The Controller General
IMPORTANT	Indian Bureau of Mines,
Notice in ths Form shall be sent atleast six	ty Nagpur - 440 001
days before the commencement of stoppin	
operations to the concerned authority.	0 TEL C + 11 C \ C
	Indian Bureau of Mines,
PIN	·
	ureau of Mines,
PIN	
	overnment concerned
1 (a) Name of mine	
(b) Section/pit number**	
(c) Mineral/minerals worked	
2. Name and address of	
(a) O	
(h) A cont	
(a) Managan	
(d) Mining Engineer/Geologist	
employed under rule 42	
3. Date of expiry of lease:	
4. Date on which it is proposed to commen	
5. Extent of development in the mine:	
(a) Number of shafts/inclines/and its	
(b) Maximum depth and development	
(c) Number of levels with their extent	
(d) Total meterage of development	aludina
(e) Total number of blocks developed inc	
the total tonnage and grade (excluding already stoped out and already permitt	
6. Details of the blocks applied for stoping	
(a) Number and size of each block,	
their levels tonnage and grade	
5 5	
(b) Method of stoping to be adopted -(i) A description of the method with	
apprropriate drawings to illustrate the	
stope preparation sequence of operation	
and extraction	
(ii)Rate of stoping contemplated	
in each block (monthly)	
(iii)Estimated recovery from	
each block	
(iv) Estimated dilution	
(v) Estimated dilution (v) Estimated tonnage and grade	
of ore to be extracted	
	this mina?
7. Is this a first application for stoping for	
If not, the following details may be furni	
(i) Date of previous application(s) for ste	Julig
(ii) Date and reference of permission or	
refusal by this department (mention	
blocks and their levels) (iii) Have all the blocks for which stoping	normicssion was arented been
(iii) Have all the blocks for which stoping	
stoped out? If not, mention the specific	blocks that are remaining

to be stoped out, indicatherein:	ating the state of stoping operations
8. Rate of development and	d programme of forming additional stope blocks simul-
9. List of enclosures	
Place:	Signature
Date:	Name in full:
	Designation:Owner/Agent/
	Mining Engineer/Manager
	ect of items 5 and 6(a) should be accompanied
-	sit plan, (ii) longitudinal section, (iii)
	e levels at which stoping is proposed
	and below, and (iv) transverse sections
at reasonable intervals for	the portion covered under (iii) above.
* This should be sent to the	e Controller of Mines/Regional Controller
	rial jurisdiction the area/mine falls as
	by the Controller General, Indian Bureau of Mines,
	ral Conservation and Development Rules, 1988.
	ses where the main mine is divided into more than
one district/section/pit.	
	FORM F-1
For the	month of20 MINE CODE
	MONTHLY RETURN
(i) Name of the Mineral	[See rule 45(1) (a) (i)]
(i) Name of the Mineral(ii) Name of Mine	IRON ORE
	eral(s), if any, produced from the same mine
To	
	an Bureau of Mines, Nagpur
2. Controller of Mines,	Zone
_	Mines,Region
4. State Government conce	
	PART - I
1 Leasting of the Min	(General and Labour)
1. Location of the Mine:	ico: Tabail/Taluk:
Village: Post Off	
District: State:	PIN:
2. Name and Address(s) of3. Rents and /or Royalty page	
(i) Rent paid for the period	
, , rand for the poritor	

- (ii) Royalty paid for the period (Rs.):
- 4. (i) Number of days the mine worked:
- (ii) Indicate reasons for work stoppage in the mine Reasons No. of days during the year such as due to strike, lockout, monsoon, non-availability of labour, transport bottleneck, lack of demand, uneconomic operations, etc. and the number of days of work stoppage for each of the factors separately.
- 5. (i) Average Daily Employment of Labour /Wage paid:

Work place Direct Labour Contract Labour Wages (Rs.)

Male Female Male Female Direct Contract

Below ground Opencast Aboe ground

Total

5.(ii) Total salaries paid to technical and supervisory staff employed in the mine during the month in Rs.

PART-II (PRODUCTION, DESPATCHES AND STOCKS)

(Unit of Quantity in Tonnes)

1. Type of ore produced:

(Tick mark, whichever i applicable)

- (a) Hematite
- (b) Magnetite
- 2. Production and Stocks of ROM ore at Mine-head

Francisco Control de la Contro

From Open Cast workings

Dump workings

- (a) Opening stock
- (b) Production
- (c) Closing stock

3. Grade-wise Production, Despatches and Stocks of Processed ore

Grades(% of Fe content) Opening stock Production Despatches Closing PMV at mine head from mine stock at (Rs./ head head-mine MT)

- 4. Lumps
- (a) Below 60%
- (b) 60% to below 62%
- (c) 62% to below 65%
- (d) 65% & above

Fines

- (a) Below 62%
- (b) 62% to below 65%
- (c) 65% & above

Concentrates/Pellets/Sinters

5. Sales/Despatches effected for Domestic Consumption and for Exports:

Grade of ore Place For Domestic Consumption For export

of sale

Co	onsignee Quantity Sa Value	•	ntity F.O.B.	
	(Rs.)	Value (Rs.)		
	r increase//decrease ared to the previous	_	any, during	
l respects.	formation furnished		and complete	
e: ::	Nai Desig	Signature ne in full: nation:Owner/Ag g Engineer/Mana		
	For the mon	h of	20	MINE CODE_
			LY RETURN 45(1) (a) (ii)]	
(i) Name (ii) Name (MANGANESE O		
(iii) Name(s) of other mineral(s e same mine), if any, produce	d	
	er General, Indian B			
3. Regional	er of Mines, Controller of Mine vernment concerned	s,		
	eral and labour) San rron ore (Form F-1)	ne as Part-I of the	Monthly Return in	
	PART-II (P	· ·	DESPATCHES AND	D STOCKS)
1. Production	on and Stocks of RC		ntity in Tonnes) ead	
	•	From Undergrou	•	

n an respects. Place: Date:	Designation:Owner/Agent/ Mining Engineer/Manager FORM F-3
Place:	
Place:	
Place:	
Place:	Decignation: Dwner/Acont/
•	Name in full:
	Signature
certify that the all respects.	ne information furnished above is correct and complete
	s for increase/decrease in production, if any, during ompared to the previous month.
5420	Value Value Rs. (Rs.)
of sale	Consignee Quantity Sale Country Quantity F.O.B.
	Place For Domestic Consumption For Export
B. Sales/Despa	atches effected for Domestic Consumption and for Exports:
f) Concentrat	
d) 45% and a e) Dioxide or	
(c) 35% to bel	
(a) Below 25% (b) 25% to bel	
	stock at from mine stock at (Rs./MT) mine-head head mine-head
	In content) Opening Production Despatches Closing PMV
Grade (% of N	
	Production, Despatches and Stocks of Processed ore

MONTHLY RETURN [See rule 45(1) (a) (iii)]

(i) Name of the Mineral BAUXITE AND LATERITE(ii) Name of Mine
(iii) Name(s) of other mineral(s), if any, produced
from the same mine To
1. Controller General, Indian Bureau of Mine, Nagpur
2. Controller of Mines,Zone
3. Regional Controller of Mines,Region
4. State Government concerned
Part-I (General and labour) Same as Part-I of the Monthly Return in respect of Iron ore (Form F-1)
PART-II (PRODUCTION, DESPATCHES AND STOCKS)
(Unit of Quantity in Tonnes) 1. Production and Stocks of ROM ore at Mine-head
From Open From Underground Dump
cast workings workings workings
(a) Opening stock (b) Production (c) Closing stock
2. Grade-wide Production, Despatches and Stocks of Processed ore
Grade (% of Al ₂ O ₃ contennt) Opening Production Despatches Closing PMV stock at from mine stock at (Rs./MT) mine-head head mine-head
(A) For use in alumina and aluminium extraction:- (Please furnish averages of the following ranges of grades):- (a) Below 40% (b) 40% to below 45% (c) 45% to below 50% (d) 50% to below 55% (e) 55% to below 60% (f) 60% and above
(B) For use other than alumina and aluminium metal extraction: (Please furnish end use industrial grade):- (a) cement (b) abrasive (c) refractory (d) chemical (e) others (including for export) 3. Sales/Despatches effected for Domestic Consumption and for Exports:
Grade of ore Place For Domestic Consumption For Export
ofsale Consignee Quantity Sale Country Quantity F.O.B. Value Value Rs. (Rs.)

4. Give reasons for increating the month compared to	ase/decrease in production, if any, de	uring
•	•	_
I certify that the inform in all respects.	ation furnished above is correct and	complete
Place:	Signature	
Date:	Name in full:	
	Designation:Owner/Agent/	
	Mining Engineer/Manager	
	FORM F-4	
	For the month of	20
		MINE CODE
	MONTHLY RETURN	
	[See rule 45(1) (a) (iv)]	
(i) Name of the Mineral		
(ii) Name of Mine		
	ral(s), if any, produced	
from the same mine		
Го		
1. Controller General, India	an Bureau of Mine, Nagpur	
	Zone	
2. Controller of Mines,		
	Mines,Region	
2. Controller of Mines,3. Regional Controller of N4. State Government conce		
3. Regional Controller of M 4. State Government conce		urn in respect of
3. Regional Controller of M 4. State Government conce	rned	ırn in respect of
3. Regional Controller of M 4. State Government conce Part-I (General and labour) Iron ore (Form F-1)	rned	
3. Regional Controller of Market A. State Government concervant (General and labour) fron ore (Form F-1)	Same as Part-I of the Monthly Retu	S AND STOCKS)
3. Regional Controller of M 4. State Government conce Part-I (General and labour) fron ore (Form F-1) PART-I	Same as Part-I of the Monthly Returned I (PRODUCTION, DESPATCHE (Unit of Quantity in Tonne)	S AND STOCKS)
3. Regional Controller of M 4. State Government conce Part-I (General and labour) fron ore (Form F-1) PART-I	Same as Part-I of the Monthly Returned I (PRODUCTION, DESPATCHE (Unit of Quantity in Tonner of ROM ore at Mine-head From Underground Dump	S AND STOCKS)
3. Regional Controller of M 4. State Government conce Part-I (General and labour) Iron ore (Form F-1) PART-I 1. Production and Stocks o	Same as Part-I of the Monthly Returned I (PRODUCTION, DESPATCHE (Unit of Quantity in Tonne) f ROM ore at Mine-head	S AND STOCKS)
3. Regional Controller of M 4. State Government conce Part-I (General and labour) From Open Control of M 5. Regional Controller of M 6. Part-I 6. Production and Stocks of Control of M 6. Prom Open	Same as Part-I of the Monthly Returned I (PRODUCTION, DESPATCHE (Unit of Quantity in Tonner of ROM ore at Mine-head From Underground Dump	S AND STOCKS)
3. Regional Controller of Mat. State Government concernation of Part-I (General and labour) From Open cast workings	Same as Part-I of the Monthly Returned I (PRODUCTION, DESPATCHE (Unit of Quantity in Tonner of ROM ore at Mine-head From Underground Dump	S AND STOCKS)

st	ock at fron	Production Despatches mine stock at (Rs./MT) ad mine-head	Closing PMV
A. Lumps (a) Below 40% Cr ₂ (b) 40% to below 5 (c) 52% Cr ₂ O ₃ and	52 % Cr ₂ O ₃		
B. Fines (a) Below 40% Cr ₂ (b) 40% to below 5 (c) 52% Cr ₂ O ₃ and	52 % Cr ₂ O ₃		
C. Concentrates";			
3. Sales/Despatche Grade of ore Plac		estic Consumption and for Consumption For E	
of sale C	onsignee Quantity Value Rs.	Sale Country Quantity Value (Rs.)	y F.O.B.
month compared	to the previous m information furnis Na	in production, if any, durionth. ned above is correct and considerations. Signature me in full: gnation:Owner/Agent/	
		ng Engineer/Manager	
		FORM F-5	
For th	e month of	20	

MINF	CODE	

MONTHLY RETURN

[See rule 45(1) (a) (v)]

from the same mine To 1. Controller General, India 2. Controller of Mines,		Zone
3. Regional Controller of M4. State Government concer		Region
		e Monthly Return in respect of
PA 1. Production and Stocks of		TION, DESPATCHES AND STOCKS)
Opening Stocks	Production	Closing Stocks
Quantity Metal Content/ Grade	Quantity Metal Contnet/ Grade	Quantity Metal Content/ Grade
Grade	Grade	
	Grade	
Total: A. From Underground work (i) From Development (ii) From Stoping B. From Open-cast working	ings	
Total: A. From Underground work (i) From Development (ii) From Stoping B. From Open-cast working	ings	
Total: A. From Underground work (i) From Development (ii) From Stoping B. From Open-cast working	ings s ore produced (Rs.):	tity in tonnes & value in Rs.)

Concentrates *obtained	Tailings concentrate Concentrate	
Quantity Value Metal Contne Grade Gra		al Content/ Quantity Metal Content/ Grade
* In case of any leaching metho contained separately. 4. Recovery at the Smelter/Mill		ive quantity recovered and grade
Opening Stocks of Concentrates at the Smelter/Plant Concentrates		Concentrates received Concentrates nt from other sources (if any)
Quantity Metal Quantity M Content/ Content Grade Grade		tity Metal Quantity Metal ntent/ Content e Grade
	any recovere	other by-products, Closing stocks of ed concentrate at the ter/Plant
Quantity Metal Qty. Value (Content/ Grade	Grade Qty.	Value Grade Qty. Value
5. Sales during the month		
Opening stock of Place of Metals/Products Sale	Metals/Pro	oducts sold(3) Closing stocks of Metals/Products

Quantity	Grade	Quantity Grade Value(2) Quantity	Value
Note:			
(1) Plea copp	er, cathodes, elect	wise break-up viz. blister, fire refined rolytic copper wirebars, lead ingots, sss, gold, tungsten etc.	
(2) Pleasother	se give ex-plant sa taxes.	ale value including excise duty but exc	-
(3) Plea	se give category-v	vide break-up of metals and other produced	ducts sold.
month o	compared to the p	e/decrease in production, if any, during revious month. on furnished above is correct and com-	
Place:	- F	Signature	
Date:		Name in full: Designation:Owner/Agent/	
		Mining Engineer/Manager	
		FORM F-6	
For the	month of	20	
		MINE CODE	=.
		MONTHLY RETU	
(i) Nar	ne of the mineral	[See rule 45(1) (a) (v MICA	VI)]
` '	ne of mine		
	me(s) of other mir the same mine	neral(s), if any, produced	
To	11 6 1 7	CAE AV	
		lian Bureau of Mines, Nagpur.	
		Zone. Mines Region.	
	Government Con		
	General and Laborore (Form F-1)	ur) Same as Part-I of the Monthly Retu	urn in respect
		ON, DESPATCHES AND STOCKS)	
1. Produ	action, despatches	and stocks of crude and dressed mica	. (in kilograms)
	Crude (r.o.m)	Waste/ scrap, mica obtained incidental to	Waste/mica obtained after preliminary

mining dressing (at mine site) 1 2 3 A. OPENING STOCKS (At the beginning of the month) (i) At mine (ii) At dressing unit (iii) At any other point (Please specify) Total (Opening Stock) B. Production (i) From underground mining (ii) From opencast mining (iii) From dump working Total (Production) C. **DESPATCHES** (I) For dressing For sale (ii) Total (Despatches) **CLOSING STOCKS** D. (I) At mine (ii) At dressing unit At any other point (iii) (Please specify) Total (Closing Stocks) PIT'S MOUTH VALUE 1 PER KILOGRAM (Rs.) E. 1. This should be estimated for all crude mica produced during the month whether sold or not on the basis of

- This should be estimated for all crude mica produced during the month whether sold or not on the basis of average sale price obtainable for crude in the market.
 To arrive at the pit's mouth value form this national sale price, the cost of transport from the mine head to the market or factory and any other incidental charges may eb fdeducted.
- 2. Give reasons for increase/decrease in production, if any, during the month compared to the previous month

I certify that the information furnished above is correct and

Place:

Date:

complete in all respects.

Signature Name in full:

Designation:Owner/Agent/ Mining Engineer/Manager

	EC	DM E 7
	For the month of	ORM F-7
	MINE CODE	20
		ILY RETURN
		e 45(1) (a) vii)]
(I)	Name of the mineral	
(ii)	Name of Mine	
(iii)	Name(s) of other mineral(s), if any, produce	ed
from the	e same mine	
То		
1.	Controller General, Indian Bureau of Mines	
2.	Controller of Mines,	
3.	Regional Controller of Mines	Region
4.	State Government Concerned	
	General and Labour) Same as Part-Lof the Mo	
	General and Labour) Same as Part-I of the Monet of Iron ore (Form F-1)	nuny Ketuin
•		
PART -	- II (PRODUCTION, DESPATCHES ANI	O STOCKS)
1.		
(i)	Opencast	·
(ii)	Underground	
	e are different types of R.O.M. production, sep	
	ished for each type of R.O.M. indicating in each	th case the appropriate
	quantity)	
	Production, stocks and despatches	
Few Va		
_	and Cut & Polished Industrial Others	Total
	tones stones	tul No of Ot-1
	Qty.1 No.of Qty.1 No.of Qty1 No.of Q stones stones	
Stones	stones stones	stones stones
A. Open	ning stocks	
 B.	Production	
(i)	From opencast workings	
(ii)	From underground workings	
TOTAL	(Production)	
C.	Despatches	

1.	The Unit of quantity viz. Carats/Grams/Milligramms etc. as the case may be should be indicated under quantity.
3.	Stones disposed of during the month by auction/sale.
	Gem Variety
	Rough & uncut cut& polished stones stone Industrial Others Total
	Qty.1 Value Qty.1 Value Qty.1 Value Qty1 Value Qty1 Value
1.	Internal consumer
 3. 	Exporter/ Foreign Buyer Middlemen
Sale hea (all dur Rs. Giv incomor	TAL e Value2 at the pit's d of the total stones varieties) produced ing the months re reasons for rease/decrease output during the inth as compared to previous month

- 1. The unit of quantity, viz. Carats/grams/kilograms etc. as the case may be, should be indicated under "Quantity"
- 2. This should be estimated for all the stones produced during the month whether sold or not, on the basis of average sale price obtained for sales made during the month. In case no sales are made Ex-pit-head, the average pit-head sale value should be arrived at after deducting the actual expenses incurred from the pit-head to the point of sale, form the sale price realised.

Give reasons for increase/decrease in production, if any, during the month compared to the previous month . I certify that the information furnished above is correct and complete in all respect

Place: Signature Date: Name in full:

Designation:Owner/Agent Mining Engineer/Manager

FORM F-8

	For the month of
(i)	Name of the mineral
(ii)	Name of mine
(iii)	Name(s) of other mineral(s), if any, produced
	from the same mine
To	
1.	Controller General, Indian Bureau of Mines, Nagpur
2.	Controller of Mines,Zone
3.	Regional Controller of Mines,Region
4.	State Government concerned
	T-I (General and Labour) Same as Part-I of the Monthly Return in respect of Iron ore m F-1)
1.	PART-II (PRODUCTION, DESPATCHES AND STOCKS) (Unit of Quantity in Tonnes) Production and Stocks of ROM ore at mine-head
	From Opencast From Underground Dump workings workings
(a)	Opening stock
(a) (b)	Production
(c)	Closing Stock
Grad	es(As per Opening stocks Production Despatches from Closing stock PMV ty rates)* at mine-head mine-head at mine-head (Rs/MT)
*The	typical grades shall be following:-
Asbe	stos: (a) Amphibole (b) Chrysotile
Rock	Phosphate/Phosphorite: (a) 30- 35% P_2O_5 (b) 25- 30 % P_2O_5 (c)20-25% P_2O_5 (d) 15-20% P_2O_5
Bar	ytes: (a) White (including snow-white) (b) Off colour
Fluc	orite/Fluorspar: (a) 85% CaF ₂ and above (b) 70 to below85% CaF ₂ (c) 30 to below
70%	6 CaF ₂ (d) Below 30% CaF ₂

Agriculture Mining Regulation States

Graphite: (a) with 80 per cent or more fixed carbon (b) with 40 per cent or more but less than 80 per cent fixed carbon (c) with less than 40 per cent fixed carbon

Kaolin/Chinaclay, Ball clay, White shale, White clay: (a) Crude (Natural) (b) Processed

Kyanite: (a) 40% Al_2O_3 & above (b) Below 40% Al_2O_3

Limestone: (a) LD, (b), SMS/Chemical and (c) BF/Cement

Talc/Steatite/Soapstone: (a) Insecticide (filler) grade (b) Other than insecticide (filler)

Grade.";

3. (i) In case the mineral produced is being pulverised in own factory, please give the following particulars:

Total Qty of pulverised Grade Total Qty of Total Qty of pulverised mineral produced(for each mineral mineral sold during the year mesh size) pulverised (tonnes) Mesh Size Quantity Mesh Size Quantity Ex-factory (Tonne) (Tonne) sale value (Rs.)

- ...

3.(ii) Average cost of pulverisation Rs. ----- per tonne.

4.Sales/Despatches effected for Domestic Consumption and for Exports:

5. Give reasons for increase/decrease in production, if any, during the month compared to the previous month.

I certify the information furnished above is correct and complete in all respects.

Place: Signature Date: Name in full

Designation:Owner/Agent Mining Engineer/Manager

FORM -9
For the month of 20
MINE CODE
MONTHLY RETURN
[See rule 45(1) (a) (ix)]
Name of the mineral
Name of mine Name(a) of other mineral(a) if any produced
Name(s) of other mineral(s), if any, produced n the same mine
ii the same mine
Controller General, Indian Bureau of Mines, Nagpur.
Controller of Mines,Zone
Regional Controller of Mines,Region
State Government concerned
PART - I (General and Labour)
Location of the Mine :
Name and address of Lessee/Owner:
Number of days the mine worked:
Rent and Royalty paid (in Rs.):
(I) Average Daily Employment of Labour/Wages paid:
ce Direct Labour Contract Labour Wages (Rs.)
Male Female Male Female Direct Contract
ound
Total salaries paid to technical and supervisory staff: PART-II (PRODUCTION, DESPATCHES AND STOCKS) (Unit of quantity in tonnes)
D O M O D D O O O O O O O O O O O O O O
R.O.M. Ore Processed/Sorted Others Total
ng Stock at mine-head tion uth Value
ches from mine
mestic Consumption
*
y(Tonne)
llue (Rs.)
xports
ty (Tonne)
alue (Rs.)
g Stock at mine-head

- b) Give reasons for increase/decrease in production, if any, during the month compared to the previous month.
- (c) The data in Part-II above shall be furnished grade-wise. The grades for iron ore shall be as per Form F-1, those for manganese ore as per Form F-2, for bauxite and laterite as per Form F-3, for chromite as per Form F-4, for copper, lead, zinc, pyrites, gold, tungsten as per Form F-5, for mica, as per Form F-6, for precious and semi-precious stones as per Form F-7, and for other minerals as mentioned in Form F-8, respectively.

I certify that the information furnished above is correct and complete in all respects.

Place: Signature Date: Name in full:

Designation:Owner/Agent/ Mining Engineer/Manager

FORM -G

[See Rule 45(1)(b)] MINE CODE **Annual Return indicating** (a) Consumption of explosives for the year 20----- 20-----(b) Estimated requirement of explosives for the next year 20----- 20------To, 1. controller General, Indian Bureau of Mines, Nagpur 2. Controller of Mines,-----Zone Regional Controller of Mines,-----Region 3. State Government concerned 4. ______ 1. Name(s) of Mineral(s) worked: 2. Name of the Mine : Location of the Mine 3. Tahsil/Taluk: Village: Post Office: District: State: PIN: 4. Name & address of lessee/Owner: 5. Licensed capacity of magazine: Total production during the year (Tonne): ------6. Overburden removed: Classification Unit Quantity consumed Esitmated requirement of Explosive during the year during the next year

		-	Small dia. Large dia.
) (above 32 n	nm) (upto 32 mm) (above 32 mm)
1.Gun Pov	_		
2.Nitrate	kg.		
Mixture			
a.Loose an	nmonium nitrate		
b.Ammoni	um nitrate		
in cartrid	ged form		
3.Nitro con	npund kg.		
4.Liquid C			
Soaked c	0		
	aplosives kg.	omas)	
6.Detonate	different trade na	ames)	
1 .Ordinar	•		
2.Electric			
(a)Ordina	ıry		
(b)Delay			
7.Fuse	Mts.		
(a)Safety			
	ating Fuse		
-	gnition cord	Mts.	
9.Others (S			
Mention th	e unit		
Place: Date:		Name Designa	gnature e in full: ation:Owner/Agent/ Engineer/Manager
			FORM H-1
For the F	inancial Year 1st		to 31st March,20
For the F	inancial Year 1st	t April, 20 MINE CO	to 31st March,20
For the F	inancial Year 1st		to 31st March,20 DDE ANNUAL RETURN
		MINE CO	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)]
(i)	Name of the M	MINE CO	to 31st March,20 DDE ANNUAL RETURN
(i) (ii)	Name of the M Name of Mine	MINE CO	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE
(i) (ii) (iii)	Name of the M Name of Mine Name(s) of other	MINE CO ineral er mineral(s),	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced
(i) (ii) (iii) from the	Name of the M Name of Mine	MINE CO ineral er mineral(s),	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced
(i) (ii) (iii) from the	Name of the M Name of Mine Name(s) of othersame mine durin	MINE CO ineral er mineral(s), ag the year 20.	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced
(i) (ii) (iii) from the s To 1.	Name of the M Name of Mine Name(s) of othe same mine durin Controller Gene	MINE CO ineral er mineral(s), g the year 20. eral, Indian B	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced
(i) (ii) (iii) from the second 1.	Name of the M Name of Mine Name(s) of othe same mine durin Controller Gene Controller of M	mineral er mineral(s), g the year 20 eral, Indian B fines,	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced ureau of Mines, Nagpur Zone.
(i) (ii) (iii) from the second 1. 2. 3.	Name of the M Name of Mine Name(s) of othersame mine durin Controller Gene Controller of M Regional Contr	mineral er mineral(s), g the year 20 eral, Indian B fines,	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced ureau of Mines, Nagpur Zone. sRegion.
(i) (ii) (iii) from the second 1.	Name of the M Name of Mine Name(s) of othe same mine durin Controller Gene Controller of M	mineral er mineral(s), g the year 20 eral, Indian B fines,	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced ureau of Mines, NagpurZone. sRegion.
(i) (ii) (iii) from the second 1. 2. 3. 4.	Name of the M Name of Mine Name(s) of othe same mine durin Controller Gene Controller of M Regional Control State Government	mineral er mineral(s), g the year 20. eral, Indian B fines, coller of Mineral	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced ureau of Mines, Nagpur Zone. sRegion.
(i) (ii) (iii) from the second 1. 2. 3. 4.	Name of the M Name of Mine Name(s) of other same mine durin Controller Gene Controller of M Regional Control State Government	mineral er mineral(s), g the year 20 eral, Indian B fines, roller of Mine ent concerned Mine:	to 31st March,20 ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced ureau of Mines, NagpurZone. sRegion. I PART - I (General)
(i) (ii) (iii) from the second 1. 2. 3. 4.	Name of the M Name of Mine Name(s) of othe same mine durin Controller Gene Controller of M Regional Control State Government	mineral er mineral(s), g the year 20 eral, Indian B fines, roller of Mine ent concerned Mine :	to 31st March,20 DDE ANNUAL RETURN [See rule 45 (1) (c) (I)] IRON ORE if any, produced ureau of Mines, NagpurZone. sRegion.

2.	Name & Address of
(i)	Lessee/Owner:
(ii)	Director in charge :
(iii)	Registered Office of Lessee:
(iv)	Agent:
(v)	Manager:
(vi)	Mining Engineer in charge
(vii)	Geologist in charge:
(viii)	Transferer (previous lessee)
if an	y, and date of transfer:
3.	Particulars of area operated/Lease
(Furnish	information on items (I) to (v) lease-wise in case mine
owrkings	cover more than one lease)
(I)	Area under lease (hectares):
Under Fo	rest Outside forest Total
(ii)	Date of execution of mining lease deed
` /	Period of lease
(iv)	Area for which surface rights are held (hectares)
(v)	Date and period of renewal (if applicable)
(vi)	In case there is more than one mine in the same
leas	e area, indicate name of mine and mineral
prod	luced
4.Lease a	rea (surface area) utilisation as at the end of year (hectares):
	Under forest Outside forest Total
(i)Alread	y exploited & abandoned by
opencas	et (O/C) mining
(ii)Cover	ed under current (O/C) Workings
(iii)Recla	imed/rehabilitated
(iv)Used	for waste disposal
(v)Occup	ied by plant, buildings, residential,
welfare	buildings & roads
(vi)Used	for any other purpose (specify)
5.	Ownership/exploiting agency of mine
(I)	PUBLIC SECTOR:
(ii)	PRIVATES SECTOR:
(iii)	JOINT SECTOR:
	PART - II (Employment & Wages)
1.Number	r of technical and supervisory staff employed at the mine
Description	on Wholly employed Part employed
40	
	Graduate Mining Engineer
	Diploma Mining Engineer
(iii)	Geologist
	Surveyor
(v)	Other administrative clerical
	technical supervisory staff
	nber of days the mine worked:
	f shifts per day:
	ate resons for work stoppage Reasons Number of days
	mine during the year such
	e to strike,lockout,monsoon
nonav	ailability of labour,transport

bottleneck, lack of demand, uneconomic operation etc. and the number of days of work stoppage for each of the factors separately. 3.(1)Employment of Labour and wages paid Maximum number of persons employed on any one day during the year: (i)In workings below ground on(a)
Classification Total No.of mandays No.of days Average Total worked during the year worked daily no. wages/ during of persons salary the year employed bill for the year
Direct Contract Total Male Female Total (I) (2A) (2B) (2C) (3) (4A) (4) (4C) (5)
Below Ground: (i)Foreman & Mining mates (ii)Face workers and loaders (iii)Others Opencast workings: (i)foreman & Mining mates (ii)Face workers and loaders (iii)Others Above ground: (i)Clerical & Supervisory Staff. (excluding the superior super visory staff.) (ii)Workers in any Attached factory, Workshop or mineral dressing plant. (iii)Others
Total :
3.(2) Total salaries paid to technical and supervisory staff employed in the mine during the year is (Rs.):
PART-II A (Capital Structure) 1. Value of Fixed Assets* (Rs.'000)
(in respect of the mine, beneficiation plant, mine, work-shop, power and water installation)
Description As at the Additions Sold or Depre- Net Closing Estimted

	beginning during discarded ciation Balance market of the year the year during during Col.(2+3)- value** the year the year (4+5)					
1	2 3 4 5 6 7					
i. ii.	Land*** Building					
	Industrial					
	Residential					
iii. iv.	Plant & Machinery including transport equipment					
	such as pre-production					
	exploration, development,					
	major overhaul and repair					
	to machinery, etc.					
	(As prescribed under					
	Income Tax Act)					
	Total					
	* In case the fixed assets are common to more than one mine, furnish combined information for all such mines together in any one of the mines return and also indicate the names of other mines in which the information relates in the form provided above. If the returns for other mines, give only a cross reference to the particular mine's return where-in the information is included.					
	** Optional and may be furnished in respect of items (i),(ii) and (iii) if the mine owner desires.					
2. Soui	*** Including any non recurring expenditure incurred on the acquisition of land. rece of Finance (as at the end of the year)					
	(i) Paid up Share Capital (Rs.'000)					
	(ii)Own Capital (Rs 000)					

	(iii)Reserve & Surplus				
	(All Types)				
	(iv)Long Term loans outstanding				
	Development and other Public Co	orporations, (such as State Finance Corporation, Industrial Co-operative Banks, Nationalised Banks and com each source and the rate of interest at which		
(i) In	est & Rents (in Rs.'000) atterest paid during the year ents (excluding surface rent) paid during the year				
1.	PART Quantity and cost of material co	•	imption of Materials) ing the year		
•	tion Unit Quantity				
 (i)Fuel					
(a) Coal	Tonnes				
(b) Dies	sel Oil Ltrs.				
(c) Petro	ol Ltrs.				
(d) Kero	osene Ltrs.				
(e) Gas	Cu.M.				
(ii)Llub					
	ricant oil Ltrs.				
(b) Grea					
(iii)Elec	9				
(a) Cons					
(b) Gen					
(c) Sold					
	olosives (off all types as per Forn	m-C)			
(v) Tyr		n-G)			
	iber & Supports				
	ll roads & kits Nos.				
	her spares & stores				
	lty and Rents (in' 000 Rs.):				
z. Roya		Paid towards	nast arraars		
(a)	Royalty	1 ald towards	s past arrears		
	Dead rent				
(b)	Surface rent				
(c)		maaa dumina t	ha yaan Da		
3. 4	Compensation paid for felling t	•	•		
4. 5	Depreciation on fixed assets Rs				
5.	Taxes and cesses Amount in	_	ing the year to.		
	Central Govt. State	e Govt.			
(i)	Sales Tax				
(i) (ii)	Welfare cess				
(ii) (iii)	Other taxes & cesses				
1111/	OTHER TANES OF CESSES				

- (a) Mineral cess
- (b) Cess on dead rent
- (c) Others (please specify)
- 6. Other expenses:
- (i) Overheads
- (ii) Maintenance
- (iii) Money value of other benefits paid to workmen
- (iv) Payment made to professional agencies

PART - IV(General Geology & Mining)

(Details on items 1,2,3,7 & 8(I) may be given once in 5 years)

- 1.General Geology & nature of occurrence of mineral deposit worked
 - (a) Nature of deposits: Give a brief description inter alia Magnetic, Sedimentary, Metamorphic, Hydrothermal nature of deposit etc.
 - (b)Morphology (Tick mark whichever is /are applicable)
 - (i) Stratiform, stratabound and tabular deposits of regular habit;
 - (ii)Stratiform, stratabound and tabular deposits of irregular habit;
 - (iii)Lenticular bodies of all dimensions including bodies occurring en echelon silicified linear zones of composite veins;
 - (iv)Lenses, veins and pockets; stock-works, irregular shaped, modest to small size bodies;
 - (v) Gemstone and raremetal pegmatites, reefs and veins;
 - (vi) Placers and residual mineral deposits of hill and valley wash and
 - (vii)Dimension stones.";
 - (c)Dimension (of each deposit separately if more than one exists)
- (i) Strike length (metre):
- (ii) Dip of ore body (in degrees indicating direction):
- (iii) Width (metre):
- (iv) Depth (metre):
- (d) Give description of geological structure of the deposit:
- (e) Mineralogy of ore deposit:

Principal mineral (Name):

Subordinate minerals: (Name(s) Proportion

- (f) Control of mineralisation (Tick mark whichever is/are applicable)
- (i) Fold axis
- (ii) Shear
- (iii) Joint Plane
- (iv) Faults
- (v) Foliation plane
- (vi) Lithological/topographical
- (vii) Others (specify)
- (g) Lithology of country rock:
- 2. Mineral(s) worked and their characteristics :

(In case more than one mineral is worked, the

of th	rmation as ne remainin rate sheet	ng miner	al(s) may	y be furnis	hed in a	
(a)	Name of			i tiic returi	1)	
				hichever i	s applicable	<u>a)</u>
	Lump	010 (1101	i iiidiii v	1110110 (01 1	з аррисаетс	<i>')</i>
	Fines					
	Friable					
	Granula	r				
(v)		•				
	Fibrous					
	y other (sp	ecify). P	owderv e	etc.		
(c)	Quality:		o ,, acij c			
` '	ıl Analysis	of Typic	cal Grade	es Produce	ed	
	ent	Grade				
		1	2	3	4	
	Size Rar					
(ii)	Principal constituents					
(iii)	Principal constituents Subsidiary Constituents					
3.				 nineral exc		disposed as waste:
(b)					ed but not se	
` '	eral reject					,
(c)	Typical	analysis		al reject(s)		
Item		1.	2.	3.	4.	
Mineral	 reject					

4. Reserves and Resources estimation during the year.

Classification	Code	Quantity	Grade
(1)	(2)	(3)	(4)
Total Mineral Resources (A + B)			
A. Mineral Reserve			
1. Proved Mineral Reserve	111		
2. Probable Mineral Reserve	121 and 122		
B. Remaining Resources			

Government Mining Regulation States

1. Feasibility Mineral Resource	211
2. Prefeasibility Mineral Resource	221 and 222
3. Measured Mineral Resource	331
4. Indicated Mineral Resource	332
5. Inferred Mineral Resource	333
6.Reconnaissance Mineral Resource	334

Note.- For the removal of doubts, the classification terms and codes mentioned in this Form shall have the same meaning as assigned to them in the Guidelines issued by Indian Bureau of Mines in this regard.

5. Mining Operations during the year:

5.1. **Exploration**

Number Meterage Grid/Dimension Item (as applicable) Drilling Trenching Pitting 5.2 Opencast (A)Details of Benches (Separately for mechanised and manual sections) In OB/Waste In ore

- (i) Number of Benches
- (ii) Average height (metres)

Raising (metres):

(d)

- Depth of the deepest working from adjacent ground(M): (iii)
- (B) (i) Total ROM Ore production (tonnes):
 - (ii) Mineral Rejects generated with grades (tonnes):

(C)Total quantity of Overburden/Waste removed during the year (tonnes)

_____ During the year Comulative so far Quantity back filled (i) Quantity disposed of in external dumps (ii) Underground: 5.3 Driving (metres) in ore: (a) Cross Cutting/Footwall Drives (in barren) (Metres): (b) Winzing (metres): (c)

2.

(a) (b)

(c)

Opening stock

Production Closing stock

(e)	Shaft sinking (metres):
(f)	Stope preparation (metres):
(g)	Tonnage of ore blocked for stoping (tonnes):
(h)	Quantity of waste removed (tonnes):
(i)	Quantity of mineral rejects generated with grade (tonnes):
5 / Nu	Within lease area Outside lease area mber of trees planted during
	vear Survival rate in percentage
-	e and agregate Horse Power of Machinery : Give the following
	mation for the types of machinery in use such as hoist, fans,
drills	, loaders, excavators, dumpers, haulages, conveyors, pumps,
	Details of any new machinery added during the year may be
furni	shed with cost.
Type	f Capacity of No.of units H.P. of Electrical/non- Used in
• •	nery each unit each electrical opencast/
macmi	unit (specify) underground
	(specify)
develop	ve details of future plans, if any, of exploration and pment, production schedule, replacements and expansion of nery and equipment etc.
	ou have laboratory facilities for R & D and if so, give description:
	etails of mineral Treatment Plant, if any. Give a brief
	ption of the process capacity of the machinery deployed and
	lability. (Enclose Flow Sheet and Material Balance of the
Plant).	
(ii)Furi	nish following information every year:
ъ .	Tonnage Average Grade
Feed:	Atrodos a
	ntrates:
Tailing	ducts/Co-products:
9.	Furnish surface and/or underground plans and sections
	pared and brought uptodate (as required under rule 28 of MCDR)
10.	Please indicate the salient features which affected mining
operat	ions during the year.
	PART-V (PRODUCTION, DESPATCHES AND STOCKS)
	(Unit of Quantity in Tonnes)
1.	Type of ore produced: (Tick mark whichever is applicable)
(a)	Hematite (b) Magnetite

Production and Stocks of ROM ore at mine-head

From opencast workings Dump workings

3.Grade-wise Production, Despatches and Stocks of Processed Ore				
Grade Opening stock Production Despatches Closing stocks PMV (% of at mine-head from mine- at mine-head (Rs/MT) Fe head content)				
Lumps: (a) Below 60% (b) 60% to below 62% (c) 62% to below 65% (d) 65% & above Fines: (a) Below 62% (b) 62% to below 65% (c) 65% & above Concentrates: Pellets/Sinters: 4.total production of processed ore since opening of the mine (tonne): 5.Details of deductions (from FOR/FOB prices) used for computation of PMV (Rs./Tonne) a) Cost of Transportation (indicate loading stations and distance from mine) b) Loading and unloading charges c) Railway freight, if applicable (indicate destination and distance) d) Port handling/export duty/and other charges, etc. (indicate name of port) Total (a) to (d) 6. Sales/Despatches for Domestic Consumption and for Exports:				
Grade Place for Domestic Consumption For export of ore of sale				
Consignee Quantity Sale Country Quantity F.O.B value value (Rs.) (Rs.)				
7. Give reasons for increase/decrease in production, if any, during the year compared to the previous year. PART-VI: COST OF PRODUCTION Cost of production per tonne of ore/mineral produced				
Item Cost per metric ton(Rs.)				
(i) Direct Cost: (a) Exploration (b) Mining (c) Beneficiation (Mechanical only) (ii) Over-head cost (iii) Depreciation (iv) Interest (v) Royalty				

(vii) (viii)	Taxes Dead Rent Others (specify)						
Total							
if require information working I certify	Information given under Part VI will be kept confidential, red. The Government, however, will be free to utilise the ation for general studies without revealing the identity or ag cost of the firm. In that the information furnished above is correct and the in						
	Mining Engineer/Manager						
	FORM H-2						
	For the Financial Year 1st April, 20 to 31st March, 20						
	MINE CODEANNUAL RETURN [See rule 45(I) (c) (ii)] (i) Name of the mineral MANGNAESE ORE (ii) Name of mine (iii) Name(s) of other mineral(s), if any, produced from the same mine during the year 19 To 1. Controller General, Indian Bureau of Mines, Nagpur 2. Controller of Mines,						
	PART-V (PRODUCTION, DESPATCHES AND STOCKS) (Unit of Quantity in Tonnes)						
	1. Production and Stocks of ROM ore at mine-head						
	From Opencast From Underground Dump workings workings workings						
	(a) Opening stock (b) Production (c) Closing Stock						

	ise Production, Despatches and Stocks of Processed ore	
Grades Op	pening stocks Production Despatches from Closing stock PMV at mine-head mine-head at mine-head (Rs./MT)	
(a)]	Below 25%	
	25% to below 35%	
(c) 3	35% to below 46%	
	46% and above	
	Dioxide ore	
	Concentrates	
3.Total pro 4.Details o of PMV(R	duction of processed ore since opening of the mine (tonne): f deductions (from FOR/FOB prices) used for computation as./tonne)	
	Cost of Transportation at loading station and distance from mine)	
•	Loading and unloading charges	
	Railway freight, if applicable	
	ate destination and distance)	
	Port handling/export duty/any other charges etc.	
(indic	ate name of port)	
Total (a) to	o (d)	
5.Sales/De	spatches effected for Domestic Consumption and for Exports:	
	re For Domestic Consumption For export consgnee Qty Sale Value Country Qty F.O.B. Value (Rs.) (Rs.)	
6.Give reas	sons for increase/decrease in production, if any, year compared to the previous year.	
PART-VI	Same as Part-VI of the Annual Return in respect of Iron ore (Form H-1)	
if required.	mation given under Part VI will be kept confidential, .The Government, however, will be free to utilise the on for general studies without revealing the identity	
or working cost of the firm. I certify the information furnished above is correct and complete		
in all respe		
Place:	Signature	
Date:	Name in full:	
	Designation:Owner/Agent/	
	Mining Engineer/Manager	

