

NOTICE

The Ministry of Mines has prepared the draft rules named “**The Mineral Conservation and Development Rules, 2016**” under section 18 of the MMDR Act, 1957, for the conservation and systematic development of minerals and for the protection of environment and for purposes connected therewith.

The draft rules are placed on the website of the Ministry for inviting comments/suggestions from the general public, Governments of States / Union Territories, Mining Industry, Stake Holders, Industry Associations, and other persons and entities concerned. The last date for receipt of the comments/suggestions is **29th September, 2016**.

The comments/suggestions may be sent by e-mail to the following ID:

mmdr2014@gov.in

It may kindly be ensured that the comments are sent on MS-Office Word file.

Alternatively, comments/suggestions may also be sent by post to the following address:

Shri Rokhum Lalremruata
Director
Ministry of Mines
Room No 302, D Wing
Shastri Bhawan
Dr Rajendra Prasad Road
New Delhi -110 001

The envelope may kindly be super scribed on the top with: “**Comments/suggestions on the draft Mineral Conservation and Development Rules, 2016**”.

**MINISTRY OF MINES
NOTIFICATION**

New Delhi, the [●] 2016

G.S.R. [●]— In exercise of the powers conferred by section 18 of the Mines and Minerals (Regulation and Development) Act, 1957 (67 of 1957), the Central Government hereby makes the following rules, namely:-

Chapter I : Preliminary

1. **Short title and commencement.**-(1) These rules may be called the Mineral Conservation and Development Rules, 2016.
 - (2) These rules shall come into force on the date of their publication in the Official Gazette.
2. **Applicability.**- These rules shall apply to all minerals except:-
 - (i) petroleum and natural gas;
 - (ii) coal, lignite and sand for stowing;
 - (iii) any mineral declared as prescribed substance for the purpose of the Atomic Energy Act, 1962 (33 of 1962); and
 - (iv) minor minerals.
3. **Definitions.**- (1) In these rules, unless the context otherwise requires:-
 - (a) “abandonment of mine” means the final closure of a mine, either whole or part thereof, when the mineral deposits within the mine or part thereof have been fully extracted or when the mining operations thereon have become uneconomic;
 - (b) “Act” means the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957);
 - (c) “agent” when used in relation to a mine, means a person specified under sub-clause(c) of sub-section(1) of section 2 of the Mines Act, 1952 (35 of 1952);
 - (d) “authorised officer” means any officer of the Indian Bureau of Mines duly authorised in writing by the Controller General, Indian Bureau of Mines or an officer authorised in this behalf by the State Government to perform the functions under these rules;

- (e) "beneficiation" means processing of minerals or ores for the purpose of upgrading the quality, purity or assay grade of the desired product by removing unwanted constituents like gangue minerals or tailings;
- (f) "calibrated lump ore" means the sized ore that is obtained after crushing and screening of the ROM ore or lumps.
- (g) "Chief Controller of Mines" means the Chief Controller of Mines of the Indian Bureau of Mines;
- (h) "competent authority" means the competent authority identified in rule 10;
- (i) "Controller General" means the Controller General of the Indian Bureau of Mines;
- (j) "Controller of Mines" means the Controller of Mines of the Indian Bureau of Mines;
- (k) "cores" means the samples of subsurface rocks or mineralized zone obtained during drilling of boreholes;
- (l) "development" means the driving of an opening to or in an ore-body or seam or removing overburden or unproductive or waste materials as preparatory to mining or stoping;
- (m) "environment" and "environmental pollution" shall have the same meanings, assigned respectively to these terms in the Environment (Protection) Act, 1986 (29 of 1986);
- (n) "final mine closure plan" means a plan for the purpose of decommissioning, reclamation and rehabilitation of a 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;
- (o) "final mine closure" means steps taken for reclamation and rehabilitation of a mine or part thereof commencing from cessation of mining or processing operations in a mine or part thereof;
- (p) "financial assurance" means the security or guarantee furnished by the holder of a mining lease in accordance with rule 27;

- (q) "Form" means a Form set forth in Schedule to these rules;
 - (r) "geologist" means a person appointed by the holder of a mineral concession to perform the duties of a geologist under these rules;
 - (s) "manager" when used in relation to a mine means a person as specified under section 17 of the Mines Act, 1952 (35 of 1952);
 - (t) "mining engineer" means a person appointed by the holder of a mineral concession to perform the duties of a mining engineer under these rules;
 - (u) "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 from time to time;
 - (v) "Regional Controller" means the Regional Controller of Mines of the Indian Bureau of Mines;
 - (w) "section" means a section of the Act;
 - (x) "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;
 - (y) "stopping" 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;
 - (z) "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 not earlier than one hundred and twenty days; and
 - (aa) "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.
- (2) The words and expressions used but not defined herein shall have the same meaning as assigned to them in the Act or the rules made thereunder.

Chapter II : Reconnaissance and Prospecting Operations

4. **Scheme of reconnaissance or prospecting.**-Every holder of a reconnaissance permit or prospecting licence or prospecting license-cum-mining lease, shall submit to the Regional Controller or the authorised officer, a scheme of reconnaissance or prospecting, as the case may be, indicating the manner in which he proposes to carry out the reconnaissance or prospecting operations, in the area covered under the permit or licence. The scheme of reconnaissance or prospecting shall be prepared in the format as prescribed by the Indian Bureau of Mines from time to time.

5. **Modification of scheme of reconnaissance or prospecting.**- (1) A scheme of reconnaissance or prospecting prepared and submitted under rule 4 may be modified at any time on geological considerations by the holder of a reconnaissance permit or prospecting licence or prospecting license-cum-mining lease or as directed by the Regional Controller or the authorised officer of the Indian Bureau of Mines during continuance of the reconnaissance or prospecting operations.

(2) Any modification carried out under sub-rule (5) shall be intimated to the Regional Controller or the authorised officer of the Indian Bureau of Mines by the holder of a reconnaissance permit or prospecting licence or prospecting license cum mining lease within a period of thirty days of carrying out such modification.

6. **Reconnaissance or Prospecting operations to be carried out in accordance with scheme of reconnaissance or prospecting.**- Every holder of a reconnaissance permit or prospecting licence or prospecting license cum mining lease shall carry out the reconnaissance or 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 Regional Controller or the authorised officer of IBM.

7. **Intimation about reconnaissance and prospecting operations.**- Every holder of a reconnaissance permit or prospecting licence or prospecting license cum mining lease shall send to the Regional Controller and the State Government, an intimation in Form-A of the commencement of reconnaissance or prospecting operations, as the case may be, so as to reach them within a period of fifteen days of such commencement.

8. **Inspection.**- The holder of a prospecting license or prospecting license cum mining lease shall allow every authorised officer of IBM to examine at any time, the accounts maintained by him and shall furnish to the authorised officer, such information and returns as the authorised officer may require. The holder of a prospecting license or prospecting license cum mining lease shall also allow any authorised officer to inspect any prospecting operations carried on by him.

9. **Reports to be submitted by holder of a reconnaissance permit or prospecting license or prospecting license cum mining lease or any other agency authorised under the second proviso to sub-section (1) of section 4.**- (1) Every holder of a reconnaissance permit or prospecting licence or prospecting license-cum-mining lease shall submit to the Regional Controller and to the State Government, a yearly report along with Form-B so as to reach him within thirty days after the expiry of twelve months from the date of execution of the relevant prospecting licence deed or the expiry of the prospecting licence or prospecting license cum mining lease, whichever is earlier.

(2) Every agency authorised under the second proviso to sub-section (1) of section 4 shall

submit to the competent authority, a yearly report in Form-B so as to reach him within forty five days after the expiry of twelve months from the date of commencement of prospecting operations by such agency.

(3) In case the prospecting operations are abandoned, the report along with Form-B shall be submitted within a period of thirty days from the date of such abandonment.

Chapter III : Mining Operations

10. Competent Authority.- (1) The Indian Bureau of Mines shall be the competent authority to take decisions with respect to a mining plan approved by any officer of the Indian Bureau of Mines duly authorised in writing by the Controller General pursuant to clause(b) of sub-section(2) of section 5.

(2) The State Government shall be the competent authority to approve a mining plan required for grant of a mining lease, prepared and certified in accordance with the system established by the State Government pursuant to the proviso to clause (b) of sub-section(2) of section 5 and approved by the Central Government:

Provided that the Indian Bureau of Mines shall be the competent authority to take decisions with respect to monitoring and implementation of such mining plans approved by the State Government.

11. Mining Operations under Mining Lease.- (1) No holder of a mining lease shall commence or carry out mining operations in any area except in accordance with the mining plan approved, modified and/or reviewed pursuant to The Minerals (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules, 2016.

(2) If the mining operations are not carried out in accordance with the approved mining plan or any information contained in the mining plan is found to be incorrect, misleading or non-compliant with applicable laws including these rules, the competent authority, as the case may be, may order suspension of all or any of the mining operations and permit continuance of only such operations as are required to restore the conditions in the mine as envisaged under the approved mining plan or modified mining plan:

Provided that the lessee should be informed in writing about the violation and if the violation is not rectified within a period of 45 days a show cause notice should be given asking reasons why the mining operations should not be suspended and, further, if no satisfactory reply is received within a period of 30 days the mining operations can be suspended.

(3) Every approved mining plan shall be subjected to review and updation in every five years as per provision of rule 17(1) of the Minerals (Other than Atomic and Hydro Carbon Energy Minerals) Concession Rules, 2016.

(4) The holder of a mining lease shall submit the mining plan for review at least ninety days before the expiry of five years period for which it was approved on the last occasion, for mining operations for a period of five subsequent years.

12. **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 the environment.

13. **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 workings 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.

14. **Separate stacking of non-saleable minerals.**-(1) All the non-saleable/un-usable minerals/ores above the limit prescribed in the threshold values or otherwise shall be stacked separately in the area earmarked for the purpose.

(2) The mineral/ore stock above the limit prescribed in the threshold values of minerals or otherwise, should be properly maintained in a bound register indicating the quantity and quality of all such material stacked. The month wise inventory of such materials shall be updated.

(3) The overburden and waste material obtained during mining operations shall not be allowed to be mixed with the materials as specified in sub-rule (1).

(4) The ground selected for dumping of overburden, waste material, the sub-grade or non-saleable ores/minerals shall be away from the working pit. It shall be proved for absence or presence of underlying mineral deposits before it is brought into use for dumping.

(5) The ultimate size of the pit shall be determined before starting mining operations 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.

15. **Underground mining operations.**-(1)Underground mining operations 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 geo-technical 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) 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).

16. Subgrade minerals to be brought to surface.-(1) All the subgrade ore/minerals wherever obtained from underground workings shall be brought to the surface instead of leaving or packing them 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 underground if it is necessary for support or protection to the mine workings.

17. 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 holder of the mining lease giving reasons for doing the same.

18. Beneficiation studies to be carried out.-(1) If the competent authority of IBM 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 holder of the mining lease to get the beneficiation investigations carried out from any government laboratory or a laboratory accredited by National Accreditation Board for Testing and Calibration.

(2) The report of the beneficiation investigations so carried out under sub-rule (1) shall be submitted to the competent authority of IBM immediately after the investigation is over.

(3) In a mine having a beneficiation plant, feed products and tailings shall be regularly sampled and analyzed at suitable intervals and records of the same maintained:

Provided that the competent authority of IBM may require the sampling and analysis to be done at any other interval than in practice from any government laboratory or a laboratory accredited by National Accreditation Board for Testing and Calibration.

19. Machinery and plant.-(1) Where heavy earth moving machinery is used in mines, the holder of a mining lease shall maintain log books duly authenticated by the manager or mining engineer of such mines 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 utilization of the machine, average hourly performance and average fuel/energy consumption per hour.

(2) Each page of the log books shall be numbered and the summary shall be signed and dated by the mining engineer.

(3) The log books shall be made available to the authorised officer on demand.

(4) Notwithstanding the provisions of sub-rules (1), (2) and (3) above, the log books may also be maintained in electronic form.

20. Notice for opening of mine.- (1) The holder of a mining lease shall send to the State Government 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 under sub-rule (1) shall be accompanied with a copy of the approved mining plan, only when the mine is being opened after a lapse of five years period from the date of approval of the mining plan.

21. Abandonment of mines.-(1) The holder of a mining lease shall not abandon a mine or a part of mine during the subsistence of the lease except with prior permission in writing of the authorised officer of the Indian Bureau of Mines or the State Government, as the case may be.

(2) The holder of a mining lease shall send to the authorised officer of the Indian Bureau of Mines or the State Government, as the case may be, 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.

Such a notice shall be accompanied by plans and sections on a scale as specified in rule 31 of these rules setting forth accurately the work done in the mine up to 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 authorised officer of the Indian Bureau of Mines or the State Government, as the case may be, may require the plans and sections to be prepared on any other suitable scale.

(3) The authorised officer of the Indian Bureau of Mines or the State Government, as the case may be, 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.

(4) The holder of a mining lease shall not abandon a mine or part thereof unless a final mine closure plan duly approved by the competent authority, is implemented. For this purpose, the lessee shall be required to obtain a certificate from the competent authority of IBM 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.

(5) The holder of a mining lease shall continue to be liable to provide the financial assurance and pay for any expenditure over and above the performance security incurred by the State Government towards protective reclamation and rehabilitation measures in the leased area of the mining lease.

22. Mine Closure Plan.- (1) 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.

(2) Every holder of a mining lease shall take steps to prepare mine closure plans as per the guidelines and format given by the Indian Bureau of Mines from time to time:

Provided that where the state government has set up a system for preparation, certification and monitoring of mining plan pursuant to the proviso to clause (b) of sub-section (2) of section 5 of the Act, such guidelines and formats will be prescribed by the state government.

23. Submission of Progressive Mine Closure Plan.-The holder of a mining lease shall submit to the competent authority, a progressive mine closure plan as a component of the mining plan, at the time of submission, modification and review of the mining plan.

24. Submission of final mine closure plan.-(1) The holder of a mining lease shall submit a final mine closure plan to the competent authority for approval two years prior to the proposed closure of the mine.

(2) The competent authority shall convey his approval or refusal of the final mine closure plan within ninety days of the date of its receipt to the holder of the mining lease.

25. 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 the modified mine closure plan to the competent authority for approval setting forth the intended modifications and explaining the reasons for such modifications.

(2) The competent authority shall convey his approval or refusal to modification of mine closure plan the holder of the mining lease, within sixty days of the date of receipt of the modified mine closure plan.

26. Responsibility of the holder of a mining lease.- (1) The holder of a mining lease shall have the responsibility to ensure that the protective measures 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 competent authority.

(2) The holder of mining lease shall submit to the competent authority, 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.

27. Financial assurance.- (1) A financial assurance, has to be furnished by every leaseholder for due and proper implementation of the approved progressive and final mine closure plan, which shall be an amount as notified by the Controller General of Indian Bureau of Mines from time to time.

Provided that the financial assurance shall be fixed on a pro rata basis depending on the mining lease area put to use for mining and allied activities separately for A category mines and B category mines and also providing the minimum amount of financial assurance payable in each of these categories:

Provided further 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 also 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 authorised by the State Government in this behalf, as the case may be:

- (a) Deposit with a Scheduled Bank with a lien marked in favour of the Regional Controller of Mines, IBM;
- (b) Bank Guarantee in the specified format;
- (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 authorised 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.

28. Notice of temporary discontinuance of work in mines and obligations of the lease holders.—(1) Subject to the provisions of section 4A, the holder of a mining lease shall send to the State Government 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 fifty days from the date of such temporary discontinuance.

(2) Where the discontinuance takes place as a result of the occurrence of a natural calamity beyond the control of the holder of a mining lease 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 notice shall be submitted to the State Government and the Regional Controller within a period of fifteen days of such discontinuance in Form D-1.

(3) During the temporary discontinuation of a mine or part thereof, it shall be the responsibility of the holder of a mining lease 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.

29. Intimation of reopening of a mine.-The holder of a mining lease shall send to the State Government 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.

30. Stopping of vein, etc.- (1) No stopping shall be commenced, conducted or carried out except with prior permission in writing of the competent authority.

(2) The holder of a mining lease shall send to the State Government and the Regional Controller a notice in Form-E intimating his intention to commence the stopping 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 meters showing the details of the block proposed to be stoped, the manner of stopping and the mineralised and barren zones indicating estimated percentages recovery from stopes:

Provided that the competent authority of IBM 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 competent authority of IBM may by an order made before the proposed date of commencement of stopping operations prohibit the stopping or allow it to be done under such conditions as may be specified in the order.

Chapter IV : Plans and Sections

31. 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 holder of the mining lease 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 centimeters long and suitably subdivided;
- (d) unless otherwise provided, be on a scale having a representative factor of –
 - (i) 1:500 in case of mines having small-scale workings;
 - (ii) 1:2000 in case of mines having large open cast working and also in case of surface plans of large leasehold areas; and
 - (iii) 1:1000 in other cases:

Provided that the competent authority 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 digitally prepared.

(2) The conventions prescribed under the Metalliferous Mines Regulations, 1961, and code prescribed by the Bureau of Indian Standards 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 competent authority 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 45, and within twelve months in the case of any other mine.

32. Types of plans and sections.- (1) The holder of a mining lease shall keep the following digitally prepared plans and sections-

- (a) a surface plan showing location and number of the boundary pillars along with its latitude and longitude values, every surface feature within the mining lease boundaries, such as building, telephone, power transmission line, water pipeline, 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 beneficiation plants, tailing ponds and other workings within the lease;
- (b) a surface geological plan of the area of leasehold 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, stacks of ore;
 - (v) section lines at regular intervals from one boundary to the other of the lease;
 - (vi) contour lines at suitable interval;
 - (vii) exploration limits such as G1, G2, G3 and G4 as per the United Nations Framework Classification.
- (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, mineral bed or deposit at different points, and such sections of the strata sunk or driven through in the mine or proved by boreholes, 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 competent authority and subject to such conditions as he may specify therein, such sections may be prepared in relation to any other suitable plane.

- (e) a digitally prepared 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 the competent authority 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 meters 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 holder of the mining lease and by the holders of the mining lease 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 holder of a mining lease shall keep the following:

(a) A key plan on a scale of 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 meters 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 meters 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 meters 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 up to sixty meters beyond the boundary of lease area.

- (6) The competent authority 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.
- (7) The competent authority may, by an order in writing, require the holder of a mining lease to provide him within such time, such plans and sections, or tracings thereof, as he may specify in the order.

33. Copies of plans and sections to be submitted.-The holder of a mining lease shall, on or before the 30th day of June every year submit to the State Government and the Regional Controller, as the case may be, a digital copy along with a print copy of the surface geological plans and sections maintained under rule 32.

34. Preparation of plans.-(1) All digitally prepared plans, sections or copies thereof kept at the mine shall be 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 45.

(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 holder of the mining lease to be a true copy of the original plan or section.

Chapter V : Sustainable Mining

35. Sustainable Mining.- (1) Every holder of a mining lease shall take all possible precautions for undertaking sustainable mining while conducting prospecting, mining, beneficiation or metallurgical operations in the area.

(2) Every holder of a mining lease shall monitor his mining and allied activities as per the notified template of star rating in the format prescribed in this behalf by the Indian Bureau of Mines from time to time, and will submit online its self-assessment report before 1st July of every year for the previous year, to the Regional Controller or the authorised officer of the Indian Bureau of Mines.

(3) The confirmation of the star rating will be done by the authorised officer of the Indian Bureau of Mines through inspection.

(4) The Regional Controller or the authorised officer of the Indian Bureau of Mines may suspend the mining operations in those mines where at least four star rating has not been achieved within a period of three years from the date of notification of these rules after giving a show cause notice of forty five days, to qualify for star rating.

(5) The suspension will be revoked only after verification through inspection of compliance of the star rating requirement specified in sub-rule (4) that the mine qualifies for star rating.

36. Removal and utilisation of top soil.- (1) Every holder of a prospecting licence, prospecting license cum mining lease 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 utilised concurrently, it shall be stored separately for future use.

37. Storage of overburden, waste rock, etc.- (1) Every holder of a prospecting licence, prospecting license cum mining lease 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 far 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 stabilized through 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.

38. 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 the mining lease so as to keep the ground vibrations caused by blasting operations within safe limit.

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

40. 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' by the holder of prospecting licence or a mining lease.

41. Discharge of toxic liquid.-Every holder of prospecting licence, prospecting licence cum mining lease 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 aquifer and useable lands, to a minimum. These effluents shall be suitably treated, if required, to conform to the standards laid down in this regard.

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

43. Permissible limits and standards.- The standards and permissible limits of all pollutants, toxins and noise referred to in rules 40, 41 and 42 shall be those notified by the concerned authorities under the provisions of the relevant statutes from time to time.

44. Restoration of flora.- Every holder of prospecting licence, prospecting license cum mining lease or a mining lease shall carry out prospecting or mining operations, as the case may be, in accordance with applicable laws and in such a manner so as to cause least damage to the flora of the area held under prospecting licence, prospecting license cum mining lease or mining lease and the nearby areas.

Chapter VI : Employment of Geologists and Mining Engineers

45. Employment of geologists and mining engineers.-(1) For the purpose of carrying out reconnaissance, prospecting or mining operations in accordance with these rules:

1. every holder of reconnaissance permit shall employ a whole-time geologist;
2. every holder of prospecting licence or a prospecting license cum mining lease shall employ a whole-time geologist and a part-time mining engineer;
3. every holder of a mining lease shall employ, in case of:-
 - (i) category 'A' mines, a whole-time mining engineer and a geologist;
 - (ii) category 'B' mines, a part-time mining engineer and a part-time geologist:

Provided that in the case of fully mechanized category 'A' mines, the mining engineers and geologists shall have a minimum five years of professional experience of working in a supervisory capacity in the field of mining:

Provided further that in case of category 'B' mines, a person employed in terms of the provisions of sub-rule (1) may be permitted to be employed in lieu of part-time mining engineer.

(2) For the purpose of this chapter-

(a) category 'A' mines means:

- (i) such fully mechanized mines where the work is being carried out by deployment of heavy mining machinery for deep hole drilling, excavation, loading and transport; or
- (ii) such mines where the number of average employment exceeds one hundred and fifty in all or seventy five workings below ground, or mines where any of the mining operations like deep hole drilling, excavation, loading and transport is carried out with the help of heavy machinery;

(b) category 'B' mines means mines other than category 'A' mines:

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.

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 man days worked by the number of working days).

(3) The part-time mining engineer and geologist can be employed up to a maximum of six prospects or mines, provided that all such prospects or mines are located within a radius of fifty kilometres.

(4) If the holder of a reconnaissance permit, prospecting licence or a prospecting license cum mining lease or a 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) If the manager of a mine is a mining engineer or a geologist he may appoint himself as a mining engineer or geologist for the purpose of sub-rule (1).

(6) A mining engineer or geologist employed by the holder of a prospecting licence or prospecting license cum mining lease or mining lease shall possess the qualifications specified below:-

Geologist : A postgraduate degree in Geological Science or Geology or Applied Geology or Geo-exploration or Mineral Exploration granted by a University established or incorporated by or under a Central Act, or a State Act, in India or educational Institution established by an Act of Parliament or declared to be deemed university under 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 recognized by the University Grants Commission established under section 4 of the University Grants Commission Act, 1956 or any equivalent qualification.

(7) Where, due to change in technology in the mine, a category 'A' mines qualifies to become a category 'B' mines, the employment of a mining engineer as required for category 'B' mines may be done only with previous permission in writing of the competent authority and subject to such conditions as he may specify.

46. Duties of geologist.- (1) It shall be the duty of the geologist to, –

- (a) prepare a scheme of prospecting and carry out the investigation operation as per the scheme;
- (b) prepare the necessary geological maps, plans and sections which are required to delineate the ore body;
- (c) carry out petrological and mineralogical studies of host rock and mineralized zones;
- (d) calculate ore reserves and its grade;

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

47. 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) The mining engineer shall be responsible for the preparation and maintenance of plans, sections, reports and schemes in accordance with these rules.

(3) The mining engineer shall be responsible for carrying out the study of the associated rocks and minerals, identifying them and stacking the various minerals produced separately.

(4) The mining engineer shall also carry out all such orders and directions as may be given in writing under these rules by the State Government or the Controller General or the authorised officer and shall forward a copy of such orders or directions to the holder of prospecting licence or prospecting license cum mining lease or the mining lease, as the case may be.

(5) 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 holder of the mining lease, he shall make requisition in writing to the holder of the mining lease 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. On receipt of such a requisition, the holder of the mining lease shall provide as soon as possible the materials and facilities requisitioned by the mining engineer.

Chapter VII :Notices and Returns

48. Monthly and annual returns.- (1) The holder of a mining lease, or any person or company engaged in trading or storage or end-use or export of minerals mined in the country, shall cause himself to be registered online with the Indian Bureau of Mines as per application specified in Form K and the registration number so allotted by the Indian Bureau of Mines shall be used for all purposes of online reporting and correspondence connected therewith.

(2) For the purpose of registration under sub-rule (1), the holder of a mining lease, or any person or company engaged in trading or storage or end-use or export of minerals, shall apply for registration in electronic form, within one month from the date of registration of the lease deed or before the commencement of trading operation or storage or end-use or export of minerals, as the case may be.

(3) The Indian Bureau of Mines shall allot and record the registration number in the register referred to in sub-rule (4).

(4) The Indian Bureau of Mines shall maintain an online register giving details of the holder of a mining lease, or any person or company engaged in trading or storage or end-use or export of minerals, as the case may be, as registered under the provisions of these rules, which shall be made available to the general public for inspection on demand, and also posted on the website of the Indian Bureau of Mines.

(5) The holder of a mining lease shall submit online returns in respect of each mine to the Regional Controller or any other authorised official of the Indian Bureau of Mines in the following manner, namely:-

(a) a daily return which shall be submitted through the Mobile application of the Indian Bureau of Mines, by 1800 hours of the third day following the day of reporting;

(b) a monthly return which shall be submitted before the 10th of every month in respect of preceding month in electronic Form as indicated below:-

(i) For all minerals except copper, gold, lead, pyrite, tin, tungsten, zinc, precious and semi-precious stones in Form F-1;

(ii) For copper, gold, lead, pyrite, tin, tungsten, zinc, in Form F-2 and

(iii) For precious and semi-precious stones in Form F-3;

- (c) an annual return which shall be submitted before the 1st day of July each year for the preceding financial year in electronic Form, along with a print copy of the same if it is not digitally signed, in the respective Form as indicated below:-
- (i) For all minerals except copper, lead, zinc, pyrite, gold, tin, tungsten, precious and semi-precious stones in Form G-1;
 - (ii) For copper, lead, zinc, pyrite, gold, tin, tungsten, in Form G-2;
 - (iii) For precious and semi-precious stones in Form G-3:

Provided that in the case of abandonment of a mine, the annual return shall be submitted within one hundred and fifty days from the date of abandonment.

- (6) Any person or company engaged in trading or storage or end-use or export of minerals, shall submit online to the Indian Bureau of Mines and concerned State Government, where the said person or company is sourcing the minerals, the returns in electronic form, along with a print copy of the same if it is not digitally signed, in the following manner, namely:-

- (a) a monthly return which shall be submitted before the 10th of every month in respect of preceding month in Form L;
- (b) an annual return which shall be submitted before the 1st July each year for the preceding financial year in the Form M.

- (7) If it is found that the holder of a mining lease or the person or company engaged in trading or storage or end-use or export of minerals, as the case may be, has submitted incomplete or wrong or false information in daily or monthly or annual returns or fails to submit a return within the date specified:

- (a) in the case of mining of minerals by the holder of a mining lease, then the Regional Controller of Mines may advise the State Government to,-
 - (i) order suspension of all mining operations in the mine and may revoke the order of suspension only after ensuring proper compliance;
 - (ii) take action to initiate prosecution under these rules;
 - (iii) recommend termination of the mining lease, in case such suppression or misrepresentation of information indicates abetment or connivance of illegal mining;

(b) in the case of trading or storage or end-use of minerals, the State Government, where the person or company engaged in trading or storage or end-use of minerals is sourcing the minerals, shall order suspension of:

(i) trading licence (by whatever name it is called);

(ii) all transportation permits issued to such person or company for mineral transportation (by whatever name it is called);

(iii) storage licence for stocking minerals (by whatever name it is called);

(iv) permits for end-use industry of minerals (by whatever name it is called);

as the case may be, of such person or company engaged in trading or storage or end-use of minerals, and may revoke the order of suspension only after ensuring proper compliance.

(c) in the case of export of minerals, the Directorate General of Foreign Trade shall order suspension of permits for carrying out such exports of minerals of such person or company engaged in export of minerals, and may revoke the order of suspension only after ensuring proper compliance:

Provided that the concerned person in clause (a), (b) and (c) above should be informed in writing about the violation and if the violation is not rectified within a period of 45 days a show cause notice should be given asking reasons why the mining operations should not be suspended and, further, if no satisfactory reply is received within a period of 30 days the mining operations can be suspended.

(8) In case of mining of minerals by the holder of a mining lease the,-

(a) sale value is the gross amount payable by the purchaser as indicated in the sale invoice, where the sale transaction is on an arms' length basis and the price is the sole consideration for the sale, excluding taxes, if any.

Explanation.- For the purpose of computing sale value, no deduction from the gross amount shall be made in respect of royalty, payments to the District Mineral Foundation and payments to the National Mineral Exploration Trust;

(b) ex-Mine price of mineral grade or concentrate shall be,-

- I. where export has occurred, the total of, sale value on free-on-board (F.O.B) basis, less the actual expenditure incurred beyond the mining lease area towards –
 - (i) transportation charges by road;
 - (ii) loading and unloading charges;
 - (iii) railway freight (if applicable);
 - (iv) port handling charges or export duty;
 - (v) charges for sampling and analysis;
 - (vi) rent for the plot at the stocking yard;
 - (vii) handling charges in port;
 - (viii) charges for stevedoring and trimming;
 - (ix) any other incidental charges incurred outside the mining lease area as notified by the Indian Bureau of Mines from time-to-time divided by the total quantity exported;
- II. where domestic sale of mineral has occurred, the total of sale value of the mineral less the actual expenditure incurred towards loading, unloading, transportation, rent for the plot at the stocking yard, charges for sampling and analysis and any other charges beyond mining lease area as notified by the Indian Bureau of Mines from time-to-time, divided by the total quantity sold;
- III. where sale has occurred, between related parties and is not on arms' length basis, then such sale shall not be recognised as a sale for the purposes of this rule and in such case, sub-clause (IV) shall be applicable;
- IV. where the sale has not occurred, the average sale price published monthly by the Indian Bureau of Mines for that mineral grade or concentrate for a particular State:

Provided that if for a particular mineral grade or concentrate, the information for a State for a particular month is not published by the Indian Bureau of Mines, the last available information published for that mineral grade or concentrate for that particular State by the Indian Bureau of Mines in the last six months previous to the reporting month shall be referred, failing which the latest information for All India for the mineral grade or concentrate, shall be referred;

V. the cost of production in case of captive mines.

(9) In case of trading or storage or end-use or export of minerals, for purpose of filing of returns, the value of the mineral grade or concentrate shall be,—

(a) where sale of the mineral grade or concentrate has occurred and the sale transaction is on an arms' length basis and the price is the sole consideration for the sale, the sale value of the mineral grade or concentrate recorded in the invoice;

(b) where sale has not occurred, the product of average sale price published monthly by the Indian Bureau of Mines for a particular mineral grade or concentrate for a particular State and the quantity dispatched or procured:

Provided that if for a particular mineral grade or concentrate, the information for a State for a particular month is not published by the Indian Bureau of Mines, the last available information published for that mineral grade or concentrate for that particular State by the Indian Bureau of Mines in the last six months previous to the reporting month shall be referred, failing which the latest information for All India for the mineral grade or concentrate, shall be referred.

(2) If more than one mineral is produced from the same mine, return shall be submitted along with the relevant parts of the specified forms for each mineral separately.

(3) In case of temporary discontinuance of mining or suspension of mining, or temporary discontinuance or suspension of trading or storage or end-use or export of minerals, the holder of a mining lease, or the person or company engaged in trading or storage or end-use or export of minerals, as the case may be, shall submit return in the specified form for the mineral for which return had been submitted earlier, furnishing relevant particulars, inclusive of "Nil" information.

(4) In case ownership of the mine or the trading or storage or end-use or export company changes during the reference period, separate returns have to be filled by each owner for the respective periods of ownership.

(5) For the purpose of regulation of transportation of minerals, all persons and companies owning trucks or any other motorised vehicle used for transportation of mineral byroad or through water way shall be required to be registered with the Directorate of Mining and Geology or the Department handling mining matters in the State Government and the lessee shall maintain trip-sheets (either in the form of written record or on computers) of the vehicles, the nature and weight of mineral and the approximate time of the trip and its destination".

49. Notice of certain appointments.- When any new appointment is made of an agent, mining engineer, geologist or any person under sub-rule (1) of rule 45 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 holder of the prospecting licence or prospecting license cum mining lease or the mining lease shall within fifteen days from the date of such appointment, termination, leaving or change in address give a notice in Form H to the Regional Controller and the State Government.

50. Notice of shaft sinking and boreholes.- The holder of a mining lease or the holder of a prospecting licence or prospecting license cum mining lease shall send an intimation in Form I to the Regional Controller and the State Government 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 meters from the surface, or
- (b) the extension of an existing shaft or borehole to a depth exceeding ten meters, or
- (c) the sinking of a new shaft or boreholes commencing from underground workings:

51. Records of shafts and boreholes.- The holder of a mining lease or the holder of a prospecting licence or prospecting license cum mining lease shall keep a record in Form-J of all shafts or boreholes. The samples of the strata passed through shall be preserved as per rule 62.

52. Change in the name of mine to be notified.- The holder of a mining lease shall send a notice in Form-C to the State Government, the Controller General of Mines, IBM and the Regional Controller, of any change in the name of the mine within thirty days of such change.

53. 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 56 of The Minerals (Other than Atomic and Hydro Carbon Energy Minerals) Concession Rules, 2016, send an intimation thereof to the Regional Controller and the State Government.

54. Transfer of records to transferees.- When the ownership of a prospecting license-cum - mining lease or a mining lease is transferred as per provisions of Act or any rules made thereunder, 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 along with records and samples 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 license cum mining lease 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 either to the State Government or the Regional Controller a detailed list of borehole cores, plans, sections, reports, registers and other records that have been transferred.

55. Copies of notices/returns and reports to be submitted to the State Government.-

The holder of a mining lease or a holder of a prospecting licence or prospecting license cum mining lease shall simultaneously submit a copy each of the notice/return/reports 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.

56. Copies of notices and returns and reports to be maintained.- The holder of a mining lease or a holder of a prospecting licence or prospecting license cum mining lease shall maintain the labour attendance register, production and dispatch register, royalty assessment register, details of contribution made to District Mineral Foundation and National Mineral Exploration Trust, details of payments made to the State Government in terms of percentage of value of minerals dispatched as quoted in the bidding, details of contribution to mine closure fund, 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 State Government and the Regional Controller 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

57. Power to issue directions.- (1) The holder of a mineral concession shall comply with such directions being directions for purposes of providing for systematic development of mineral deposits, conservation of minerals and for sustainable mining 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 holder of a mineral concession, and to the State Government concerned, and any comments received from the holder of a mineral concession 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 Regional Controller 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 by delivering or 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 neighborhood.

58. Examination of mineral deposits and taking of samples.- The authorised officer may examine any mineral deposit in any area under prospecting licence or prospecting license cum mining lease or mining lease and take samples there from at any time for the purposes of these rules.

59. Prohibition of deployment in certain cases.- If any mine or part thereof, which in

the opinion of the Chief Controller of Mines or the Controller of Mines or the Regional Controller of Mines poses a grave and immediate threat to the conservation of minerals or to environment or to the sustainable development of the mine, he may, by an order in writing to the holder of a mining lease, 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

60. **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.

(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 bank draft for rupees ten thousand as application fee drawn on a scheduled bank in the name of 'Pay and Accounts Officer, Indian Bureau of Mines' payable at Nagpur or by way of a bank transfer to the designated bank account of the Indian Bureau of Mines.

61. **Penalty.-** Whoever contravenes any of the provisions of these rules shall be punishable with imprisonment for a term which may extend to two years or with fine which may extend to five lakh rupees, or with both, and in the case of a continuing contravention, with additional fine which may extend to fifty 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 authorised 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

62. **Preservation of cores, etc.-** (1) Every holder of a mineral concession and every agency authorised under the second proviso to sub-section (1) of section 4 shall preserve intact, until submission of the final geological report, all cores and specimens of different types of rocks and minerals obtained during drilling or sinking operations and shall arrange for them to be laid out in a serial order with identification marks, showing the progressive depth at which they are obtained.

(2) The Regional Controller or the State Government may, by an order in writing, require the holder of the mineral concession or the agency authorized under the second proviso to sub-section (1) of section 4 to preserve the cores or specimens of rocks and minerals obtained from specific boreholes or shafts in a specific manner or for any specific period or relax the provisions of this rule to such an extent as they may deem fit.

(3) No cores or samples generated and preserved as per sub-rule (1) above shall be destroyed without the prior permission in writing from the Director General, Geological Survey of India, Chief Controller of Mines, Indian Bureau of Mines and the State Government.

(4) The Geological Survey of India shall be the nodal agency for archiving drill cores at the National Core Repository and at the Regional Drill Core Repositories with suitable indexing and cataloguing. Regional Drill Core Repositories shall function as satellites of the National Core Repository.

(5) The holder of a mineral concession or any other agency authorized under the second proviso to sub-section (1) of section 4 shall adhere to the procedure for preservation and submission of cores as prescribed in the manual issued by the Geological Survey of India from time to time and shall, after completion of all the required studies and at the time of submission of the final geological report, mandatorily handover the identified borehole cores to the Geological Survey of India.

63. 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 authorised officer for the purpose of undertaking research or training in matters relating to mining or geology.

64. 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 authorised officer, 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 Director General, Geological Survey of India for geology related research and to the Chief Controller of Mines, Indian Bureau of Mines for mining research within thirty days of its completion.

(b) The information so received will be kept confidential, if required. The authorised officer 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.

65. 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.

66. Obligation to supply other information.- The holder of a mineral concession shall furnish such information regarding his reconnaissance or prospecting operations or mining

operations or any matter connected therewith as 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.

67. Provisions of these rules to be applicable to Government.- The Government or its agencies carrying out prospecting or mining operations, as the case may be, without a mineral concession shall be bound by all the provisions of these rules in the same manner as they are applicable to holders of mineral concessions.

68. Exercising the powers.- Any power granted under these rules to the Regional Controller of Mines may be exercised by the Controller of Mines. The powers granted to the Controller of Mines can be exercised by Chief Controller of Mines and the powers granted to the Chief Controller of Mines can be exercised by the Controller General.

69. Applicability to atomic minerals.- These rules shall apply to all minerals specified in Part B of the First Schedule to the Act:

Provided that any reference in these rules to the Minerals (Other than Atomic and Hydro Carbon Energy Minerals) Concession Rules, 2016, shall, with respect to the minerals specified in Part B of the First Schedule of the Act, mean the rules prescribed for such minerals by the Central Government in exercise of its power under section 11B.

70. Repeal and savings.- The Mineral Conservation and Development Rules, 1988 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, 1988 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.

71. Review of format and manuals.- The Indian Bureau of Mines shall revise or update, every three years or earlier if required with prior stakeholder consultation, the formats of the scheme of reconnaissance, scheme of prospecting, mining plan and the mine closure plan prescribed by it.

Chapter XI : Geological Reports

72. Geological Reports.- (1) Every holder of a mineral concession or any other agency authorized under the second proviso to sub section (1) of section 4 shall submit:

- (a) a geological report and all geo-scientific data (geological, airborne geophysical, ground, geophysical and geochemical and any data collected for geological investigation purpose) collected during the course of his reconnaissance or prospecting or mining operations, to the Director General of the Geological Survey of India, the Controller General and the State Government; and

(b) all information pertaining to investigations of atomic minerals collected during the course of his reconnaissance or prospecting or mining operations to the Director, Atomic Minerals Directorate for Exploration and Research, Hyderabad and the State Government.

(2) Geological reports and geo-scientific data shall be submitted in hard copies and in digital form every year reckoned from the date of commencement of operations and shall include:

(a) geological data relating to exploration / mining, such as raw data with location, geological map, structural data, sections, plans and anomaly maps;

(b) geophysical data (ground and aero-geophysical) relating to prospecting, mining fields or engineering or ground water surveys, such as raw data with location, anomaly maps, sections, plans, contour maps and logging details;

(c) geochemical data relating to exploration and mining, such as raw analytical data with location, anomaly and contour maps and sections;

(d) detailed exploration results, style and nature of mineralization, mineral resource and mineral reserve estimates and grade. Necessary supporting documents relating to exploration results, mineral resources or mineral reserves of the area shall form a part of the report;

(3) Geological reports shall be reviewed by the Controller General or the authorised officer of the Indian Bureau of Mines, to assess exploration progress and results and to ensure that the results of exploration are fully and clearly recorded for the benefit of future explorers and researchers. The Geological reports shall include:

(a) annual reports;

(b) partial relinquishment reports;

(c) final reports; and

(d) geophysical survey reports, if any.

(4) Submission of Geological Reports:

- (a) partial relinquishment reports must be submitted within one month of the publication of the notice of the partial relinquishment (whether through cancellation or renewal);
- (b) final reports shall be submitted within three months after expiry of the mineral concession or the expiry or abandonment or termination of the mineral concession, whichever is earlier; and
- (c) geophysical survey results reports, if any, must be submitted within six months of the completion of geophysical surveys:

Provided that the holder of a mineral concession may apply for an extension of the period within which a geological report must be submitted to the State Government, at least fifteen days prior to the date for submission of such report.

(5) The holder of a prospecting licence or prospecting licence cum mining lease may request for the geological report or data submitted by him to be kept confidential. The State Government shall, pursuant to such request, keep the specified portions of the geological report or data confidential for a period of two years from the date of expiry of the mineral concession, or abandonment of operations or termination of the mineral concession, whichever is earlier.

(6) All geological reports must be prepared in conformity with the Mineral (Evidence of Mineral Contents) Rules, 2015.

(7) The geological reports under this Chapter must be prepared by or under the direction of, and signed by a geologist under whose supervision exploration was carried out.

73. Failure to submit Geological Report.- If the holder of a mineral concession fails, without sufficient cause to furnish the information referred to in this Chapter, the State Government may take appropriate action after giving the holder of the mineral concession a reasonable opportunity of stating his case.

Chapter XII: Mining Regulation Portal

74. The Indian Bureau of Mines in consultation with the state governments shall prepare a mining regulation portal to bring information together on the different aspects of the regulatory functions being undertaken by the Indian Bureau of Mines and the State

Government for implementation and compliance of the provisions of these rules.

75. All aspects of regulatory functions being undertaken by the Indian Bureau of Mines and the State Government for implementation and compliance of the provisions of these rules shall be recorded in standard process sheets or templates developed for these purposes, and the information in this regard shall be made available on the portal.

76. Each information source should have a dedicated area on the page for displaying information (a portlet).

Explanation: inspections carried out by Indian Bureau of Mines or the State Government and the response of the mine owner / manager to the inspection is an example of one information source.

77. Identification of the different information sources, preparation of the standard process sheets or templates, configuring and customizing the presentation of the content and other details in this regard as well the role of the administrator for addition of information to the portal or deletion from the portal shall be decided by IBM in consultation with the state governments and the Ministry of Mines.