

(The Mines Act Rules (Myanmar), 1917.)

No. 45

THE MYANMAR GAZETTE, MAY 4TH, 1918.

[Amendment : 18.06.1989]

No. 45.- In exercise of the powers conferred by section 20 of the Indian Mines Act, 1901, as amended by the Decentralization Act, 1914, the Local Government is pleased to make the following rules for the regulation of tungsten and tin mines in the Tavoy District, namely:-

Preliminary.

1. These rules may be cited as **The Mines Act Rules (Myanmar), 1917.**
<Amendment 18.06.1989>
2. Unless it is otherwise provided by these rules all or any of the powers or duties vested in, or imposed on, the Inspector of Mines, by or under these rules, may, when necessary, be exercised or performed by the District Magistrate.

CHAPTER I.

Management and Control.

Notice of change of name and address of manager.

3. When a change occurs in the name or address of the manager of a mine, notice of the change shall be sent within one month by the owner, agent or manager to the Chief Inspector of Mines in India through the Inspector of Mines and also to the District Magistrate.

Inspection Book.

4. For every mine a book, to be called the **Inspection Book**, shall be kept in which Inspecting Officers may record their observations. The owner, agent or manager shall also write or cause to be written at the commencement of the book:-
 - (a) the name of the mine;
 - (b) the name and address of the owner of the mine and of the agent (if any);
 - (c) the name and address of the manager of the mine;
 - (d) the name of the competent person or persons appointed under Rule 5; and

- (e) the system of signals or other means provided in accordance with Rule 15 for giving warnings before and after blasting.

Daily Report Book.

- 5. The manager or some competent person or persons appointed in writing by the owner, agent or manager for the purpose shall at least once in every 24 hours inspect every part of a mine in or through which any person has to work or pass, and, if more than 20 persons are employed in the mine simultaneously, shall without delay write or cause to be written a report of such inspection in a book, to be called the **Daily Report Book**. Every such report shall be signed by the person making the inspection.

Procedure to be followed when a person required to report is unable to write.

- 6. Where any person required by these rules or by any special rule made under section 21 of the Indian Mines Act, 1901, to make any report is unable to write, he shall be present when his report is written for him and shall have it read over to him and shall attach his thumb mark to it. The person writing the report shall also sign his name at the end together with a statement that it has been read over to the person for whom it was written.

Books and rules to be kept in a convenient place.

- 7. All books which are required to be kept under these rules together with a copy of the Indian Mines Act and of all rules applicable to the mine shall be kept at an office or other building as near as conveniently may be to and used in connection with the working of the mine and shall be produced on the request of an Inspector of Mines, a Magistrate, or any person authorised in that behalf by the Local Government.
- 8. Subject to the terms of any mining lease between the Secretary of State for India in Council and any lessee,-

General plan.

- (a) A general plan made by a competent surveyor of all land leased for mining purposes shall be kept at the mine and be made up at least once every four months. This plan shall show the Government survey marks, the boundaries of the concession, the outcrops, as well as the actual strike and dip of all lodes or other mineral deposits so far as known, all open surface workings of every kind, including prospecting pits, adit and shaft openings, bore-holes, watercourses, flumes, ditches, dams, reservoirs, tailings-sites and dumps, public roads, railways, the principal buildings and the sites of all mining and metallurgical plant. It shall also show the geographical meridian.

Underground plan and sections.

- (b) Besides the general surface plan referred to in the previous rule, the manager shall keep in the office of the mine an underground working plan and section or sections showing clearly all the working surveyed up to within four months from date. This plan and its section or sections shall be on the scale of fifty feet to one inch and shall in particular show clearly all shafts, bore-holes, drives, cross-cuts, winzes, rises, excavations (stoped ground) and all tunnels and passages connected therewith, the position of all permanent winding gear, all steam, air and water pipes or courses, electric cables, pumps, ventilating fans, brattices and doors for regulating ventilation, and all underground bench marks and stations of the underground survey, and in addition thereto the vertical depth of shafts and bore-holes, and depths at which the mineral deposits have been intersected, the general strike of the lodes or mineral deposits with their dips at different points and all dislocations of the strata.

Copies of plan and sections to be deposited with the Inspector of Mines.

- (c) A true copy on mounted paper or tracing cloth of the general plan and of every underground plan or sections referred to in clauses (a) and (b) shall be deposited with the Inspector of Mines and the said copies shall be brought up to date once every year by the agent or manager. For this purpose the said copies may be obtained by the agent or manager from the Inspector of Mines any time subsequent to the 31st of December, and shall be returned to the Inspector of Mines not later than the 1st of June following.

Preservation of underground bench marks.

- (d) All bench marks and stations of the underground survey shall be properly marked with holes and plugs and care taken to preserve them in view of subsequent surveys.

Surveys to be made from the geographical meridian.

- (e) The plottings of every survey shall be made from a line or lines representing on the plan the true geographical meridian.

Plans of abandoned workings.

- (f) In case of a mine or any considerable part of it being intentionally abandoned, the general and underground plans and underground sections shall first be completed up to date and the same or exact copies thereof shall be sent to the Inspector of Mines within two months of such abandonment.

Surveys to be made before working becomes inaccessible.

- (g) All underground workings shall, when it is possible, first be surveyed before being allowed to become inaccessible.

Control of working monitors.

9. No person shall be placed in charge of a working monitor unless he is appointed in writing by the manager of the mine, and possesses such knowledge and skill as qualify him for the purpose.

CHAPTER II.

Explosives and Shot - firing.

Storage of explosives in mines prohibited.

10. No explosive substance shall be stored in a mine.

Secured cases or boxes for taking explosives into mine.

11. No explosive substance shall be taken into a mine except in secured cases or boxes, containing not more than 5 lbs each, and a person shall not have in use or keep for use at one time in any one place within the mine more than one of such cases or boxes. The place in the mine at which any such case or box is in use, or is kept for use, unless solid ground directly intervenes, shall not be less than thirty feet from a place at which any other such case or box is in use or kept for use:

Provided that the Inspector of Mines may, in special cases and by order in writing, permit, subject to such limitations as he may prescribe, the use at one time in one place of more than one of such cases or boxes.

Detonators.

12. No detonator shall be carried or kept in the same case or box with any other explosive material.

Iron or steel implements.

13. No person shall use any iron or steel implement in the process of charging or stemming for blasting.

Appointment of shot - firers.

14. All shots shall be fired by or under the personal direction of a competent person appointed in writing by the manager.

Warning to be given before and after blasting.

15. Blasting shall not be commenced until such warning as will prevent danger to the persons working in the mine and its vicinity has been given by an efficient system of signals or by other means arranged by the manager. Notice shall similarly be given as soon as blasting is finished.

Misfires.

16. If a shot has, or appears to have, missed fire, no person shall approach the place until at least one hour has elapsed, unless the attempt to fire the shot has been made by electrical means when this interval may be reduced to fifteen minutes after the battery has been disconnected.

Removal of things from holes which have been charged.

17. After a hole has been charged and made ready for firing no person shall remove or attempt to remove anything therefrom.

New shot holes.

18. A new shot hole shall not be commenced in any portion of a shot hole left by a previous shot.

Misfires.

19. If a shot has missed fire no new hole shall be commenced within twelve inches from the hole in which the misfire occurred, and care shall be taken to drill the hole in such a direction that there is no danger of touching the unexploded charge. The new hole shall be bored in the presence of the manager or of the person who exercises daily personal supervision over the mine or that section thereof, and also, if possible, of the man who bored the hole in which the misfire occurred. Such manager or person exercising the daily personal supervision shall also be present during any operations undertaken for the removal of rock within six feet of the unexploded charge.

CHAPTER III.

Safety of Persons employed and Protection of Property.

Sides of open workings.

20. The sides of open workings shall be sloped, stepped or secured in such a manner as to prevent danger from falls of materials.

Steps in open workings.

21. When an open working is worked in steps, the steps shall be of sufficient breadth in comparison with their height to secure safety.

Removal of trees, over-burden, loose ground and material.

22. In open workings trees liable to fall as a result of working, over-burden, and all loose ground and material shall be removed sufficiently far from the edge or otherwise made secure, in order to prevent danger to persons employed in the mine.

Plans of dams to be submitted to Inspector of Mines.

23. (a) No dam of which the maximum impounding capacity is more than 250,000 gallons shall be constructed on any concession, until plans, sections and specifications drawn in such form, or to such scale as the Inspector of Mines may require or prescribe from time to time, have been submitted to the Inspector of Mines.
- (b) At any time within four weeks of the delivery at his office of such plans, sections and specifications, the Inspector of Mines may, for reasons to be stated by him in writing, prohibit the construction of the dam or require such other particulars as he may consider necessary.
- (c) If by the expiry of the said period the construction of the dam has not been prohibited or particulars as aforesaid have not been required by the Inspector of Mines the construction of the dam may be proceeded with.
- (d) The Inspector of Mines may require fresh plans, sections, specifications or other particulars if the construction of the dam has, in his opinion, been unduly delayed after the expiry of the said period.
- Dams, etc., to be kept in repair.

24. All dams, sluices and other appliances appertaining thereto shall be kept in repair by their owners, their agents or managers, and such measures shall be taken by them from time to time in respect to them as the Inspector of Mines may require to prevent accidents and otherwise to ensure public safety.

Control of dredging operations.

25. (1) The District Magistrate may issue instructions in writing for the control of any dredging operations or the disposal of tailings therefrom.
- (2) No dredging operations shall be carried on or tailings therefrom disposed of so as to obstruct traffic on any river, channel or other waterway or otherwise than in accordance with such instructions and subject to such conditions, if any, as the District Magistrate may issue or impose from time to time.

Distances between shafts and rivers.

26. No shaft more than 20 feet deep shall be sunk within 30 feet of any other shaft or within 100 feet of any river without the permission in writing of the Inspector of Mines.

Provision of shafts and outlets.

27. (a) At every mine, other than an open quarry, where more than twenty persons are employed below ground, or where in the opinion of the Inspector of Mines it is necessary, there shall be at least two shafts or outlets, not nearer to one another than 30 feet affording separate means of ingress and egress

available to all the persons employed in the mines, and arrangements to the satisfaction of the Inspector of Mines shall be made for persons to enter and leave the mine at each of such shafts or outlets.

(b) The foregoing provisions of this rule with respect to shafts and outlets shall not apply-

(i) while a shaft is being sunk or an outlet is being made;

(ii) to any working for the purpose of making a communication between two or more shafts or outlets.

(c) In cases where there are special difficulties which make compliance with the foregoing provisions of this rule not reasonably practicable, the mine may be exempted therefrom by the Inspector of Mines, subject to such conditions as he may think fit to impose.

Provision of ladders.

28. At every mine there shall be provided means of entrance or exit, such as ladders, which are accessible from every part of the mine, and independent of machinery.

Ventilation in mines.

29. (a) An adequate amount of ventilation shall be constantly produced in every mine so that the shaft, winzes, levels, underground working places thereof and the travelling roads leading thereto, shall be in a fit state for working and passing therein.

(b) Where, in the opinion of the Inspector of Mines, the ventilation is not sufficient some mechanical or other appliance adapted to ensure adequate ventilation shall be provided.

All excavations to be timbered and supported.

30. All shafts, adits, levels, galleries and travelling roads and every excavation of any kind in-connection with the working of a mine shall be made and kept safe for persons employed therein, and a light shall be kept burning in the chamber of every level whilst any person is working therein.

Prevention of dust.

31. All holes drilled in dry ground must, as far as practicable, be kept moist to prevent the atmosphere being charged with dust.

Fencing of exposed and dangerous parts of machinery.

32. Every fly-wheel and all exposed and dangerous parts of any machinery used in or about a mine shall be kept securely fenced or shielded.

First-aid and sanitary appliances.

33. Such sanitary and first-aid appliances as the Inspector of Mines may from time to time prescribe shall be provided and kept ready at hand at every mine.

Fencing of dangerous places, etc.

34. On a mine where any open pit, shaft, level or inclined plane exists the manager shall-

- (a) erect and thereafter maintain such fencing as may be necessary to prevent the occurrence of any danger or damage to man or beast;
- (b) surround with a substantial wall or fence the top of any shaft which for the time being is out of use or used only as an air shaft;
- (c) surround with a permanent wall, or, if the Inspector of Mines so directs, fill in every shaft which is no longer required for the purposes of the mine.

Accumulation of water and slime.

35. Where a place is likely to contain a dangerous accumulation of water or slime, the working approaching that place shall not at any point within thirty feet thereof, exceed six feet in width or height, and there shall be constantly kept at a sufficient distance not being less than five feet in advance at least one bore-hole near the centre of the working, and sufficient bore-holes on each side, and where necessary above or below.

CHAPTER IV.

Water-supply.

Drinking water.

36. (a) A sufficient supply of good drinking water free from contamination shall be provided or kept in or near the mine, so as to be easily accessible to all persons employed in or about the mine.
- (b) If the sources of the water-supply are springs, means shall be provided for the exclusion of surface drainage therefrom. The surface area around the out-fall of a spring shall be enclosed by a fence. All trees within a radius of 50 feet of a spring shall be cut down and removed and all dense vegetation cleared away and destroyed.
- (c) If the sources of the water-supply are wells, they shall be dug in such a position that they shall not be less than four feet distant from any drain for every foot of depth and not less than 200 feet away from any cess-pit or latrine. All trees overhanging a well shall be cut down and removed. A masonry parapet not less than two and a half feet high shall surround all wells.
- (d) If the water-supply is drawn from streams, drinking water therefrom shall be drawn at a point as far as practicable above all possible sources of contamination by human and animal excreta or refuse.

Consent of District Magistrate necessary for utilization of water supplies.

37. No person shall erect, cut or construct on or through any other lands than his own concession any pump, line of pipes, channel, drain, dam or reservoir, without the written sanction of the District Magistrate.

Powers of District Magistrate in respect of alteration of water-courses.

38. Without the written sanction of the District Magistrate no person shall make or permit any other person to make any alteration in the water-supply of any lands which may prejudicially affect the water-supply enjoyed by any other persons or lands.

Powers of Inspector of Mines regarding dams and water-courses.

39. All water channels, pipe lines, water-works and appliances intended to facilitate the use, supply, or distribution of water on any mine, shall be kept, in repair to the satisfaction of the Inspector of Mines.

Purification of water.

40. Every person who uses water in connection with his mining operations, whether for the generation of power or for the removal of mineral substances or for concentrating, milling or otherwise dealing with such substances, shall make such provision as will ensure that all water so used shall, before it leaves the mining area on which it has been so used, be freed from all chemicals deleterious to animal or vegetable life.

Permissible amount of solids in effluent water.

41. No effluent water from any mining area or mining operation shall contain solid matter in excess of an amount which the Inspector of Mines may in writing prescribe.

CHAPTER V.

Sanitation.

Disposal of earth, etc.

42. No earth, sludge, dirt, tailings or other refuse matter from any mine, mill, washing shed, stamping-house, water-course, or other place, shall be disposed of otherwise than in accordance with such instructions as the Inspector of Mines may issue from time to time.

Removal of refuse, etc.

43. All rubbish or refuse shall be removed at least once every three days from camp sites and deposited or destroyed or otherwise dealt with to the satisfaction of the Health Officer of the district at such place as subject to his approval may be fixed from time to time.

Latrines.

44. No latrines or cess-pits shall be built at a distance of less than 100 feet from any human habitation and their position shall be periodically changed. The Health Officer of the district may order the removal of any latrine or cess-pit which he considers insanitary.

Camp sites.

45. The Health Officer of the district may for sanitary reasons give such directions as he thinks fit in respect of the situation, location or removal of camp sites, and no camp sites shall be situated, located or removed otherwise than in accordance with such directions.

Cooly barracks, etc.

46. No barracks or cooly lines shall be built on any ground within a camp site, if in the opinion of the Health Officer of the district such ground is from a sanitary point of view not suitable for the purpose, and any barracks or cooly lines built on such ground shall, if the Health Officer so directs, be removed from one position to another within the camp site.

Construction of cooly barracks.

47. (a) In all barracks or cooly lines constructed after the issue of these rules accommodation shall be provided as follows:-
- (i) Not less than 250 cubic feet for each person between the floor and a parallel plane at the wall plate level;
 - (ii) Not less than 30 square feet of floor area per person.
- (b) The building shall be constructed in such a manner that the floor itself shall not be less than three feet from the ground, and the wall plate eight feet above the floor level.
- (c) The walls shall have a space of not less than 12 inches at the top for ventilation.
- (d) A window for every eight feet length of building shall be provided.
- (e) No cook- house shall form part of a barrack or cooly line.

Construction of cook-houses.

48. Cook-houses shall be built not less than 25 feet from the main buildings for which they are intended. The floors shall be constructed of raised earth, one foot high, with the surface finished with gravel and shall be of such dimensions as to allow a plinth area space of not less than ten square feet per man.

Cattle shed, etc.

49. No cattle shed, pig sty, stable or other erection used for housing animals shall be constructed within 100 feet of any dwelling house, well, tank or stream used for drinking or bathing purposes.

Provision for appeal.

50. An appeal shall lie to the District Magistrate from any decision or order of the Health Officer of the district under this Chapter within twenty days after the receipt of the decision or order by the owner, agent or manager of the mine affected thereby.

----- Footnote -----

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