

METALLIFEROUS MINES REGULATIONS, 1926

[8th September, 1926]

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THE SCHEDULE

FORM I

Annual return for the year ending on the 31st December, _____

FORM II

Persons employed during the year ending on 31st December _____

FORM III

Accidents prosecution

FORM IV
Epidemic Diseases

FORM V
Type and aggregate horse-power of electric apparatus

FORM VI
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FORM VII
(For mica mines only)
Output for the year ending on 31st December, _____

FORM VIII
(For all mines except mica mines)
Output for the year ending on 31st December, _____

FORM IX
Notice of accident

TEXT

METALLIFEROUS MINES REGULATIONS, 1926¹

[8th September, 1926]

[Regulations framed in exercise of the powers conferred by Section 29 of the Mines Act, 1923 (IV of 1923), after previous publication as required by sub-section (1) of Section 31 of the said Act.]

Regulations for all mines except Coal Mines

1. (1) These regulations may be called the Metalliferous Mines Regulations, 1926.
(2) They shall apply to every mine of whatever description other than a coal or oil mine.
2. In these regulations unless there is anything repugnant in the subject or context--
 - (a) "the Act" means the Mines Act, 1923;
 - (b) "the District Magistrate", in relation to any mine, means the District Magistrate of the district in which the mine is situated:

Provided that in the case of a mine which is situated partly in one district and partly in another, the District Magistrate for the purposes of these regulations shall be the District Magistrate authorized in this behalf by the local Government.

- (c) "Form" means a Form as set out in the Schedule;
- (d) "Schedule" means the Schedule to these regulations.

CHAPTER I

Returns, Notices and Records

3. (1) On or before the 21st day of January in each year the owner, agent or manager of every mine shall forward to the District Magistrate and to the Chief Inspector annual returns in respect of the preceding year in the following forms:--

Mica Mines In Forms I, II, III, IV, VI, and VII.

Mines other than Mica Mines ... In Forms I, II, III, IV, V, VI and VII.

(2) If any mine is abandoned or the working of any mine has been discontinued over a period exceeding over a period exceeding three months or if a change occurs in the ownership of any mine the returns required by sub-regulation (1) shall be submitted within one month from the date of abandonment or change of ownership or within four months from the date of discontinuance:

Provided that the Chief Inspector may by order in writing extend the period for the submission of such returns up to any date not later than the twenty first day of January in the year following that to which they relates:

Provided further that nothing in this sub-regulation shall be deemed to authorize the submission of any return later than the twenty first day of January in the year following that to which it relates.

4. The notice required by Section 14 of the Act shall be furnished in duplicate, and shall specify the name and situation of the mine, the names and addresses of the owner and the manager, in the case of a new mine, the date on which it was opened. The District Magistrate shall on receipt of the notice forward one copy thereof to the Chief Inspector.
5. When a mine has been abandoned, or the working thereof has been discontinued over a period exceeding two months the owner of the mine shall, within one month after the abandonment or within seven days after the expiry of the said period, as the case may be, send to the Chief Inspector notice in writing specifying the name and situation of the mine, the name and address of the owner, and the date and cause of the abandonment or discontinuance.
6. When a mine is reopened after abandonment or discontinuance, the owner, agent or manager shall before reopening sent to the District Magistrate and the Chief Inspector a notice in writing specifying the name and the situation of the mine, the names and addresses of the owner and the manager, and the date of reopening.

¹ These Regulations were published under Government of India, Department of Industries and Labour Notification No. M.—1055(2), dated the 8th September, 1926, and amended by Noti. No. LR-7(9)48, Feb. 25, 1954, Gaz. of Pak., Mar. 5, 1954 and LR-7(9)48, Jan. 12, 1956, Gaz. of Pak., Jan. 20, 1956.

7. When a change occurs in the name of, or in the ownership of, a mine, notice in writing of the change and of the date thereof shall be sent by the owner, agent or manager to the Chief Inspector within one month from the date of change.
8. When any new appointment is made of an agent or manager of a mine, or any change of address of any agent or manager occurs, notice of the appointment or change and of the date thereof shall be sent by the owner, agent or manager to the Chief Inspector within one month from the date of the appointment or change.
9. When the ownership of a mine is transferred, the previous owner or his agent or manager shall make over to the new owner all plants, books and other records required to be kept under the Act, and all correspondence relevant to the working of the mine with the Department of Mines and other Government departments.
10. If the owner, agent or manager of any mine intends to conduct or extend any mining operations under his control at or to any point within fifty yards of any railway subject to the provisions of the Railway Act 1890, or of any public work in respect of which this regulation is applicable by reason of any general or special order of the appropriate Government under clause (u) of section 29 of the Act, he shall, not less than sixty days before commencing such operations, give notice of his intention to the Chief Inspector and also, in the case of a railway, to the Railway Administration concerned or, in the case of any such public work as aforesaid, to such authority as the appropriate Government may by general or special order direct.
11. If the operations in respect of which notice is given under regulations 10 are not commenced within twelve months from the expiry of the period of sixty days therein referred to, the notice shall be held to have lapsed and the provision of that regulation shall apply as if no such notice had been given.
12. The notice to be given under regulation 10 shall specify the position of the workings of the mine in relation to the railway or public work in question, the manner in which it is proposed to carry out the intended new operations, and the limits to which it is proposed to carry out the intended new operations, and the limits to which it is proposed to carry the said operations, and shall include a plan showing the existing and the intended mining operation in so far as they affect the railway or public work in question.
13. When any accident causing loss of life or serious bodily injury, or an accidental explosion, ignition, outbreak of fire or irruption of water, occurs in or about a mine, the owner, agent or manager of the mine shall forthwith inform the Inspector by telephone or telegraph and shall also, within twenty four hours of such occurrence, send notice thereof in Form IX to the Inspector, to the Chief Inspector and to the District Magistrate or to the Sub-Divisional Magistrate.
14. If death results from any injury already reported as serious under regulation 13, the owner, agent or manager of the mine shall within twenty four hours of his being informed of the death, send notice thereof to the inspector, to the Chief Inspector, and to the District Magistrate or to the Sub-Divisional Magistrate.]

CHAPTER II

Plans

15. (1) The following provisions in respect of plans shall apply to all mines for gold, manganese, copper, lead, tin, and wolfram and to such other mines or parts of mines or classes thereof as the appropriate Government may, by notification in the official Gazette, specify.

(2) Nothing in this regulation shall be deemed to apply to any mine in which the workings do not extend under the superjacent ground, or to any mine in which excavation is being made for prospecting purposes only:

Provided that the Chief Inspector may direct that this regulation shall apply to any such mine to such extent as he may think fit.

16. (1) The owner, agent or manager of every mine shall keep a plan and section or sections, properly inked on durable paper of the workings of the mine on a scale of not less than 100 feet to 1 inch. The position of the workings at the time of the last survey shall be shown by a dated line drawn through the ends of the workings. The dotted line shall be marked with the date of the last survey. The name of the mine and of its owner and the scale shall be shown on the plan and sections, and the magnetic meridian with date shall be shown on the plan. The plans and sections shall also show all shafts, drives, crosscuts, winzes, rises, excavations (stoped ground), and any tunnels and passages connected therewith. They shall also show the boundaries of the underground leasehold, where possible, and all important surface features within the boundaries

such as railways, roads, rivers, streams, reservoirs and buildings which overlies any part of the workings of any part within 600 feet or any part of the mine workings also the general strata of the veins or mineral deposits, with their dips at different points, and the dislocation of the strata.

(2) The plans required by this regulation shall be kept in the office at the mine. They shall be accurate and shall be maintained upto a date not more than six months previously; provided that where any mine is abandoned or the working thereof has been discontinued the plan shall, before such abandonment or immediately after such discontinuance, be brought up to a date to the time of abandonment or discontinuance, as the case may be, unless such abandonment or discontinuance has been caused by circumstance beyond the control of the owner, agent or manager, in which case the fact that the plan is not upto date shall be recorded on it.

17. The owner, agent or manager of every mine shall, at any time on the request of the Chief Inspector or any Inspector, produce to him at the office at the mine such plans and sections, and also on the like request, mark on such plans and sections the then state of the workings of the mine; and the Chief Inspector or Inspector shall be entitled to examine the plans and the sections and for official purposes to make or have a copy made of any part thereof respectively.

18. Where any mine or any considerable part of a mine is abandoned, or the working thereof has been discontinued over a period exceeding one year the person who was the owner of the mine at the time of the abandonment or discontinuance shall, within three months after the abandonment or within fifteen months after the discontinuance of working, as the case may be, send to the Chief Inspector accurate plans and sections of the workings of the mine up to the time of abandonment or discontinuance, or a true and accurate copy of the same:

Provided that if a change of ownership occurs after the abandonment or discontinuance and before the expiry of the three months or the fifteen months aforesaid, as the case may be, such plans and sections shall be sent forthwith.

19. After the expiry of ten years from the date of abandonment or discontinuance of working in any mine or in any considerable part of a mine, or where the consent of the owner of the mine for the time being has been obtained, prior to the expiry of the said period, the Chief Inspector may, on such conditions as he thinks fit to impose, permit any person having interest in the said mine or part of a mine to inspect the plan or section of such mine or part of a mine sent to him in accordance with the provisions of regulation 18 and he may further, on such conditions as he thinks fit to impose, supply to any such person copies of the like plan or section.

19-A. The plans required to be kept under regulation 16 or to be sent under regulation 18 shall be prepared by the or under the supervision of a competent surveyor who shall sign the same; date his signature and be responsible for their accuracy. If any question arises whether any person appointed is competent to perform duties of surveyor, the decision of the Chief Inspector shall be final.

CHAPTER III Management

20. For every mine a book, to be called the Inspector Book, shall be kept in which Inspectors may record their observations. The owner, agent or manager shall 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.

21. (1) (a) The owner or agent of a mine shall appoint a competent person to be a manager of the mine. The manager so appointed shall be a person who has received a diploma or certificate in scientific or mining training at an educational institution approved in this behalf by the appropriate Government or who has taken a degree in scientific and mining subjects at a University approved in this behalf by the appropriate Government and has had special experience in an underground mine for a period of not less than three years:

Provided that the Chief Inspector may, by order in writing, authorise to act as manager of any mine or mines for a specified period any person whom he may consider competent, notwithstanding that such person does not possess the qualifications prescribed in that behalf and may, by a like order, revoke any such authority at any time and such order shall be final.

- (b) No person shall act as a manager of a mine unless he hold one of the qualifications and has had experience prescribed in clause (a), or holds a manager's permit granted by the Chief Inspector.
- (c) All such permits shall be signed by the Chief Inspector and shall be valid for such period not exceeding one year as he may specify therein.
- (d) A fee of ten rupees shall be paid by the owner or agent of a mine in respect of an application for a manager's permit. The fee shall be paid into treasury or at any office, branch or agency of the State Bank of Pakistan and the receipt of the treasury or Bank shall be sent to the Chief Inspector after the application for issue of the permit has been accepted.
- (e) The Chief Inspector may at any time renew any manager's permit for a further period not exceeding one year, notwithstanding that such permit has already been so renewed. A fee of ten rupees shall be chargeable in respect of any such renewal.
- (f) A manager's permit may be cancelled at any time by the Chief Inspector by order in writing without assigning any reason for such cancellations and such order shall be final.
- (g) A register showing the names and addresses of all holders of permits and all cancellations of such permits shall be maintained in the office of the Chief Inspector.
- (h) No person shall act as a manger of a mine unless he has attained the age of twenty one years, and has satisfied the Chief Inspector that he has had appropriate practical experience in a mine for a period of not less than three years and has gained a First Aid Certificate of the St. John Ambulance Association or other Society or body approved by the appropriate Government.

(2) One person may be appointed manager of more than one, provided that the size of such mines and the distance between them is not so great as to preclude the proper and through performance by such manager of his duties in respect of such mines. The decision of the Chief Inspector shall be final on any question arising out of this regulation.

- (3) (a) The owner or agent of a mine shall not take any part in the technical management of the mine unless he holds technical qualifications equivalent to or higher than those of a manager.
- (b) Where, by reason of illness, leave or for any other reason except that of resignation, dismissal or transfer, the manager is unable to perform the duties required of him by the Act, Regulations, Rules or Bye-laws, the owner, agent or manager shall authorizes in writing a person whom he considers competent to act as manager of the mine; provided that:--
 - (i) no such authority shall have effect for a period in excess of one month;
 - (ii) the owner, agent or manager as the case may be shall send to the Chief Inspector with the least possible delay a written notice intimating that such an authorization has been made, and stating the reason therefore, the qualification and experience of the person authorized and the dates of the commencement and ending of the authorization; and
 - (iii) the Chief Inspector may be order in writing revoke any authority so granted, and such order shall be final.
- (c) In every mine the supervision to be exercised by the manager shall be direct and personal.
- (d) The manager of every mine shall appoint in writing such number of competent persons as will be sufficient to secure a thorough supervisions of all the operations in the mine and the enforcement of the requirements of the Act and of the Regulations, Rules and Bye-laws made thereunder. No person shall be appointed under this regulation unless he is paid by the owner of the mine and is directly answerable to the owner, agent or the manager of the mine. Every manager shall, on appointment, satisfy himself that all persons appointed under this regulation are competent to perform the duties assigned to them. Copies of all such appointments and all authorizations made under these regulations shall be entered in a bound and paged book kept in the office at the mine.

(e) The manager of every mine shall ensure that the proper materials and appliances for carrying out the provisions of the Act and of the regulations, rules and Bye-laws made thereunder and ensuring the safety of the mine and persons employed therein are always provided at the mine; and if he is not the owner or agent of the mine he shall report in writing to the owner or agent of the mine when anything is required for the aforesaid purposes that is not within the scope of his authority to order. The copy of every such report shall be kept in the office at the mine.

(f) No persons shall be employed in a mine as manager unless he is paid by and is directly answerable to, the owner or agent of the mine.

(4) No persons shall be appointed to carry out the inspection required by regulations 43 unless he has attained the age of 21 years and had sufficient practical experience of the working of mine. If any question arises whether the person so appointed is competent to carry out the duties required of him, the decision of the Chief Inspector shall be final.

CHAPTER IV Shafts and Outlets

22. Where any part of a mine is so situated that there is any danger whatever of an irruption of surface water into the mine adequate protection against such an irruption shall be provided and maintained.

23. (1) The owner, agent or manager of a mine shall neither employ any person in the mine nor permit any person to be in the mine for the purpose of employment therein unless there are at least two shafts or outlets, not nearer to one another than 20 feet, affording separate means of ingress and egress available to all the persons employed in the mine.

(2) Proper arrangements shall be made for persons to descend to, and ascend from, the mine at each of such shafts, or outlets. If apparatus is necessary, it shall be kept on the works belonging to the mine and shall be constantly available for use.

(3) The foregoing provisions of the regulations 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; and

(iii) to any working for the sole purpose of searching for or proving minerals.

(3-A) At a mine having a single shaft or outlet not more than 20 persons shall be employed underground at any one time.

(4) The Chief Inspector may exempt from the operation of this regulations, subject to such conditions as he may think fit to impose, any mine in the case of which special difficulties exist which in his opinion make compliance with the provisions of this regulation not reasonably practicable.

CHAPTER V Raising and Lowering Persons or Materials

24. At every shaft or incline where persons or materials are lowered or raised by means of machinery the following provision shall have effect, namely:

(a) A single linked chain shall not be used for lowering or raising persons in any working shaft or plan, except for the short coupling chain attached to a cage, skip wagon or bucket.

(b) Ropes used in raising and lowering persons and all cappings or sockets and shakles shall be of the best materials and kept in good condition. The working load shall at no time be more than one-sixth of the breaking load of the rope. A similar spare rope shall always be kept in reserve at mines where there is only one hoisting shaft.

(c) There shall be attached to every machine worked by mechanical power, and used for raising and lowering persons, one or more brakes of sufficient power by themselves to hold the cage, skip wagon or bucket, when loaded, at any point in the shaft, and a proper indicator (in addition to any mark on the rope) showing to the person who works the machine the position of the cage, skip, wagon or bucket in the shaft; and if the drum is not on the crank shaft, there shall be an adequate brake on the drum shaft:

Provided that in the case of a shaft or winze not exceeding 100 feet in depth or a shaft or winze in course of sinking so much of this clause as requires an indicator shall not apply.

- (d) Every apparatus on or in which persons ride in a working shaft shall be provided with a sufficient cover overhead, except—
 - (i) In the portion of a shaft which is being extended by sinking, or
 - (ii) Where persons are employed at work in a shaft.
- (e) Every working shaft used for the purpose of drawing mineral or for lowering or raising persons shall, if exceeding 150 feet in depth, be provided with proper means of communicating distinct and definite signals from the bottom of the shaft, and from every entrance for the time being in use between the surface and the bottom of the shaft, to the surface, and from the surface to the bottom of the shaft, to the surface, and from the surface to the bottom of the shaft and to every entrance for the time being in use between the surface and the bottom of the shaft, There shall also be proper means of transmitting distinct and definite signals from the top of every winding shaft to the winding engine. All signals shall be transmitted by mechanical means.
- (f) (i) The first three or principal signals shall be---
 - One rap or bell ... RAISE when engine at rest.
 - One rap or bell ... STOP when engine in motion.
 - Two raps or bells ... LOWER.
 - Three raps or bells ... MEN ready to ascend or descend;
 - Three raps or bells ... IN REPLY. Men may enter the cage or other conveyance:

Provided that an alternative code may be used where the written permission of the Chief Inspector has been obtained.

 - (ii) Any other signals shall be in addition to, and shall not interfere with, the foregoing.
 - (iii) A printed copy of the code of shaft signals shall be posted at the shaft top and a every inset, and also at the winding engine.
- (g) Every working shaft used for lowering or raising persons by machinery, other than machinery operated by hand labour, shall, if it exceeds 150 f. in depth, be provided with guides to within not less than 100 feet from the bottom of the shaft.
- (h) Adequate stationary lights shall be provided and used during working hours:--
 - (1) At all places where persons have to work underground in the immediate vicinity of shafts.
 - (2) After dark at the tops of all working shafts and at all winding engines used for raising and following persons.
- (i) There shall be on the drum of every machine used for lowering or raising persons such flanges, horns or other appliances as may be sufficient to prevent the rope from slipping. The rope shall be securely fastened to the drum, and there shall be at least two turns of the rope on the drum when the case, skip, bucket or box is at the bottom of the shaft.
- (j) Every cage shall be provided with catches or some other suitable contrivance to prevent tubs from falling out and shall, if used for lowering or raising persons, be covered completely at the top and closed in at the two sides in a manner sufficient to prevent persons or things from projecting beyond the sides, and shall be provided with suitable gates or other rigid fences and with a rigid hand bar fixed in a position where it can be easily reached by all persons in the cage.
- (k) The manager, or a competent person or persons appointed by the manager for the purpose shall, once at least in every 24 hours examine the state of the external parts of the machinery and of the head-gear, ropes, cages, guides, and conductors in the shafts and other similar appliances of the mine which are in actual use, both under ground and above ground, and shall without delay write or cause to be written a full and accurate report of the result of such examination. Every such report shall

be recorded in a paged book to be kept at the mine for the purpose, and shall be signed and dated by the persons who made the examination.

- (l) All chains attached to a cage, skip, wagon or bucket shall be annealed and all working ropes used in raising and lowering persons shall be re-capped once at least every six months, or if necessary, at shorter intervals and the date of such operation shall be recorded in a book at the mine for the purpose.

25. No person shall get on or off a cage, skip, tub or bucket used for lowering or raising persons after the same has been set in motion, or leave it until it has reached the appointed stopping place, nor shall any person ride on the top or edge of any cage, skip, bucket or box except when engaged upon work in the shaft.

²[**25-A.** (1) The owner, agent or manager shall be responsible for:--

- (i) the supervision, control and movement of trucks in the mines; and
(ii) the maintenance of record of the trucks and the persons attached thereto such as drivers, cleaners and loaders and such persons shall be considered to be the employees of the owner, agent or manager as the case may be.

Explanation:-- In these Regulations the expression "trucks" shall include diesel driven tractors and trolleys.

(2) The owner, agent or manager shall ensure that:--

- (i) trucks emitting smoke are not allowed for transportation of men and material underground;
(ii) while underground loading operations are in progress, the truck engine shall be switched off to avoid unnecessary smoke emission;
(iii) adequate ventilation is constantly produced in the mines to maintain the gases to the following limits:
(a) oxygen shall not be less than 19%;
(b) carbon monoxide shall not be more than 0.01%;
(c) hydrogen sulfide shall not be more than 0.002%;
(d) nitrous fumes shall not be more than 0.0005%;
(e) sulfur dioxide shall not be more than 0.0005%;
(f) inflammable gas shall not be more than 1%;
(g) carbon dioxide shall not be more than 0.5%; and
(h) nitrogen shall not be more than 80%
(iv) (a) the height of a truck does not exceed 18 feet;
(b) the size of pillars is not less than 50 ft. x 50 ft; and
(c) the height and width of main gallery, tramway or development headings does not exceed 15 ft. x 15 ft.]

26. No person, when ascending or descending a shaft, shall take with him any tools or other bulky materials, save when engaged in repairing the shaft or when otherwise specially authorized by the manager:

Provided that, in the case of tools only, the manager may, by general order, permit the same to be carried.

27. No person shall ride in a shaft on, or against, a loaded cage, skip, bucket or box.

28. Every person, when at or about the top or the bottom of a shaft, shall obey the orders and directions of the shaft attendants on duty at the time.

29. Every windlass, whim or whip in use at a shaft or winze shall be provided with a stopper, lynch peg, or other reliable holder.

30. The bucket, skip or any wagon in the cage shall not be filled up to such a height that any of the contents can fall out, and the bottom of the cage shall be kept clean.

² Added vide Noti. DEV-II/10-4/98 dt. 11-6-99 The Punjab Gaz., Pt. I, July 7, 1999, p. 357-359.

31. When tools, etc., with ends projecting over the top of the cage, skip or buckets are being lowered or hoisted, the projecting ends shall be securely fastened to the rope or bow.

32. Not more than such number of persons as may be authorized by the manager shall be allowed to ride in the same cage, tub, skip or bucket at one time, and a notice specifying the authorized number shall be posted at the top to every shaft and at every inset in a shaft.

33. When the winding apparatus is not provided with some automatic contrivance to prevent over winding, a point shall be fixed and marked on the indicator in such a way as to show when the cage or other conveyance is within a distance of twice the circumference of the drum from the completion of the wind; and when such cage or conveyance has reached such distance it shall not, if either it or the descending cage contains persons, be raised for the remaining distance at a speed exceeding three miles per hour.

34. In shafts exceeding 300 feet in depth, where persons are raised or lowered by machinery, suitable devices shall be fitted if, in the opinion of Chief Inspector, such are required to provide against the overwinding of cages, skips or other conveyances or to safeguard persons liable to be injured in the case of an overwind.

35. (1) At the top of every incline on which the haulage, not being endless rope or chain haulage, is worked by mechanical power or gravity, there shall be stop-blocks or the like contrivances to prevent tubs, truck, wagon, skip or their trains from running away. Additional stop block or runaway switches or other appliances for arresting or diverting the descent of tubs or skip in the event of a runaway shall be fixed below the first stop blocks at a greater distance than the length of a train of tubs, trucks or wagons. There shall be also provided and attached behind the ascending skip, tub or train of tubs a back stay, drag or other suitable contrivance for preventing the skip, tub or truck or wagon or their trains from running back.

(2) (a) Every haulage road on which the haulage is worked by gravity or mechanical power shall be provided with sufficient refuge holes which shall in no case be more than sixty and where the inclination is more than 1 in 6 more than thirty feet apart and which shall not be less than 5 feet in height, 3 feet in width, and 4 feet in depth. Every manhole shall be kept clean and white washed inside and to a depth of not less than one foot on the level surface around the aperture. The entrance to every manhole shall be kept unobstructed.

(b) If in any case an inspector considers the provision of manholes within the aforesaid intervals or of the above specified dimensions not reasonably practicable he may be order in writing, specify a greater interval or reduce the dimensions.

(3) Every haulage road exceeding 100 feet in length on which the haulage walk by gravity or mechanical power shall be provided with the proper means of communicating distinct and definite signals from all regular stopping places to the place or places at which the persons who control the haulage machinery are stationed:

Provided that the Chief Inspector, at his discretion and by order in writing, may require that there shall be the means of communicating signals in the reverse direction also.

The first four or principal signals shall be: ---

Three raps	...	...	...	Start when at rest
One rap	...	...	...	Stop when in motion
Two raps	...	...	...	Lower slowly Haul in slowly
Four raps	...	...	...	Raise slowly Haul out slowly

All other signals shall be in addition to and shall be such as not to interfere with the foregoing.

(4) A printed copy of the code of haulage signals shall be kept posted at the brake wheel or haulage engine, and at both ends of the haulage road and at every signaling station.

(5) The signals handle and the attachment at every stopping place on any haulage or self acting incline shall be placed in such a position as will enable the person operating the signal to be safe in the case of a runaway tub or skip on the incline.

(6) When haulage is by means of an endless rope or chain automatic catches shall be fixed at such points on the haulage road as may be necessary to prevent tubs from running away.

(7) When the Inspector so requires travelling road separate from the haulage roads shall be provided to and from the working places.

36. Where wagons are moved by hand no person shall permit any ³[tubs, trucks, wagon or their trains] to run uncontrolled, and, if sprags are necessary, a sufficient number shall be provided by the manager.

37. No person shall ride upon any tub, truck or wagon either underground or above ground without the permission of the manager.

CHAPTER VI Mine Workings

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

39. Where an open working is worked in steps, steps shall be of sufficient breadth in comparison with their height to secure safely.

40. In open working, trees liable to fall, the overburden, and all loose ground and material, shall be removed sufficiently far from the edge, or other wise made secure, in order to prevent danger to persons employed in the mine.

41. The roofs and sides of all travelling roads and working places shall be made and kept secure.

41-A. Every footpath along which loads are carried in open workings by human agency shall comply with the following requirements—

- (a) Its breadth shall not be less than three feet;
- (b) Its slope shall not be greater than 1 vertical to 2 horizontal;
- (c) At every place where its slope exceeds 1 vertical to 4 horizontal reasonably level steps shall be provided such that the vertical height of every step does not exceed seven inches and the dimension of every step measured horizontally from the edge to the back is not less than fourteen inches.

Explanation: Gang-planks used for loading wagons shall not be deemed to be part of a footpath for the purposes of this regulation, provided that every gang-plank shall be so inclined or constructed as to give a secure foot-hold.

41-B. Where women are employed in carrying loads, the weight of the loads and the height and distance to which they have to be carried shall not be such as to involve risk of injury to health of the women. If any dispute arises as to whether risk of injury to health is involved, the decision of the Chief Inspector shall be final.

42. Where the ground is not safe, all shafts in use shall be made secure with suitable timber work or other means of support.

43. (1) A competent person or persons appointed for the purpose by the manager or underground manager shall inspect, at least once in every shift, every part of the mine in or through which any person has to work or pass, ⁴[* * * *] for the purpose of ascertaining the condition thereof as far as ventilation, roof, sides and general safety are concerned, and shall without delay write or cause to be written a full and accurate report of the result of such inspection in a book to be kept at the mine for the purpose, and shall sign and date his report.

(2) A competent person appointed by the manager for the purpose, shall, once at least in every week, examine the state of the shafts by which persons ascend or descend, ⁵[* * * *] shall without delay write or cause to be written a full and accurate report of the result of the examination. Every such report shall be recorded in a paged book to be kept at the mine for the purpose, and shall be signed and dated by the person who made the examination.

(3) A competent person or persons appointed by the manager for the purpose shall be constantly present in the part of the mine or mines assigned to him by the manager during the whole of the time that persons are employed in mining, quarrying or tramming mineral in such mine or mines.

³ These words were subs, for "wagon" by Noti. L. R. 7(9) 48, Feb. 25, 1954.

⁴ The expression "If more than 20 persons are employed in the mine simultaneously" omitted by Noti L. R. 7(9) 48, Feb. 25, 1954.

⁵ The expression "If more than 20 persons are employed in the mine simultaneously" omitted by Noti L. R. 7(9) 48, Feb. 25, 1954.

(4) The part of a mine or mines assigned to a competent person appointed by the manager under sub-regulation (3) shall not be of such a size, nor shall any duties which may be assigned to him other than his duties under this regulation be such; as to be likely to prevent him from carrying out such last mentioned duties in a thorough manner. If any question arises whether the part of a mine or mines assigned to any such person is too large or whether the additional duties assigned to him are too great, the decision of the Inspector shall be final.

44. Every place where work is carried on or where men are stationed or pass shall be placed under the charge of a competent person appointed by the manager or underground manager.

45. If a working place or travelling road is found to be unsafe, all persons shall be withdrawn immediately from the dangerous area and all access to such working place or travelling road, except for the purpose of removing the danger or saving life, shall be prevented by securely fencing the full width of all entrances to the place.

46. The top and all entrances between the top and bottom of shafts, winzes, shoots or sliding holes and any openings into a stope more than 10 feet deep below a drive and other dangerous openings, shall be provided with a permanent or removable barrier in order to prevent persons or things from falling into them. When a shaft, winze, rise or stope leads directly into a travelling rod or place where persons are stationed at work, the traffic at such points shall be protected against danger from anything falling from above.

47. At every shaft station where it is necessary for persons to pass from one side of the shaft to the other, provision shall be made enabling them to do so without entering or crossing a winding compartment.

48. All ladders, ladderways, platforms, doors, fences and other appliances, and things in use underground shall be maintained in proper repair. Temporary ladders, platforms or other means of climbing or keep in a footing while at work shall be provided in sinks, winzes, rises, stopes and other places where they are needed.

49. Where any working is approaching any place containing or likely to contain a dangerous accumulation of water, the working shall not exceed 6 feet in width or height, and boreholes shall be constantly kept at such a distance in advance of the face and at such angles from the working as is necessary to obviate the danger of a sudden breaking through of such water.

49-A. Where any part of a mine is so situated that there is any danger of irruption of surface water into the mine, adequate protection against such irruption shall be provided and maintained.

50. An adequate amount of ventilation shall be constantly produced in every mine to clear away smoke and dilute and render harmless inflammable and noxious gases to such an extent that the working places of the shafts, levels, and workings of the mine, and the travelling roads to and from these working places shall be in a safe state for persons working or passing therein.

51. Underground workings and shafts, sumps and winzes which have been in disuse for some time shall be examined before again being used in order to ascertain whether foul air or other dangerous gases have accumulated therein, and also to ascertain the condition of the roof and sides; and only such workmen as may be necessary to make such examination shall be allowed to proceed to such places until such places are certified to be in a safe state to work and travel in.

52. In any underground part of a mine where adequate stationary lights are not in use, every person shall carry a light.

53. No person shall work in any place other than a place in which he has been ordered to work by an official of the mine or by any person in whose charge he has been placed by an official of the mine.

CHAPTER VII

Ladderways

54. In ladder-shafts making an angle of 25 degrees or less with the vertical, platforms shall be provided at intervals not exceeding 25 feet. Ladders shall be placed so as to cover the openings in the platforms. Provided that in cases where timber and supplies are handled, a portion of this opening may be to one side of the ladder and in the opposite corner of the platform. Except in respect of the lowest 30 feet of working shaft, ladders shall be fixed at an inclination of not less than one foot horizontal for every 10 feet vertical; provided that where exceptional circumstances require they may, with the consent of an Inspector, be fixed at a steeper inclination.

- 55.** In ladder-shaft where the slope is less than 65 degrees and more than 30 degrees with the horizontal, platforms shall be placed at intervals of not more than 55 feet along the underlie or slope of the shaft.
- 56.** All platforms shall be securely fenced.
- 57.** All ladders shall be securely fastened to the sides of timbering of the shaft.
- 58.** All ladders shall project at least three feet above the shaft-top and above every platform, or strong holdfasts shall be provided at these places in convenient positions.
- 59.** A ladderway, which is a compartment of a shaft used also for other purposes, shall be closed off from the other compartments to such an extent as to prevent injury to workmen passing up and down the ladderway.
- 60.** Every ladderway opening in any travelling road or place where men are stationed or pass shall be provided with a door or with a substantial fence.
- 61.** No person shall carry or be permitted to carry any drill, tool or any loose material on a ladderway in a vertical or steeply inclined shaft or winze, except so far as may be necessary in executing repairs:

Provided that nothing in this regulation shall prevent a person from carrying tools on a ladderway to a stop.

61-A. All ladders and platforms shall be made of the best material and kept in good condition. The breaking load of the ladders and platforms shall at no time be less than three times their working load.

61-B. All ladders and platforms used by persons working in a mine shall be examined by a competent person appointed by the manager in writing for this purpose, within two hours next before the commencement of work in a shift. The result of every such inspection shall be recorded in a book kept at the mine for this purpose. The report shall be signed by the person who made the inspection and shall state the date and time of the inspection and date and time when the report was written.

CHAPTER VIII Explosives

62. The explosives provided for use in the mine shall be of good quality and, as far as can be practically known, in good condition, and only detonators of one strength and of sufficient power for every class of explosives used shall be kept for use in the same mine.

62-A. No gunpowder or any other explosive except fuses and detonators shall be issued for use in blasting operations in a mine or used in a mine except in the form of cartridges. The preparation of cartridges from loose gunpowder, the drying of gunpowder and the reconstruction of damp cartridges shall be carried out only by a competent person or persons appointed in writing by the manager for the purpose and only in accordance with the conditions laid down in rules made under the Explosives Act, 1884, and in a place approved by a licensing authority.

63. Explosives shall not be taken into or kept in a dwelling house, but only in a properly constructed magazine.

64. (1) Explosives shall not be stored underground in a mine except with the approval of an Inspector in writing, and in a magazine or magazines duly licenced in accordance with the provision of rules made under the Explosives Act, 1884.

(2) The manager shall appoint in writing a competent person or competent persons to be in charge of every magazine for the storage of explosives and no person shall be in charge of a magazine without such written authority.

(3) Explosives shall be issued only to competent persons appointed by the manager or underground manager or foreman, and no unauthorized person shall have explosives in his possession. The names of such competent persons shall be registered in a book to be kept for the purpose.

(4) The person in charge of a magazine shall keep a correct record of the quantity of gunpowder and of the numbers of cartridges of other kinds of explosives and of detonators issued from the magazine to each authorized person, and a similar record of explosives returned to the magazine.

65. Underground magazines shall be placed at a sufficient distance from one another and from any portion of the mine, in which work is going on or which is used as a travelling road, to prevent the risk of injury to any person in the event of the explosion of the maximum amount of explosive stored.

66. The quantity of explosive which may be stored in an underground magazine shall not exceed the supply required for two working days in the mine in which the magazine is situated.

67. Detonators shall be kept in a securely locked box separate from any other explosive and no detonator shall be inserted into a priming cartridge until immediately before it is to be used:

Provided that, in the case of a wet working, priming cartridges may be prepared at the nearest convenient dry place adjacent to the working.

68. Every precaution shall be adopted to prevent the explosion or ignition of explosives stored in an underground magazine. The Chief Inspector may prescribe precautions to be adopted in addition to those required by the terms of the explosives licence.

69. No naked light shall be taken into an underground magazine or store.

70. Explosives shall not be sent down in the cage, skip or bucket unless there is a distinguishing mark attached to the cage, skip or bucket, or they are accompanied by a shot-firer or responsible person.

71. (1) All blasting operations shall be conducted by or under the personal direction of duly competent persons, not less than ⁶[21 years] of age appointed by the manager, underground manager or foreman. The names of these persons shall be registered in a book to be kept for the purpose.

(2) In any mine in which more than ⁷[20 persons] are employed underground at any one time no person shall be so appointed or shall perform the duties of a shot-firer who is responsible for making inspections under regulation 43.

(3) The part of a mine or mines assigned to a shot-firer under this regulation shall not be of such a size nor shall the total amount of his work of firing shots be such, nor shall any duties which may be assigned to him other than his duties under this regulation be such, as to be likely to prevent him from carrying out such last mentioned duties in a thorough manner. If any question arises whether the part of a mine or mines assigned to any such person is too large or the total amount of work of the additional duties assigned to him are too great, the decision of the Inspector shall be final.

(4) A shot-firer shall be paid a regular and shall not have any financial interest in getting a mineral.

72. The number of shots fired, the quantity of explosives used and the number of shots (if any) which have misfired shall be recorded daily in a book to be kept for the purpose.

73. All unused explosives shall be returned to the magazine without delay. Such returned explosive shall be re-issued before fresh stock is used.

74. No explosive shall be taken into a mine except in a securely locked case or canister containing not more than ⁸[hundred pounds] each, and no person shall have in use or keep for use, at one time in any one place, more than one such case or canister. The place in the mine at which any such case or canister is in use, or is kept for use, shall, unless solid ground directly intervenes, be not less than 30 feet from a place at which any other such case or canister is in use or kept for use:

Provided that the Chief Inspector may, in special cases by order in writing permit, subject to such conditions as he may prescribe, the use at one time in one place of more than one such case or canister.

75. When explosives are being carried on a ladder, each case, canister or bag shall be securely fastened to the person carrying it.

76. In the process of charging or stemming a hole no person shall use an iron or steel tool, scraper or tamping rod, nor shall he use undue force in pressing the explosive into the hold or strike it when at the bottom of the hole.

⁶ Substituted vide Noti. DEV-II/10-4/98 dt. Jan. 11, 1999.

⁷ Substituted vide Noti. DEV-II/10-4/98 dt. Jan. 11, 1999.

⁸ Substituted vide Noti. DEV-II/10-4/98 dt. Jan. 11, 1999.

77. In any underground working place only those holes, which are to be fired, in the next round, shall be charged, and the fuses in all holes which have been charged shall be ignited or detonated together.

78. Before a shot is fired in an underground working place due warning shall be given to persons in the vicinity, and every entrance to the place where shot is about to be fired shall be guarded so as to prevent any person not having received warning, from placing himself in dangerous proximity to the shot.

79. (1) When two underground working places have approached to within 10 feet of one another, no blasting shall be done in any one of such workings unless the workmen have been withdrawn from the other working and the same has been fenced.

Explanation--- For purpose of this sub-regulation any place to which workmen have lawful access shall be deemed to be a working place.

(2) In open workings blasting shall not be commenced until such warning as will prevent danger to the persons working in the mine and in 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.

79-A. Every shot-firer shall, before a shot is fired by him or under his supervision, see that all persons in the vicinity have taken proper shelter at a safe distance. He shall also take suitable steps to prevent any person from approaching the shots and shall himself take proper shelter.

80. When shots are fired, the number of reports shall be counted by at least two persons. The lowest count shall be taken to be correct. Unless it is certain that all the shots have exploded, no person shall re-enter such working place until 30 minutes after blasting, unless the shot has been fired by electrical means when this interval may be reduced to not less than ten minutes after the source of the electricity has been disconnected from the cable and the place becomes clear of the fumes. If the charge is known to have burnt away without exploding no person shall re-enter the working place for an hour.

81. After a shot has been fired in an underground working place the person who fired the shot or a competent person appointed in writing by the manager of the mine shall, before any other person enters the place make a careful examination and with his assistants make the place safe. No other person shall enter the place until the examination has been made and the place has been declared to be safe in all respects.

82. No person shall bore out a hole that has once been charged or to withdraw a charge either before firing or after misfire or deepen with empty holes or sockets left after blasting.

83. When a misfire occurs, a portion of the tamping may be sludged out with compressed air or water under pressure, but no kind of tool shall be used for this purpose. The hole shall thereafter be reprimed and fired.

84. No person shall drill or cause or permit to be drilled any hole within 12 inches of a misfired hole, and care shall be taken to drill the new 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 an authorized shot-firer, and he shall be present during operations undertaken for the removal of debris lying within six feet of the misfired hole. A careful search amongst the debris shall be made for cartridges and detonators, if any.

85. If a place where misfire has occurred is temporarily vacated a man shall be posted to warn all persons in the neighborhood of the fact, or the place shall be fenced so as to prevent access. In open workings it will be sufficient to mark the place of misfire with a red flag.

CHAPTER IX Miscellaneous

86. (1) Every flywheel and all exposed and dangerous parts of the machinery used in and about a mine shall be kept securely fenced.

(2) Where it is necessary to prevent danger to the public every tank or reservoir shall be securely fenced.

87. Efficient guards shall be provided for such parts of any machinery and any electrical conductor as may be a source of danger.

- 88.** If any person, when in charge of any machinery, apparatus or appliance used in or about a mine, observes any defect or dangerous flaw therein, he shall immediately report the fact to the manager, under-manager or engine-wright.
- 89.** Every person shall strictly comply with all lawful orders issued by the manager or such other official as may be empowered by the manager to issue the same.
- 90.** No person occupying any position of trust in or about a mine shall depute another person to do his work without the sanction of the official to which he is subordinate; and no such person shall absent himself without having previously obtained permission from such official for the term of his absence or without having been relieved by a competent person.
- 91.** No person shall negligently or willfully do anything likely to endanger life or limb in the mine, or negligently or willfully omit to do anything necessary for the safety of the mine or the persons employed therein.
- 92.** No person shall damage, destroy or improperly interfere with anything provided for or used in the working of the mine.
- 93.** No person shall remove or pass through any fence, or remove or pass any danger-signal unless so specially authorized by the manager or an official empowered by the manager in that behalf.
- 94.** No person occupying any position of trust in or about a mine shall sleep whilst on duty.
- 95.** If any person required by these regulations or by any rule or bye law made under the Act 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.
- 96.** Whenever the circumstances at any mine or part of a mine are such as to render provision of these regulations not reasonably applicable to such mine or part of such mine, the Chief Inspector may, at his discretion, grant exemption from such provision under such conditions as he may think fit.
- 97.** A competent person appointed by the manager for the purpose shall keep a correct record of the number of persons going underground daily, and after returning from underground record his presence in accordance with any system approved for the mine by the Chief Inspector or an Inspector.
- Provided that this regulation shall not apply in the case of any person appointed to carry out duties of superintendence, management or control.
- 98.** When wagons are about to be moved, persons likely to be endangered shall be warned by the person incharge of the moving.
- 99.** The movement of railway wagons by gravity or manual power shall only be carried out by a male person having suitable strength and skill and being authorized by the manager in writing. When more wagons than one are being moved at the same time the wagons shall be coupled together. Persons employed in moving wagons shall move them only by pushing from behind the last wagon.
- 100.** A locomotive used in or about a mine shall be kept in good condition and shall be provided with brakes of sufficient power by themselves to hold loaded wagons moved by it at any point in such moving.
- 101.** When wagons are being pushed by the locomotive, the shunter shall accompany the leading wagon and immediately signal to the locomotive driver, if any person approaches or crosses or is working on the line, on receiving the signal the driver shall sound the whistle and slow down or stop.
- 102.** The driver shall sound the whistle when the locomotive approaches a level crossing or any place where any person is at work or where his view of the line ahead is interrupted.

⁹CHAPTER X
Mining And Milling of Radioactive Ores

- 103.** The provision of this Chapter shall apply to mining and milling of radioactive ores containing more than 0.05 per cent by weight of the element uranium or thorium, and to

⁹ Chapter X comprising Regulations 103 to 137 added by Noti. S.R.O. 645(I)/81 dt. June 21, 1981, Gaz. Of Pak., Extr., Pt. I, June 23, 1981, p. 1450.

operations which involve more than 1 kilogram of the contained natural element uranium or thorium in any calendar year.

104. No person below the age of eighteen years shall be employed in operations involving the mining and milling of radioactive ores.

105. No person other than a person who is concerned only with radiation protection shall be appointed to supervise and advise the manager on all aspects of radiation safety.

106. The manager shall ensure that persons before they are employed and also during their period of employment are properly instructed in the health hazard connected with their duties, safe working methods and the precautions necessary to avoid accidents and injuries to health.

107. All areas and sources likely to present a radiation hazard shall be identified by means of appropriate and easily recognizable signs.

108. All those rocks and ores under ground likely to pose radiation hazard shall be removed as quickly as possible to surface storage places.

109. Health and radiation monitoring records of all workers shall be maintained in a form approved by the Chief Inspector.

110. The owner, agent or manager of an establishment engaged in mining and milling of radioactive ores shall arrange such medical examination as may be approved by the Chief Inspector of each person before he is employed and later at an interval not exceeding one year, and finally on termination of employment; and the report of annual medical examination shall be forwarded to the Chief Inspector within one month of such examination giving details of measures taken for the convalescence or against the aggravation of positive cases detected.

111. No person shall be snuff, eat, drink or smoke in a working area.

112. Efficient dust prevention, suppression and collection methods shall be used as close as possible to source of dust formation.

113. Sufficient clean air shall be provided to each working area to ensure that the weight average exposure to any worker shall not exceed the established safe limits.

114. The main ventilations of the mine and of the mine district shall work continuously, or for a length of time prior to entry of persons sufficient to provide adequate protection against airborne radioactive materials, Mechanical ventilation of mine shall be turned off only when authorized by the manager.

115. At every place where persons are employed or have to walk through, air-borne dust shall be sampled for radio nuclides ones during the twenty four hours, at a time when concentration is likely to be the highest and it shall not exceed 100 micrograms natural uranium per cubic meter of air any one time.

116. All persons shall wear suitable respirations when working in injurious dust concentrations which cannot be suppressed. They shall be properly trained in the use of such respirations.

117. Respirations shall be of a type approved by the appropriate authority and be maintained in good condition by properly trained persons.

118. At every place where persons are employed or have to walk through, air shall be sampled once in every shift for concentration of short lived radon or thoron daughters, result recorded, and if it exceeds 0.3 MPC in any area, a record of accumulative exposure to radon or thoron daughters in terms of MPC months (MPCM) shall also be kept for each person working therein.

Explanation.-- MPC means maximum permissible concentration of radon or thoron daughter products as recommended by the International Commission on Radiological Protection.

119. No person shall be allowed to work in an area of more than one MPC concentration or to accumulate exposure of more than two MPCM in any consecutive period of three months or of more than four MPCM in any consecutive period of twelve months, Actual exposures shall be kept as far below these values as practicable.

120. If a sample from any working place shows concentration of radon or thoron daughters of more than one MPC immediate corrective actions shall be taken or the persons shall be withdrawn, When concentrations higher than two MPC are indicated, the persons shall be withdrawn from the area until corrective actions are taken and atmospheric concentration of the radon or thoron daughters is reduced to one MPC or less. Record of each withdrawal made and corrective action taken and of each re-entry shall be maintained and signed by the manager.

121. All inactive areas in a mine shall be either completely ventilated or effectively isolated by air-tight barriers. Entry to areas being inactive or reopened or of suspended ventilation shall not be allowed unless a competent person appointed by the manager inspects that area and certifies it in writing as safe for entry.

122. Return air ways shall not be used for regular movement of persons and no working station shall be located therein.

Explanation.-- Working station means a place where any operations other than mining are being carried out.

123. Washing facilities including showers shall be provided to workers if risk of skin contamination exists beyond permissible level of 10^{-5} Ci/cm².

124. (1) Equipment from mines and mills shall be checked for surface contamination so that its contamination level does not exceed 10^3 u Ci/cm², before it is released from the active area.

(2) The contamination on clothing shall not exceed 10^{-4} uCi/cm² when person leaves the working area.

125. Changing from work clothes to outdoor clothes, and vice versa, shall when necessary, be done in suitable locker rooms adjacent to the washrooms, so as to control the spread of radioactive contamination.

126. In mines and mills, work clothing shall be appropriate to the working conditions.

127. According to the risks, overalls, head coverings, gloves, tight closing boiler suits, impermeable footwear and impermeable aprons shall be provided by the employer.

128. At every place where persons are employed or where they remain for a longer part of the day, the rate of radiation exposure shall be measured once during a week, and if the whole body dose in an hour due to such exposure is one millirem or more, record of doses accumulated by each person shall be maintained.

129. Radiation exposure shall be so controlled that no person receives doses in excess of the limits given below:-

Organ	Quarterly Limit	Yearly Limit
	rem	rem
1. Whole body, gonads or redbone marrow	3	5
2. Any single organ, excluding the gonads, redbone marrow, bone, thyroid and skin	8	15
3. Bone, thyroid, skin of the whole body (excluding the skin of hands, forearms, feet and ankles)	15	30
4. Hands, forearms, feet and ankles	40	75

Note:-- Actual exposures shall be kept as far below these values as practicable.

130. The instruments used to sample and measure radioactive dust radon or thoron and their daughters and radiation exposure shall be calibrated and certified every three months to the satisfaction of the manager and record thereof maintained.

131. All liquid and solid wastes from mining and milling of radioactive ores shall be impounded in a tailing retention system which shall be properly stabilized.

132. Any liquid wastes, if reaching fresh water streams by seepage, shall have PH from 6.0 to 8.0 units and radium 226 concentration not more than 30 picocuries per liter.

133. Mine waste and mill tailing shall not be used for any building construction.

134. Transport technique and equipment shall be built, installed and used so as to avoid spillage and disintegration as far as practicable.

135. Transfer and loading points shall be so designed to prevent dispersals of dust into the air so far as possible. Dust produced shall be suppressed by suitable wet and dry methods.

136. Transport routes and transfer points shall be properly maintained and cleared of dust as frequently as necessary.

137. No person shall wilfully and unnecessarily expose himself or be exposed without adequate protection, to ionizing radiation.

THE SCHEDULE

FORM I

[See Regulation 3]

Annual return for the year ending on the 31st December, _____

1. Name of mine.
2. Postal address of mine.
3. Date of opening.
4. Date of closing (if closed).
5. Situation of mine

}	District
}	Province
6. Name

{	Name of owner.
}	Postal address of owner.
7. Name

{	Name of Managing Agents (if any).
}	Postal address of Managing Agents (if any).
8. Name

{	Name of Agent (if any), as defined in Section 3 (a) of the Mines Act, 1923.
}	Postal address of Agent.
9. Name

{	Name of Manager.
}	Postal address of Manager.
10. Name of mineral worked.
11. Means by which the mineral is raised from the mine, i.e., hand labour mechanical or electrical power.

FORM II
[See Regulation 3(2)]

Persons employed during the year ending on 31st December _____, and wages paid for work done in December, _____.

Classification	Aggregate number of daily attendance of persons permanently and temporarily employed	Number of days worked during the year	Daily average number of persons employed as calculated by dividing the aggregate number of attendances by the number of days worked during the year	Average hours worked per week during the year	Aggregate number of daily attendance in December	Total amount paid in wages for work done in December	Average daily earnings in December as calculated by dividing the amount in column 7 by the number of attendances in column 6.
1	2	3	4	5	6	7	8
A.- Underground (i.e. in places lying beneath the superjacent ground)							
Males.							
Foremen and mates							
Miners							
Skilled labour not included above							
Unskilled labour not included above							
Total (Males)							
B.- Open workings (i.e. in working of the mine (including quarries) which are not situated beneath the superjacent ground.)							
I. Males.							
Foreman and mates							
Miners							
Loaders							
Skilled labour not included above							
Unskilled labour not included above							
Total (Males)							
II. Females.							
C. Surface (i.e. not in the working of the mine, including all subordinate officials and persons employed on sidings, loading wharves, private railways, and surface tramways and also carting).							
I. Males.							
Clerical and supervising staff (excluding the superior supervising staff)							
Skilled labour							
Unskilled labour							
Total (Males)							
II. Females.							

Note: (1) Where males are employed in both underground and open workings, the figure relating to them should be included under section A.

Note: (2) When workmen are paid through contractors, the sums entered in column 7 should be the sums paid by the contractors to the workmen, so far as these can be ascertained.

FORM III
[See Regulation 3]

Accidents prosecution

Number of separate accidents* reported during the year			No. of persons		Number of prosecutions initiated by the management with sections and rules under which the prosecutions were instituted	Number of person convicted with the sections and rules under which the convictions were obtained
Fatal	Serious	Total	Killed	Seriously injured		
1	2	3	4	5	6	7

* Accidents, which were reported as serious accidents but resulted fatally, should be entered as fatal accidents.

FORM IV
[See Regulation 3]

Epidemic Diseases

Name of Disease**	Date of appearance	Date of disappearance	Number of cases	Number of deaths
Cholera 				
Plague 				
Small-pox 				
Influenza 				

** Figures for any other specified disease which has been epidemic at the mine should be entered in this form.

FORM V
[See Regulation 3]
(For mines other than mica mines)
Type and aggregate horse-power of electric apparatus

1.	System of supply (Whether continuous current or alternating current:-				
	Voltage of supply	-	-	-	-
	Periodicity	-	-	-	-
	Source of supply	-	-	-	-
2.	Voltage at which current is used for:				
	Lighting	-	-	-	-
	Power	-	-	-	-
3.	Aggregate horse-power of motors installed on surface for:-				
	Winding	-	-	-	-
	Ventilation	-	-	-	-
	Haulage	-	-	-	-
	Ore dressing	-	-	-	-
	Crushing and dressing	-	-	-	-
	Miscellaneous	-	-	-	-
				Total horse-power	
4.	Aggregate horse-power of motors installed underground for:-				
	Haulage	-	-	-	-
	Pumping	-	-	-	-
	Portable machinery	-	-	-	-
	Lighting	-	-	-	-
	Miscellaneous	-	-	-	-
				Total horse-power	
5.	Total horse-power (addition of 3 and 4)	-	-	-	

FORM VI
[See Regulation 3]
Particulars of Explosives

Explosives		
Name of Explosive	Quantity used in Lbs.	Number of detonators used

FORM VII

[See Regulation 3]

(For mica mines only)

Output for the year ending on 31st December, _____.

Total amount of dressed mica raised	Total amount of dressed mica consigned	Total value at the mine of mica con-signed (“Value” means and should be calculated upon actual or estimated selling price at the mine. Any charge incurred in transporting the mica outside the mine should not be included)
1	2	3
Cwts. Lbs.	Cwts Lbs.	

Signature of Owner, Agent or Manager.

(If the form is signed by Managing Agent the words “for owner” should be added.)

Date of Signature.

FORM VIII

[See Regulation 3]

(For all mines except mica mines)

Output for the year ending on the 31st December, _____.

Name of mineral raised and metal (if any) extracted	Total amount of mineral raised. The figures should be stated:- in the case of gem-stones, in carats. (b) in the case of alum, amber, as-bestos, graphite, jadestone, steatite, tin-ore, tungsten-ore in cwts; or where the circumstances require greater particularization in order to give an accurate estimate of small out-puts, in cwts. and lbs. Out put of radio-active minerals and rare minerals such as molybdenite, monazite, pitchblende, samarkite, tantalite, triplite, should be returned in cwts. and lbs. (c) in case of clay, limestone, magnesite, marble, phosphatic rock, salt, slate and other stone, and all metalliferous ores except those referred to in (b), in tons.	Total value at the mine of mineral raised. (“Value” means and should be calculated upon actual or estimated selling price at the mine.) Any charges incurred in transporting the minerals outside the mine property should not be included.	Quantity of metal or metals extracted at the mine. Each metal should be shown separately:- (a) in the case of gold, silver and other precious metals, in Troy ounces; (b) in the case of tin in cwts. and fractions of cwts. (c) in case of other metals in tons and fractions of tons.	Value of metal or metals extracted at the mine. The value of each metal should be shown separately
1	2	3	4	5
Total				

Signature of Owner, Agent or Manager.

(If the form is signed by Managing Agent the words “for owner” should be added.)

Date of Signature.

FORM IX
 [See Regulation 13]
Notice of accident

Form:-- _____

To

THE CHIEF INSPECTOR OF MINES, _____
 District
 (through the ----- Magistrate of)
 Sub Divisional

Dated..... 19

Sir,

I have the honour to furnish the following particulars of an occurrence of a fatal accident

a serious accident

an accidental explosion or ignition which has occurred at the Mine

an outbreak of fire

an irruption of water

1. Situation of the mine. (Village, Stations, District, Province)

2. Mineral worked.

3. Name and postal address of owner.

4. Particulars of person:--

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	Killed	Injured	Age	Occupation
5.	Date and hour of the occurrence.			
6.	Place of occurrence.			
7.	Cause and description.			
8.	Classification of accident*			
9.	Nature of injury, if any, and, fatal, cause of death.			

I have the honour to be,
 Sir,

Your most obedient servant,
Owner, Agent, Manager.

*** Under one or other of the following heads, namely.**

(1) Explosions and ignitions of fire add dams, (2) Explosions of coal-dust, (3) falls of roof; (4) falls of sides; (5) in shafts (overwindings); (6) in shafts (ropes and chains breakage); (7) in shafts (while ascending or descending by machinery); (8) in shafts (falling down in shaft); (9) in shaft (things falling down in shaft); (10) in shafts (miscellaneous); (11) suffocation by gases; (12) by explosives; (13) irruptions of water; (14) haulage; (15) by underground machinery; (16) sundries underground; (17) by surface machinery; (18) boilers or pipes bursting; (19) on surface railways or trameways belonging to the mine; (20) by electricity and (21) miscellaneous on surface.