Regulations under the Mines Regulation Ordinance 1939-1962.

ROGER BEDE NOTT, the Administrator of the Northern Territory of Australia, having received the advice of the Administrator's Council, in pursuance of the powers conferred on me by the Mines Regulation Ordinance 1939-1962 and the Administrator's Council Ordinance 1959-1963, hereby make the following Regulations.

Dated this 2nd day of July, 1964.

ROGER NOTT Administrator.

AMENDMENTS OF THE MINES REGULATIONS.†‡

- 1. Regulation 4 of the Mines Regulations is repealed and the following regulations are inserted in its stead:-
- "4.—(1.) An adequate amount of pure air shall be made to circulate through and into the shafts, outlets, winzes, rises, and all the working Provision of places of a mine, and the travelling ways to and from the working places, in such quantities as to maintain them in a fit state for working and passing therein.

- "(2.) Where the ventilation of any place is in the opinion of an inspector inadequate no work excepting such as is necessary for the purpose of remedying the condition shall be undertaken in that place.
- "(3.) Where the adequacy of ventilation is in dispute a decision shall be made by the Director of Mines.
- "4A.—(1.) Any part of a mine that is disused may be shut off from the ventilation system, and in the part so shut off, the regulation as hereinafter Closing of parts of a required shall not be enforced.

Minimum

standards of

- "(2.) All parts so shut off shall be noted in the Record Book and shall be securely closed off from the parts of the mine in use.
- "(3.) Before work is resumed in any workings that have been disused, the ventilation of these shall be thoroughly restored.
- "4B.—(1.) The air in any working place shall be deemed to be adequate for the purpose of regulation 4 of these Regulations if—

(a) it contains not less than twenty parts per centum by volume of purity of air.

* Notified in the Northern Territory Government Gazette on 15th July, 1964. † Regulations notified in the Government Gazette of the Northern Territory dated 10th

November, 1939 Title amended by Regulations 1964, No. 15.

- (b) it contains not more than—
 - (i) .25 parts per centum of carbon dioxide;
 - (ii) .01 parts per centum of carbon monoxide;
 - (iii) .0005 parts per centum of the oxides of nitrogen; and
 - (iv) .0025 parts per centum of sulphuretted hydrogen by volume; and
- (c) it shows a count not in excess of 300 particles per cubic centimetre of dust which is 5 microns or less in diameter or a count not in excess of such lower number of particles as an inspector may require having regard to the conditions of the particular working place. Such counts shall be determined by finding the average of not less than six counts with a konimeter caused to be taken by an inspector and counted using dark field illumination.
- "(2.) The Director of Mines may direct that a particular method or apparatus be used in the determination of the purity of air used in a mine.

Re-circulation of air.

"4c. Main air currents passing through every mine shall, as far as practicable, be regulated so that the air shall pass through the workings from inlet to outlet, without local circulations, that is, the same air shall not be allowed to return repeatedly through the same place.

Airways in filled stopes.

"4D. In filling stopes, or in shrinkage stopes, rearings or passes shall be constructed so as to leave open airways between the filling or broken ore and the unbroken ground.

Stoppings and doors.

- "4E.—(1.) Air doors, stoppings, cross-overs and brattices shall be provided where necessary for the regulation of the ventilation air currents and shall be maintained in good order and condition.
- "(2.) All air doors shall be so erected that they shall close automatically and remain closed, and any air door not in use shall be lifted off its hinges or bolted to the wall timber.

Return airways.

"4F. In every mine there shall be constructed as soon as practicable one or more airways independent of the main shaft or other principal entrance of the mine from the surface to the lowest level of the mine, of sufficient area to allow the passage of the amount of air required to ventilate all the parts of the mine served by such airways and they shall be maintained open and unobstructed except when may be necessary to close some of them to regulate and properly distribute the air through the workings.

Additional mine workings.

"4G. If required by an inspector additional rises, chambers, drives or other workings shall be constructed to ensure adequate ventilation of the workings.

Connections between adjacent mines.

- "4H.—(1.) All excavations by which two mines are connected shall, if considered necessary by an inspector, be kept open for ventilation and escape; but the inspector may order any such connections to be closed if he considers the ventilation conditions will be improved thereby.
- "(2.) If, in the opinion of the Director of Mines, compliance with an order given under the last preceding sub-regulation entails any expense in connection with the regulating and conducting of hot, moist or foul air

from one mine through the workings of any other mine for the purpose of improving the working conditions of the men employed in either mine. such expense shall be borne by the owners of such mines in such proportions as the Director of Mines shall direct

- "(3.) Adjacent mines shall be connected by such excavations as are deemed necessary by the Director of Mines for the purposes of ventilation and escape, and such connections shall be made at the expense of the owners of such mines, or of such of them and in such proportions, as the Director of Mines may direct.
- "41. If, in the opinion of an inspector, the state of the ventilation in part ventilating of the mine is unsatisfactory and there is no immediate prospect of improve-machines. ment of the ventilation by the connection of workings he may, in writing, require that ventilating machines shall be provided and used.

"4J.—(1.) No development end or winze where a machine drill is Development used shall be advanced more than ten feet from a through air current and ends. no working shall be taken off such development end or winze at a distance greater than ten feet from a through air current unless ventilating equipment is installed delivering air through pipes to the face with sufficient volume and velocity to remove and dilute the dust.

- "(2.) Any person who, wilfully or through negligence, damages or misuses any ventilating equipment or installation or who fails to use them where provided shall be guilty of an offence.
- "4K. The manager of a mine shall ensure that where the ventilation Restoration of system has been shut down or the quantity or air circulated has been ventilation. reduced at weekends, holidays or at any other time, no man shall be allowed to enter any working place in the mine until adequate ventilation has been restored.

"4L.—(1.) No charge shall be fired in a winze, or any workings from ventilation of a winze unless an air hose or air pipe has been installed to discharge winzes. compressed air to the bottom of the winze, or to the face of any working from such winze and secured in such a manner as is approved by the inspector.

- "(2.) The discharge end of the hose or pipe shall be secured so as to discharge air at not more than 20 feet from the bottom or working face.
- "(3.) The master valve controlling the supply of air to a winze or any intermediate workings within 20 feet of such winze shall be situated at the brace or top of the winze and no other valve shall be allowed in the winze except by permission in writing of an inspector.
- "4M. The supply of air for any ventilating machine or air compressor purity of which forces air into the workings shall be drawn from the purest sources air to practicable.
- "4N.—(1.) Air-receivers and the pipes connecting them with the com-Removal of pressor shall be blown out every day. air mains.

vater from

"(2.) Air mains from compressors and all branch mains therefrom on all levels in a mine shall be furnished with sufficient traps, of an approved type, to remove accumulations of water, and water shall not be allowed to blow through to the working faces. Traps shall be blown off at least once in every shift.

Prevention of dust.

- "4P.—(1.) Where dust is produced in the course of mining operations underground, or in any quarry, or in any rock crushing plant or reduction mill, to such an extent that the health of the workmen may be endangered thereby, the owner or manager of the mine or quarry shall make provision for preventing or allaying such dust or otherwise for mitigating the danger to persons liable to inhale such dust.
- "(2.) A person shall not work in or cause or allow another person to work in any underground place, quarry, rock crushing plant or reduction mill until the owner or manager had complied with the last preceding sub-regulation.
- "(3.) A person shall not be deemed to have complied with subregulation (1.) of this regulation unless he has installed appliances of a type approved by an inspector which are effective to lay or collect the dust.
- "(4.) Where, in the opinion of an inspector, the dust from tailing dumps, or any other heaps of waste rock or mill residues on a mine is a nuisance to persons employed on them or in the vicinity, and detrimental to their health, he shall give notice in writing to that effect and the manager shall thereupon provide and cause to be constantly used such appliances as will effectively lay or collect the dust.
- "(5.) The water that is used either on surface or underground for the purpose of laying dust shall be free from pollution with noxious matter.

Ventilation.

- "4Q.—(1.) When required by an inspector, the direction, course and volume of the air currents and the positions of all air doors, stoppings, fans, and ventilating devices throughout the mine shall be marked on the plans and sections required to be kept at the mine.
- "(2.) An inspector may require a copy of the ventilation plans to be supplied to him.

Ventilation officers.

- "4R.—(1.) The manager of a mine, when required in writing to do so by an inspector, shall appoint dust and ventilation officers whose duty it shall be to examine and report on at times specified by the inspector—
 - (a) the quality, distribution and use of the water used for laying dust:
 - (b) the condition of the appliances for collecting and laying dust at each working place and elsewhere;
 - (c) the dust sampling of the mine, more particularly as regards the development ends;

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- (d) temperature readings in working places; and
- (e) the condition of the mine relating to ventilation and health more particularly as regards the amount of air supplied during the interval after blasting and before entry and during the working shift in all development ends in which there is no through current of air.

- "(2.) The manager shall notify the inspector in writing of the name of the person or persons appointed from time to time.
- "(3.) The conditions as found by such person at the completion of each examination shall be entered by him in the Record Book and a copy forwarded to the inspector.
- "(4.) Such entries shall be examined and countersigned by the manager or underground manager.
- "4s.—(1.) The quantity of fresh air, excluding compressed air, supplied Air quantities. underground in a mine shall be not less than 200 cubic feet per minute for every man normally employed underground.
- "(2.) The current of fresh air supplied shall be suitably split and each working place shall receive not less than 200 cubic feet per minute per person employed therein.
- "(3.) The quantity of air circulating underground in a mine shall be determined at least once in every three months and recorded in the Record Book.
- "4T. No person shall enter any working place after blasting has taken Entry after place until the fumes and toxic gases arising from the explosion have been blasting. effectively dispersed.
- "4U. All vessels used for the acid treatment of zinc slimes from the Acid treatment cyanide process shall be fitted ventilation hoods or other appliances which of slimes. shall prevent the fumes from entering the air breathed by the workmen engaged in that process and shall discharge to the atmosphere in such a manner as to cause no inconvenience to other persons.
- "4v.-(1.) In every case where fumes and toxic gases which, in the Noxious fumes opinion of an inspector are noxious and dangerous to persons, are likely to from metallurgical escape from any furnace or other plant used in connection with any metal-processes. lurgical processes in quantities or under conditions such that the health or life of persons engaged in, on or about the premises in which the metallurgical process is carried on, is likely to be endangered such furnace or other plant shall be equipped with suitable devices as may be approved by the Director of Mines to remove such fumes or toxic gases from the presence of the workmen employed.

"(2.) A supply of remedies including oxygen and approved appliances Remedy for for the treatment of men suffering from fumes of explosives or other noxious gases, with instructions for their use, shall be kept at every mine employing more than ten men underground.

"4w. Tailings used for filling worked out ground shall not contain more Use of free cyanide than is equivalent to 0.01 per cent. of potassium cyanide and cyanide tailings. a strong current of air shall be maintained through any such workings which are being filled with such tailings so long as men are working and passing therein.

"4x. The owner, manager and agent of a mine or quarry shall ensure that the standards of ventilation prescribed by these Regulations are observed.

Penalty: Fifty pounds.

- "4y.—(1.) Where the Director of Mines is of the opinion that the ventilation in a mine does not conform with the standards prescribed in these Regulations or that by reason of the lack or insufficiency of ventilation the life or health of a person employed in the mine is endangered he may by notice in writing require the owner, manager or agent of the mine to do such work or install such appliances for the ventilation or the better ventilation of the mine as are specified in the notice.
- "(2.) A person to whom a notice under the last preceding subregulation is given shall comply with the terms of the notice.

Penalty: Fifty pounds.

"4z. Where the Director of Mines is satisfied that it is impracticable or unnecessary to apply regulations 4 to 4y inclusive of these Regulations to a mine or part of a mine, he may by notice in writing, subject to such conditions and for such time as he thinks fit, exempt that mine or that part of the mine from the provisions of regulations 4 to 4y inclusive of these Regulations."

Repeal.

- 2. Regulation 55 of the Mines Regulations is repealed.
- 3. After regulation 68 of the Mines Regulations the following regulation is inserted:—

Offences.

"69. A person shall not contravene or fail to comply with a provision of these Regulations.

Penalty: Fifty pounds.".