Regulation No. (131) For the Year 1966
MINING REGULATION

Issued in Accordance with Article (68) of Law No. (37) for the Year 1966 Temporary Law for the Organization of Natural Resources Affairs

Article (1) This regulation shall be called (Mining Regulation for the Year 1966) and shall become effective as of its promulgation in the Official Gazette.

Article (2) Applications for acquiring prospecting permits, exploration licenses, mining rights and certificates of registration of discovery shall be submitted to the President on the forms prescribed by the Authority.

Article (3) The President upon approval of the Board of Directors shall issue the prospecting permit or exploration license valid for one year .

Article (4) The area covered by the prospecting permit or exploration license shall not exceed (48) square kilometers and shall consist of one piece having right angles and its borders parallel to the longitude and latitude lines.

Article (5) The Holder of a prospecting permit, exploration license or the mining right shall have the right to submit an application to the President requesting renewal thereof. The Authority shall have the right to approve or to reject the application.

Article (6) The applicant for renewal of the prospecting permit, exploration license or the mining right shall specify in his application the number of the expiring permit, license or right and shall submit it if so requested. The new permit, license or right shall be given the same number as the old one.

According to Law No. (30) for the year 1985, the word “Vice-President” has been replaced by the word “President” in the text of this regulation.

Article (7) If the area or part thereof in which prospecting, exploration or mining is to be carried out is owned by third party, the applicant shall submit the documents which prove that he obtained the approval of the land owner, the person having the right of

disposal or his agent as required under Article (33) of the Temporary Law for the Organization of the Natural Resources Affairs.

Article (8)

a - The Holder of a prospecting permit, exploration license or mining right shall submit every three months a statement to the President about all operations conducted in the permit or license area or all the information he has reached to .

b - The Authority has the right to revoke the prospecting permit, exploration license or the mining right if the holder of such permit, license or right has failed to implement the requirements specified under paragraph (a) of this Article or if the Authority found out that the reports submitted by the Holder of the permit or license is incorrect.

Article (9)

If minerals are discovered in commercial quantities, the discoverer shall report this to the President as soon as possible. At the same time , the discover shall provide him with the requested information and samples of rocks and minerals discovered. the President may send a specialized employee to inspect the area and make sure that the information reported by the discoverer is correct.

Control and Inspection

Article (10)

a - The President shall appoint a specialized employee (to be called the Mines Inspector General) to supervise the general protection and safety in the mining facilities and to monitor the application of the provisions of the regulation herein and shall appoint assistants as may be needed called (mines inspectors); provided that all inspectors shall be mining engineers in accordance with the Law No. (18) for the year 1958 and any amendments thereto.

b - Special inspectors who are not mining engineers may be appointed in quarries provided that they hold adequate qualifications and experience.

Obligations of the Mining Right Owner

Article (11)

A mining right owner shall carry out the following duties :

a - Provide efficient professional management capable of implementing mining operations and the proper maintenance of mining facilities.

b - Take the necessary precautions to ensure general protection and safety within the mining facilities.

Article (12) Should the holder of a prospecting permit, exploration license or a mining right contracts the prospecting, exploration or mining operation to a contractor he shall remain responsible for the compliance of the contractor with all the requirements under the Temporary Law for the Organization of the Natural Resources Affairs and the regulations and rules issued thereto.

Article (13) If no contract is concluded with a contractor or if any of the clauses contained in this regulation is neglected, the said clauses shall be considered in all cases binding to the contractor.

Article (14) 1 - the owner of any mine or his agent shall submit to the President the following information in writing :

a - Name, location and type of the mine.

b - Name and address of the supervisor. If the supervisor is a company, the articles of association and by-laws should be submitted.

c - Name and address of the mine's manager.

d - Any change in the mine's name and the address of its manager

2 - The owner of any quarry employing more than ten (10) persons shall provide the President with the informations specified in paragraph (1) of this Article .

Article (15) The owner of any quarry or mine shall provide all necessary facilities to the employees sent on inspection assignment by the President.

Management

Article (16) A mine shall be administered by a Jordanian manager to be appointed upon approval of the President and shall have the following qualifications :

a - He should be a mining and metallurgical engineer according to the law.

b - He should have at least three years practical experience in his field of specialization.

Article (17) One person may not be a manager for more than one mine except in accordance with the following conditions :

a - Approval in writing from the President.

b - Total employees in all mines under his management should not be more than two thousands.

c - All entrances to these mines should be within an area whose diameter is not more than four kilometers.

d - In each mine employing more than 300 workers under his management, he shall have an assistant holding the title “Mining and Metallurgical Engineer” according to the law.

e - If the employed workers in all mines under his management are more than 500, he shall appoint an assistant holding the title “Mining and Metallurgical Engineer” according to the law.

Article (18) If a mine manager is absent from his work for more than three days for any reason, the owner of the mine or his agent shall assign a deputy mine manager during the absence of the manager and shall inform in writing the mines inspector general.

Article (19) A mine manager should reside in an area which is within 20kms from the location of the mine .

Article (20) a - The mine manager is responsible for supervising precisely the operations of the mine and to make sure that there is a daily control in accordance with para (b) hereunder.

b - The assistant mine manager shall carry out daily inspection over all the mine sections and make sure that all technical requirements are available.

Article (21) The supervisors, superintendents and formans responsible for supervising the progress of work shall inspect the site of work at the beginning of every shift before allowing any body to enter therein.

Article (22) Each company engaged in mining operations shall, after obtaining the approval of the President, appoint a special engineer to monitor protection and maintenance operations in its mining facilities. In case of failing to do so , the President may, upon recommendation by the mines inspector general, assign a specialized engineer to carry out the protection, maintenance and technical control work in the company and shall be paid a monthly fee as decided by the President.

Rescue, Relief and Health

Article (23) Each mine or group of mines having one manager shall be provided by a rescue team of not less than eight trained persons along with the mine's doctor to undertake the following:

a - Rescue activities and removing of debris in case of an accident in the mine due to destruction collapse or suffocation, etc.

b - First aid operations including artificial breathing, dressing, inspections by tranquilizers.

Article (24) a - Each mine or group of mines under the control of one manager shall have a health clinic and an ambulance supplied with the necessary drugs and articles needed for first aid in case of the occurrence of an accident.

b - If the mine is 50 km far from the nearest health center having a doctor and the mine's workers are over 200, an inspector doctor should be appointed in the mine's area to provide health protection and relief to workers in emergency cases.

c - If the workers of a mine are more than 3000 there shall be a full time doctor whose site of work shall be in the mine area.

d - A doctor shall be appointed for each mine and shall visit the mine at least twice a week.

Article (25) The following shall be available at each mine :

a - A restaurant in which the workers have their main meals.

b - Suitable underground places for meals to be taken by workers if they are obliged to.

c - Main water closet including bath rooms, washing basins and lavatories.

Article (26) The mine manager in cooperation with the doctor concerned shall take the necessary arrangements to preserve public health in the mine.

Workers

Article (27) a - Any person under 18 years of age shall not be employed to work under the ground surface.

b - Females shall not be at all employed in mining activities.

Article (28) a - Workers shall be employed to work underground only after receiving training for a period not less than three months under the supervision of a specialized engineer excluding those workers who enter the mine for training purposes.

b - The mine manager shall make sure that all workers and employees in his mine are adequately informed of safety measures required by the work in a mine.

Article (29) It is exclusively prohibited for any body to enter the mine unless he is putting on a mine helmet and wearing protective shoes. Linen or light shoes should not be used for this purpose.

Article (30) Entry into a mine is forbidden unless adequate light is available to see the road in front for a distance not less than ten meters.

Article (31) According to special instructions, the mine manager shall determine the time of going in and coming out of the mine so that the number of workers is known at the beginning and end of each shift and consequently those who failed to go out can be determined.

Explosives

Article (32) Explosives should be stored in places far from residence or working areas. Approval of the Authority and public security should be obtained with respect to such stores.

Article (33) Explosives stores should have a special design to permit storage of primers and fuses, and each type of explosives in a separate place.

All such stores should have well ventilation and the ambient temperature should not exceed 28°C in any season of the year.

Article (34) Explosives stores should be surrounded by a fence not less than two meters high. If the store is above the ground surface the wall should be of stone and reinforced concrete at least 30 cm thick. If the store is underground surface the fence may be made of barbed wire. In all cases the distance between the surrounding wall and the exterior walls of the store shall not be less than (30) meters .

Article (35) the stores should be provided with 24-hours guards and access is allowed only by a special permit from the mine manager. Sign boards should be placed in a conspicuous place around the stores warning passers-by from approaching.

Article (36) Smoking, putting on fire, carrying matches, lighters, cigarettes or any other inflammable materials shall not be permitted inside the walled area of the explosives store.

Article (37)

a - special places in the mining areas shall be prepared for use as substores for explosives.

b - The maximum quantity of explosives to be kept in the substores should not exceed the quantity needed for one day use of the mine or quarry.

c - Delivery of explosives from the substores shall be only to licensed persons authorized by the mines inspector general.

Article (38)

a - Special wooden boxes painted in red colour shall be provided to carry the explosives to work places. The word “Explosives” shall be written in broad and clear letters .

b - Dynamite and fuses or primers shall not be put together in one box.

Article (39) The explosives used in mines and wells shall be of the type made for mining purposes and shall be free of gases and poisonous and suffocating fumes.

Article (40) By the end of each day unused explosives shall be returned to the stores.

Article (41) Lamps and inflammable materials should be moved to a safe place during the charging of mines. No lamps should be placed on the explosives box or in any place near thereto.

Persons Engaged in Blasting of Mines

Article (42)

a - Detonating of mines shall be undertaken only by persons licensed by the mines inspector general.

b - The inspector shall grant a license for mines blasting after conducting an examination for the persons willing to engage in blasting work and after making sure that they have satisfactory experience in blasting.

Article (43) Persons carrying out blasting of mines may not ignite more than ten mine fuses in one explosion cycle. Should it be necessary to ignite more than the said number in any cycle, an ignition fuse should be used or the assistance of another person called.

Article (44) No less than five minutes before the fuse is ignited or the primer battery connected, the person blasting the mines should warn all those present in or around the blasting area and make sure that all passages leading thereto are closed.

Article (45) The person who is blasting the mines shall obtain the approval of the superintendent of the area five minutes before starting the detonation of mines.

Article (46) No detonation of mines shall be carried out simultaneously in two areas of one mine if the distance between the two locations is less than 200 meters.

Article (47)

a - If the explosion is in a location less than 150 meters from the area of retreat or sensing those areas should be evacuated from all workers before ignition of the primer or connecting the battery.

b - If the detonation of mines is to be carried out in a tunnel having one entrance only, all the section between the location of explosion and the end of the tunnel should be evacuated from all persons whatever the distance between the two said locations is.

Article (48) Approach to the location of the explosion may take place only after the elapse of at least 10 minutes from hearing the sound of the last explosion if the ignition is complete. If the ignition of mines is not complete the waiting time should not be less than 15 minutes.

Article (49) Blasting of mines within municipal or village areas shall be carried out in accordance with special instructions to be issued by the President in agreement with municipal and village councils and Security Authorities.

Ventilation

Article (50) In each mine there should be available a suitable atmosphere for breathing for the persons working therein. Adequate means should be available to allow fresh air to pass continuously throughout the parts of the mine.

Article (51) The Mine Manager should continuously ensure that the proportion of dust, poisonous gases and fumes within the mine atmosphere is less than the minimum considered harmful to the health of the workers.

Article (52) Workers engaged in places full of dust, gases and fumes should be provided with protective masks.

Article (53) It is exclusively forbidden to use diesel or any other machinery which may result in increasing the ratio of carbon monoxide or

poisonous gases in the atmosphere of the mine unless such equipment are provided with gas absorbing equipment.

Article (54) Kerosene or diesel lamps are not to be used at all for lighting in a mine.

Article (55) Putting up a fire for heating purposes or for any other purpose is prohibited in a mine.

Article (56) Before authorizing any body to enter abandoned areas in a mine, the mine manager should make sure that the atmosphere of such areas is suitable for public health.

Lighting

Article (57) The mine should be provided with adequate lighting so that workers can move easily without injuring their eyes or exposing themselves to danger.

Article (58) The following main parts of a mine should have good and continuous lighting throughout the working hours :

a - Work places, main routes, transport lines, belts and workers paths.

b - Points of loading and unloading of minerals and stone materials, supplies and articles.

c - Intersection points for two main tunnels or any two transportation lines.

d - Any place in the mine containing a motor, electric generator, compressor, fan, pump, pulling machines or water pool or any other place in which heavy or medium size machines are used whether fixed or portable.

e - Any place under ground used for workers gathering.

f - Places and annexes thereto used for storage of explosives or boxes of explosives for use during work.

Article (59) Each moving machine used for mining purposes shall have a fixed conspicuous light in front and another in the back.

Signals

Article (60) Each mine or quarry shall have signals system for machinery operating therein to organize its movements on roads and routes of transport.

Article (61)

a - Special instructions shall be prepared to regulate signalling for each pulling or dragging machine used in mining purposes.

b - A copy of signalling instructions shall be placed in a conspicuous place in the pulling or dragging machine room and at the entrance of the mine. the signalling instructions shall be kept in good condition and shall be written in the language or languages of the concerned.

Signal instructions shall be explained to those who are illiterate.

Maintenance and Protection

Article (62) A detailed geological, physical and hydrological study should be carried out for the area in which mining shall take place to include the following :

a - Thickness of the mineral to be extracted, its distribution, gradient, distance from the surface and hardness.

b - Vertical cross sections every 200 meters showing the type of rocks, thickness, hardness and gradient over and under the minerals to be extracted.

c - Cracks and folds which may affect the nature of mining in the area.

d - The highest underground water table which may be found in the area and how far from ground surface.

e - Main water course in the area and the highest level to which the water table may rise in these courses calculated on basis that the rate of annual rainfall is 1000 mm.

Article (63) Before mining commences in any area, a written statement should be submitted to the President showing the following :

1 - Size of mineral reserves available in the area, the mining plan, the expected annual rate of production and the estimated age of the mine.

2 - Master plan for the mine showing the following :

a - The process to be used in mining .

b - Volume of pillars and width of tunnels showing the reasons for selecting such measurements.

c - Plan and means of ventilating the mine.

d - Network and interval means of transportation showing the main points of loading and unloading.

e - Type of machinery to be used underground, its horse power, type of driving power and locations of usage.

f - Distribution of lighting network and any other electrical network inside the mine.

g - Organization chart for the staff of the mine showing the hierarchical order of the technical and administrative responsibility starting from the manager and downforth.

h - Protection instructions for each of the main parts of the mine.

Article (64) The mining plan approved by the President may be amended only by approval of the President.

Article (65) All main passage ways, roads and transport lines inside the mine should be supported in a way to avoid being collapsed.

Article (66) Any funnel more than 2 meters wide should be adequately reinforced through one of the methods usually used in mining .

Article (67) a - A plan should be set up for the process of supporting retreat and sensing areas in each mine so as to suit the nature of work therein provided that a written approval of the inspector general should be obtained before its implementation.

b - The following should be taken into consideration when setting up retreat or sensing plan.

1 - The last five meters of the tunnel leading to the retreat area should be supported.

2 - Strengthening the supports in the line near the ore pillar so that the edge of the headers in this line are adjacent to the pillar.

3 - The maximum distance between one supporter and the next in one line should not be more than one meter.

4 - The maximum distance between one line of supporters and the next line should not be more than one meter.

5 - The edges of headers in each line should exceed the edges of headers apposite to them by not less than 10 cm.

6 - To reinforce retreat or sensing areas blasted by dynamite before commencing to carry the ore material therefrom.

7 - To consider the falling area behind the last supporters line, a prohibited area, and entry thereto is forbidden for any reasons whatsoever.

Article (68) The following arrangements should be observed in all openings of mining wells :

a - Excavation works in the openings of mining wells, on the sides, surface and earth covering the minerals should be undertaken in a way to prevent sand or others from falling in a dangerous way.

b - A fence shall be constructed around the well opening in case there is any hazard to workers operating in or around the well.

Article (69) Shelters should be constructed to protect workers during blasting operations. Such shelters will not be needed if the workers can reach a safe place far from the location of blasting.

Article (70) Before starting work or during the work, especially after blasting, each worker shall inspect the place in which he works and shall remove any rock, stone or earth which may fall.

Article (71) A worker shall not throw rocks, stones, earth or any other material which may endanger others.

Article (72) Entrances to wells, boreholes, holes and ponds and any other neglected place in the mine or around it should be tightly walled.

Article (73) The sides of mines wells from which minerals are extracted or which are used as passages for workers or to carry supplies shall be supported and lined with wood.

Article (74) No body is allowed to operate a pulling or dragging machine unless he has a permission from the mine manager.

Article (75) Wire ropes for pulling shall be used in all mines more than 15 meters deep. Such ropes should be of good manufacture and clear from any defect and of a great strength .

Article (76) The pulling rope used in lifting and lowering the workers should have a safety factor not less than 200% .

Article (77) The mine manager shall keep a record in which the following details shall be registered with respect to the pulling rope :

a - Maximum grade of endurance.

b - Manufacturer's name, address, date of production and purchase.

c - Rope length and weight per each meter (kg).

d - Starting date of use.

e - Dates of shortening.

f - Dates of changing the ends.

g - Dates of testing.

h - Date of discontinuation of use.

i - Maximum loads lifted.

The person who registers such information shall sign the record.

Article (78) The mine manager shall appoint a specialist to carry out the following :

a - To inspect at least once every week the status of the pulling ropes, joints to buckets, cylinders, other transportation means, pulling wheels and all exterior parts of the pulling equipment whose deterioration may endanger the safety of workers.

b - To inspect weekly the parts of the pulling equipments in general and to monitor the signalling relating to its operation. Prepare a complete report on the results.

Article (79) Each mine should have at least two exits, one to be used in ordinary conditions and the other in emergencies when the main exist cannot be used.

Article (80) All parts of the mine should be maintained in a way to ensure protection to workers.

Article (81) a - Along the dragging roads there shall be provided a network for giving clear signals to the driver carrying out the dragging activities.

b - If dragging is effected by gravity or if the length of the gradient surface is over (40) meters, a system for giving clear signals between stopping stations should be provided.

c - If carts may get off the line because of the dragging means used, necessary measures should be taken to avoid accidents.

Article (82) If the routes and movements of workers are on the same roads used for transport, such routes should be wide enough to permit easy passage of workers without being subject to dangers of the transportation means.

Article (83) Tunnels or wells connected to abandoned work places shall not be excavated unless adequate measures are taken to ensure the safety of persons working in the areas adjacent thereto.

Article (84) If excavations approached places in which water is collected in a dangerous way, excavations shall be confirmed only after

making sure that such water is not dangerous to the safety of workers.

Article (85) If the power of any machine is more than 40 H.P. it shall be entrusted to a contractor for supervising it. If its power is less, supervision shall be entrusted to a capable person provided that a written approval of the inspector general is obtained.

Article (86) All moving wheels and all exposed parts of the machines used in mining facilities should be enclosed within a tight fence.

Article (87) Electric machinery and wiring shall be installed and maintained in a way to safeguard workers from danger.

Special to Quarries

Article (88) It is absolutely forbidden to open caves or tunnels in quarries for any reason. A quarry in which a cave or tunnel is opened shall be closed unless for the regulations for mines are applied thereto.

Article (89)

a - Walls in quarry shall not be more than (30) meters high. If the need requires that the height of wall be more than that, then the walls should be made in the form of steps or terraces.

b - If the height of any wall in a quarry is more than (10) meters the facades of the walls should be inclined in comparison with the vertical level at an angle not less than ten degrees.

Abrogations

Article (90) The Mining Regulations No. (63) for the year 1964 and the provisions of any regulations in contradiction with the Regulations shall be abrogated.

10/10/1966