

89/1988 Coll.

REGULATION

of the Slovak Mining Institute of 20 May 1988

on rational use of the exclusive deposits and on permission and reporting of mining activity and on reporting of the activity carried out by the mining manner

Amendment: 16/1992 Coll.

The Slovak Mining Institute according to Article 30 par. 7. 32 par. 5 of the Act No. 44/1988 Coll. on the protection and use of mineral resources (the Mining Act) and according to Article 5 par. 4, Article 9 par. 2, Article 10 par. 8, Article 11 par. 3 and Article 13 par. 2 of the Act of Slovak National Council No. 51/1988 Coll. on mining activity, explosives and on the state mining administration stipulates as follows:

THE FIRST PART

EFFECTIVE USE OF EXCLUSIVE DEPOSITS

Article 1

Preparedness of Reserves for Mining

The organisation must propose and reason the division of the reserves by their preparedness for mining in dependence on time, which is necessary for their opening and preparation for mining and on planned reduction of the reserves, in the plan of the opening, preparatory work and mining of the exclusive deposit in order to ensure the smooth mining of the exclusive deposit.

Article 2

Recovery Rate, Dilution and Losses

(1) In mining of the exclusive deposit, it is necessary to use such mining methods that allow to mine the balance reserves of the exclusive deposit 1) with the most possible recovery rate (for the solid raw materials), or yield (for the liquid or gaseous raw materials, as well as for leaching) with the smallest possible losses and dilution, which are also economically reasoned from the technical and universal point of view.

(2) The organisation must propose and reason the mining method in the plan of opening, preparation and mining of the exclusive deposit subsequent recovery rate (yield), dilution and losses.

1) Article 4 par. 2 letter b) of the Act No. 44/1988 Coll. on protection and use of mineral resources (the Mining Act).

Governmental Decree of CSSR (Czechoslovakia) No. 80/1988 Coll. on determination of requirements and classification of reserves of the exclusive deposits and on assessment, approval and state expertises of reserve estimations.

2) abrogated

Article 3

Yield

In preparation and beneficiation of minerals, should they carry out in relation to their mining, it is necessary to use such procedures, which will allow to use the mined minerals in the most complete way, with the most possible yield of their utility components and with the smallest waste, which are economically reasoned from the technical and public interest point of view. The procedure of preparation and beneficiation of the minerals mined and subsequent yield must be included by the organisation in the plan of opening, preparatory work and mining of the exclusive deposit.

Article 4

Finding out Results, their Recording and Utilisation

(1) The organisation must find out and record

- a) in mining of the exclusive deposit, recovery rate (yield), dilution and losses,
- b) in preparation and beneficiation of the minerals mined, the content of their utility components and harmful components in the charge, semiproducts, final products of preparation and beneficiation and also in waste.
- c) in mining activity, the quantity of materials deposited in dumps, stock piles and setting pits (Annex No. 12).

(2) The organisation examines and records, in the appropriate extent, petrographical and mineralogical composition of mined minerals and accompanying rocks, manner and form of their occurrence and mutual relations, content and chemical bonds of both utility and harmful components and their physical-mechanical and chemical-technological properties.

(3) The organisation use the results obtained according paragraphs 1 and 2 in planning and management of opening, preparatory work and mining of the exclusive deposit, as well as in preparation and beneficiation of the minerals mined.

THE SECOND PART

PERMISSION OF MINING ACTIVITY

Article 5

Types of Permits for Mining Activities

The permit of the Subdistrict Mining Office is required for the following mining activities:

- a) for prospecting and exploration of the exclusive deposit by workings, namely by vertical workings, which are deeper than 40 m, or by adits or by deeps of the length exceeding 100 m, or even by shorter workings, should other workings driven from them, whose length together with the above-mentioned workings exceeds 100 m; the permit is also necessary for protection and liquidation of these workings,
- b) for opening, preparatory work and mining of the exclusive deposit, as well as for protection and liquidation of these workings,
- c) for special interventions in the earth's crust including workings for prospecting and exploration used for the above purposes should they correspond by their extent to the dimensions and conditions given under letter a),
- d) for protection of the old workings including their identification, should this identification be implemented using the workings in the extent given under letter a).

Article 6

Application for a Permit of Mining Activities

(1) The application for a permit of mining activities includes

- a) the name and seat of the organisation, which will carry out the mining activity
- b) the type of the mining activity the permit is applied for,
- c) the name and identification number of the cadastral area, 3) and code of the district, 4) or more detail denomination of the place of activity (e.g. plot numbers affected by the planned mining activity),
- d) at the mining activity according to Article 5 letter b), the data on determination of the protection zone of the deposit area and of the mining reservation,
- e) at the mining activity according to Article letter c), the data on determination of the protection zone for special interventions into the earth's crust,
- f) the planned beginning and finishing, or interruption of the mining activity,
- g) the name and seat of the designer of the plan, or of the documentation and the name and seat of the organisation, which will carry out some jobs included in the mining activity for the organisation stated under letter a),
- h) the names and addresses of the participants in permission proceeding. 5)

(2) The organisation shall prepare and present together with the application for permission

- a) for prospecting and exploration of the exclusive deposit by workings: documentation according to Annex No. 1,
- b) for protection and liquidation of workings, which were used for prospecting and exploration of the exclusive deposit: documentation according to Annex No. 2,
- c) for opening, preparatory work and mining of the exclusive deposit
 1. by both underground and surface mining: the plan of opening, preparatory work and mining according to Annex No. 3,
 2. of oil, combustible natural gas and technically usable natural gas: the plan of opening and mining according to Annex No. 4,
 3. by leaching using surface boreholes: the plan of opening, preparatory work and mining of leaching field according to Annex No. 5,
- d) for protection of workings and quarries and for liquidation of the main workings and quarries
 1. at both underground and surface mining: the plan of protection of workings and quarries and of liquidation of the main workings and quarries according to Annex No. 6,
 2. at mining of oil, combustible natural gas and technically usable natural gas: the plan of protection and liquidation of boreholes and wells according to Annex No. 7,
 3. at mining by leaching, using surface boreholes: the plan of protection and liquidation of the leaching field according to Annex No. 8,
- e) for special interventions into the earth's crust: documentation according to Annex No. 9 and 10,
- f) for protection and liquidation of the old workings: the plan of protection and liquidation of the old workings according to Annex No. 11.

(3) The organisation shall attach to the application for permit for mining activity

- a) the documents on solution of conflict of interests, should the mining activity endanger the buildings and interests protected according to special regulations, 6)
- b) the list of exceptions the organisation was permitted for the planned mining activity by the respective authority,
- c) the document on approval of the project documentation according to the special regulation, 7) should the buildings are those, which are permitted by the Subdistrict Mining Office, 8)

d) the document on approval of the procedure according to the special regulation, 9) should the permit be given for prospecting and exploration of the exclusive deposit by workings, or should the permit be given for protection or liquidation of the old workings,

e) results of the exclusive deposit reserves management, 2) should the permit be given for protection and liquidation of the workings and quarries or for the liquidation of the main workings and quarries.

(4) The application for granting the permit for mining activity together with the plan or documentation shall be presented to the Subdistrict Mining Office in two copies.

3) Article 3 of the Regulation of the Federal Statistical Office and the Federal Ministry for Technical and Investment Development No. 120/1979 Coll. on spatial identification of the information.

4) Article 1 of the Regulation of the Federal Statistical Office No. 1793/78-032-918 of 9th June, 1978, which regulates numbering of regions and districts in the CSSR (registered in 25/1978 Coll.).

5) Article 18 of the Act of Slovak National Council No. 51/1988 Coll. on the mining activity, explosives and on the state mining administration.

6) For instance the Act No. 69/1967 Coll. on national committees in wording of the later regulations (complete reading for the Slovak Republic No. 35/1983 Coll.), the Act No. 51/1964 on railways and the Regulation of the Federal Ministry of Transport and of the Central Mining Authority No. 28/1967 Coll., which stipulates the rules for contact with the mining activity, the Act No. 110/1964 Coll. on telecommunications, the Act No. 20/1966 Coll. on care for national health, the Act No. 53/1966 Coll. on protection of the agricultural lands in wording of the Act No. 75/1976 Coll. (complete reading No. 124/1976 Coll.), the Act No. 138/1973 Coll. on waters (the Water Act), the Act No. 61/1977 Coll. on forests, the Act No. 40/1956 Coll. on state protection of nature in wording of the later regulations, the Act of Slovak National Council No. 1/1955 Coll. on state protection of nature in reading of the later regulations, the Act of Slovak National Council No. 27/1987 Coll. on state care of historical monuments.

7) the Regulation of the State Commission on Scientific, Technical and Investment Development No. 5/1987 Coll. on documentation of buildings.

8) Article 23 par. 3 and 4 of the Mining Act.

9) Article 6 of the Act of Slovak National Council No. 52/1988 Coll. on geological jobs and on the Slovak Geological Institute.

Article 7

Plans and Documentation Related to Mining Activities

(1) The details of the plan and documentation must be accommodated to the local conditions. Graphical Annexes are made in such a scale to ensure clear depiction of data and facts; various data and facts may be depicted in one graphical Annex preserving if they are clear.

(2) The documentation or the part thereof, which was made for other purposes according to the special regulations 10) in the scope, which is required by this Regulation, can be used as the plan or as the documentation according to par. 1.

(3) The plan and documentation shall be approved by the manager of the organisation. The plan and documentation and their individual parts must include the date of their making out, the names and signatures of designers and their positions, as well as the names and signatures of the managers, who check the correctness and completeness of the individual parts of the plan and documentation.

10) For instance the Regulation No. 5/1987 Coll..

Article 8

Decision on the Permit for Mining Activity

- (1) The Subdistrict Mining Office shall review during proceeding in permission for mining activity
- a) the completeness of the plan and documentation,
 - b) the solution of nation-wide interests, which are protected according to the special regulations, 6)
 - c) the observance of principles of mining technology at assurance of the rational utilisation of the exclusive deposit.

(2) In its decision on permission of the mining activity, the Subdistrict Mining Office shall determine, if it is necessary, the special technical conditions of the mining activity and decide on objections of the participants in proceeding.

(3) The Subdistrict Mining Office shall send the organisation one verified copy of the plan or documentation together with the decision on permission for the mining activity.

6) For instance the Act No. 69/1967 Coll. on national committees in wording of the later regulations (complete wording for the Slovak Republic No. 35/1983 Coll.), the Act No. 51/1964 on railways and the Regulation of the Federal Ministry of Transport and of the Central Mining Authority No. 28/1967 Coll., which stipulates the rules for contact with the mining activity, the Act No. 110/1964 Coll. on telecommunications, the Act No. 20/1966 Coll. on care for national health, the Act No. 53/1966 Coll. on protection of the agricultural lands in reading of the Act No. 75/1976 Coll. (complete reading No. 124/1976 Coll.), the Act No. 138/1973 Coll. on waters (the Water Act), the Act No. 61/1977 Coll. on forests, the Act No. 40/1956 Coll. on state protection of nature in wording of the later regulations, the Act of Slovak National Council No. 1/1955 Coll. on state protection of nature in wording of the later regulations, the Act of Slovak National Council No. 27/1987 Coll. on state care of historical monuments.

Article 9

Change in permitted mining activity

(1) The organisation may perform any change in the permitted mining activity, if the occupational health and safety management system and safety of operation are not deteriorated and the structures and interests, which are protected according to the special regulations, 6) are not affected over the extent, which is acceptable according to the conditions specified in the decision on permission for mining activity and the utilisation of the reserves of the exclusive deposit or parts thereof is not made more difficult or deteriorated.

(2) In other cases, except those given in par. 1, the organisation must apply for the permit of the Subdistrict Mining Office. The following is considered to be such a change

- a) the use of another mining technology, another driving technology, should this technology be selected for protection of health and safety of labour and another manner of transport at surface mining,
- b) the change in ventilation related to the independent ventilation section as a whole, or to several independent ventilation sections,
- c) the change in design and parameters of safety pillars,
- d) the change in the general overburden face, quarry face and dump slope and the change in the parameters of overburden and haulage levels and dump layers.

(3) The provisions of par. 1 and 2 are also related in a reasonable way to the changes in construction or reconstruction of the mining structures, which are permitted by the Subdistrict Mining Office , 8), or to the changes in the collection centres on the oil deposits and on the natural gas deposits, or in the arrangement of the leaching field.

(4) The provisions of Articles 6 to 8 are also related to the proceeding in the change in the mining activity according to par. 2.

6) For instance the Act No. 69/1967 Coll. on national committees in wording of the later regulations (complete reading for the Slovak Republic No. 35/1983 Coll.), the Act No. 51/1964 on railways and the Regulation of the Federal Ministry of Transport and of the Central Mining Authority No. 28/1967 Coll., which stipulates the rules for contact with the mining activity, the Act No. 110/1964 Coll. on

telecommunications, the Act No. 20/1966 Coll. on care for national health, the Act No. 53/1966 Coll. on protection of the agricultural lands in wording of the Act No. 75/1976 Coll. (complete reading No. 124/1976 Coll.), the Act No. 138/1973 Coll. on waters (the Water Act), the Act No. 61/1977 Coll. on forests, the Act No. 40/1956 Coll. on state protection of nature in wording of the later regulations, the Act of Slovak National Council No. 1/1955 Coll. on state protection of nature in reading of the later regulations, the Act of Slovak National Council No. 27/1987 Coll. on state care of historical monuments.

8) Article 23 par. 3 and 4 of the Mining Act.

THE THIRD PART

REPORTING THE MINING ACTIVITY AND THE ACTIVITY CARRIED OUT BY MINING MANNER AND REPORTING THEIR RESULTS

Article 10

Subject of Reporting

(1) The organisation reports the mining activity and the activity carried out in the mining manner (hereafter the "activity" only) to the Subdistrict Mining Office.

(2) The organisation does not report

- a) boreholes from workings (underground boreholes),
- b) mapping, laboratory and cameral geological jobs.

(3) At the mining activity and the activity carried out by mining manner, which is permitted by the Subdistrict Mining Office, the start, interruption and finish of jobs shall be reported (Article 13 par. 1).

Article 11

Report Contents

(1) The report includes

- a) the name and seat of the organisation that will be carried out the activity,
- b) the type of activity and its identification, which will be used by the organisation on maps and statements,
- c) purpose and scope of the planned activity,
- d) district, community and cadastral area with the detail localisation of the place of activity,
- e) the date of the beginning and planned finish, or interruption of the activity,
- f) the kind and type of the technical equipment used,
- g) the manner and extent of blasting operations, data on their permission,
- h) measures for assurance of health protection and safety of labour and operation safety,
- i) manner of recovery of the adverse effects of the activity.

(2) The map with the place and type of activity marked on it shall be attached to the report.

12) Articles 2 and 3 of the Act of Slovak National Council No. 51/1988 Coll.

Article 12

Manner of Reporting

(1) The following is reported individually

- a) establishment of surface boreholes with their planned depth exceeding 500 m
- b) shaft sinking and pit sinking,
- c) adit and tunnel driving,
- d) driving of other underground workings of the volume exceeding 500 m³,
- e) mining of sands and gravel sands in beds of the rivers using dredgers including preparation and beneficiation of these raw materials in relation to their mining with the exception of removing accumulations of sands and gravel sands during river regulations,
- f) operations, which are necessary for assurance of the stability of underground workings (underground maintenance)
- g) jobs for making the caves accessible,
- h) machine drilling of wells of the depth exceeding 30 m,
- i) pumping of natural healing waters and potable mineral waters from workings.

(2) the other activities shall be reported both individually or collectively according to the cadastral areas or in the form of the annual plan (project) of these jobs, or a part thereof or in the form of the extract from it including the data stated in Article 11.

Article 13

Terms of Reporting

- (1) The organisation must report the beginning of the activity, its interruption lasting more than 30 days and its finishing at least 8 days beforehand.
- (2) The changes in the contents of the report must be notified by the organisation immediately.

Article 13a

Reporting of the results of the mining activity and of the activity carried out by mining manner

(1) The organisation shall present the annual report on the mining activity and on the activity carried out by the mining manner to the Subdistrict Mining Office, 13). The report shall be submitted within 1 month after the end of the calendar year.

(2) The report will include the following results

- a) the results of the activity according to the individual parts of documentation, which was the basis for permission of the mining activity,
- b) the results of mining of the deposits of non-exclusive raw materials according to the individual parts of the plan for utilisation of the deposit.

13) Article 13 of the Act of Slovak National Council No. 51/1988 Coll..

THE FOURTH PART

FINAL PROVISIONS

Article 14

Abrogating Provision

The following regulations are abrogated:

1. the Regulation of the Central Mining Authority No. 261/1957 Coll., by which more detail regulations on the development and approval of the plan of opening, preparatory work and mining are issued, as well as of the plans of protection and liquidation of the main workings and quarries,
2. the Regulation of the Central Mining Authority No. 264/1957 Coll., by which the reporting of the prospecting and exploration activity to the state mining administration is regulated,
3. the Directive of the Central Geological Institute and of the Central Mining Authority of 5th April, 1963 No. 2531/1963, by which the directives and instructions of the Central Geological Institute of 1st July, 1962 No. 9/1962 on prospecting and exploration of deposits of ore materials are annexed (registered in 22/1963 Coll.),
4. the Directive of the Central Mining Authority No. 800/1963 of 28th January, 1963 on the development and approval of the plans of opening and mining of oil deposits and natural gas deposits, as well as of the plans of liquidation or conservation of boreholes and wells (registered in 11/1963 Coll.),
5. the Regulation of the Slovak Mining Institute No. 116/1975 Coll. on reporting of underground and surface workings to the bodies of the state mining administration,
6. the Directive of the Central Mining Authority of 19th July, 1960 No. 1017-Z/1960 on the development and approval of the plans of opening, preparatory work and mining of deposits and the plans of liquidation of the main workings in the section of the Central Administration of Prospecting and Mining of Radioactive Raw Materials.

Article 16

Force

This Regulation has come into force on 1st July 1988, the Regulation No. 16/1992 has come into force on 16th January, 1992.

Chairman:

Ing. Baran, CSc. sign manual

ANNEX No. 1

DOCUMENTATION OF PROSPECTING AND EXPLORATION OF THE EXCLUSIVE DEPOSIT BY WORKINGS

1. The objective of prospecting and exploration; description, purpose, extent and layout of workings and dumps.
2. Assurance of operation by power and water supply, machinery and material; manner and system of hauling.
3. Basic measures for assurance of health protection and safety of labour and operation safety, measures related to the old workings, adjacent mines and quarries, mainly from the point of view of occurrence of explosive gases and dusts, self-ignition, rock, coal and gas burst, water and mud inrush and other dangerous phenomena.
4. Mine water disposal.

5. Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.
6. Measures for observance of the conditions stated in decisions on determination of the protected deposit area and the mining reservation.
7. List of workings, which will reach the surface, or which will be so near the surface that they could affect the surface in adverse manner, including the manner of their inspection.
8. Maps and cross-sections with clear depiction of the facts, which are necessary for evaluation of the data stated in items 1, 2, 3, 4 and 7.

ANNEX No. 2

DOCUMENTATION OF PROTECTION AND LIQUIDATION OF WORKINGS AT PROSPECTING AND EXPLORATION OF THE EXCLUSIVE DEPOSIT BY WORKINGS

1. Reasons for protection or liquidation; in the case of protection, the date of the planned resuming of the activity.
2. The reserves of the exclusive deposit, manner of their protection or mining, or document on their writing-off.
3. The manner of protection or liquidation, or other utilisation of workings, time schedule.
4. Basic measures for assurance of health protection and safety of labour and safety operation, measures related to the old workings, adjacent mines and quarries, mainly from the point of view of occurrence of explosive gases and dusts, self-ignition, rock, coal and gas burst, water and mud inrush and other dangerous phenomena.
5. Mine water disposal.
6. Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.
7. Maps and cross-sections with clear depiction of the facts, which are necessary for evaluation of the data stated in items 1, 2, 3, 4 and 7.

ANNEX No. 3

PLAN OF OPENING, PREPARATORY WORK AND MINING OF THE EXCLUSIVE DEPOSIT BY THE UNDERGROUND AND SURFACE METHOD

1. Text part
 - 1.1 Geology and the exclusive deposit reserves management
 - 1.1.1 A concise geological, stratigraphical, petrographical and hydrogeological characteristic of the exclusive deposit, mainly
 - a) its thickness, strike, dip and tectonics,
 - b) physical-mechanical and technological properties of minerals being mined, the contents of the utility components and harmful components,

c) description of interbeds (intercalations in the deposit), their thickness, physical-mechanical properties, content of utility and harmful components,

d) description of overlaying and basement rocks and soils, their physical-mechanical properties, content of utility and harmful components,

e) occurrence of natural medicinal waters and natural potable mineral waters,

1.1.2 The quantities of reserves of the exclusive deposit in the part of the deposit, which is affected by the plan, and which are declared in the reserve records according to the last status of exploration.

1.1.3 Planned changes in the reserves of the exclusive deposit

a) increase, decrease and transfer of the reserves and their writing-off,

b) recovery rate and dilution,

c) the final quantity of reserves.

1.1.4 Distribution of the reserves according to their preparedness for mining.

1.1.5 The anticipated quantity and quality of the reserves bound in the safety pillars, reasons for their binding and measures for their later mining.

1.1.6 Distribution, quantity and quality of the reserves, whose mining will be made more difficult by the planned opening, preparatory work and mining and measures for their protection or mining.

1.2 Opening, preparatory work or mining

1.2.1 Measures for observance the conditions stated in the decisions on determination of the protected deposit area and mining reservation.

1.2.2 Additional planned exploration.

1.2.3 Methods of opening and preparatory work, their division and chronological and material sequence of operations.

1.2.4 Mining methods, data on their approval, reasoning of their used; special measures at introduction of the new mining methods.

1.2.5 General overburden face, quarry face and parameters of haulage levels and overburden levels; localisation and chronological sequence of operation of dumps and dump piles, their planned capacities and service lives; general slopes of dumps, parameters of the dump layers; measures against slides.

1.2.6 Measures at running the operations near the boundaries of the mining area; the data on workings or planned operations in the adjacent mining area, should the operations be mutually affected and necessary measures.

1.2.7 Methods of excavations of rocks.

1.2.8 Location of mine structures under the surface and of the mine structures, which serve for opening, preparatory work or mining of the exclusive deposit, in quarries and overburdens within the boundaries limited by the line of the really excavated overburden or implemented mining, or in the area exposed to impacts of mining, should the reclaiming of the land fail to be implemented.

1.2.9 Mechanisation and electrification, haulage, water distribution system and material supplying.

1.3 Safety of labour and protection of health and safety of operation, protection of structures and interests, that are protected according to special regulations.

1.3.1 Basic measures against risks of

a) gas and dust explosion,

b) self-ignition and fire in the mine,

c) water and mud inrushes,

d) rock, coal and gas bursts,

e) rock bumps,

- f) ionising radiation,
- g) slides in quarries, on dumps and dump piles,
- h) other dangerous phenomena.

1.3.2 Ventilation of the mine or a part thereof, or ventilation of the independent ventilation sections; air-conditioning equipments, measures for their protection or mining; mine degassing; ventilation of deep quarries.

1.3.3 Drainage

- a) collection and drainage of mine waters,
- b) disposal of mine waters.

1.3.4 Survey of structures and interests protected according to the special regulations, which are affected by the planned activity, manner of observance of the requirements arising from the decisions of the authorities and agreements with the authorities and organisations protecting them.

1.4 Preparation and beneficiation

- a) the manners of transport for preparation and beneficiation,
- b) the components of mined minerals, which will be utilised at preparation and beneficiation,
- c) the quantity and quality of the mineral charge into the process of preparation and beneficiation,
- d) technology of preparation and beneficiation,
- e) yield,
- f) the quantity and quality of the final products of preparation and beneficiation, manners of their storage,
- g) the quantity and quality of waste and its storage,
- h) basic measures against the origin of serious operation accidents (breakdowns).

2. Graphical part

2.1 The map of surface and mine layout and cross-sections in the extent of the planned mining activity at the suitable scale illustrating the facts, which are necessary for evaluation of the data stated in items 1.2 and 1.3.

2.2 The map of block of reserves of the affected area with drawing main tectonic faults, the anticipated decrease and writing-off of reserves.

2.3 The map of the ventilation system at the suitable scale, or in the special projection (e.g. isometric or axonometric one) with drawing safety objects and equipments for air-conditioning; a canonical scheme of ventilation.

2.4 The plan of power distribution system, drainage and degassing equipments.

2.5 Characteristic geological cross-sections and cross-sections with operation horizons (levels, layers).

2.6 Special annexes for mines and quarries with complex geological, hydrogeological and technical conditions (e.g. the mines with risks of rock bumps, water and mud inrush, rock, coal and gas bursts).

ANNEX No. 4

PLAN OF EXPLOITATION OPENING OF OIL, COMBUSTIBLE NATURAL GAS AND TECHNICALLY USABLE NATURAL GAS

1. Text section

1.1 Geological and hydrogeological characteristic of the deposit, its position and characteristic of surrounding rocks.

1.2 The recorded quantity of reserves of the deposit in its part affected by the plan.

- 1.3 Observance of the requirements stated in the decisions on determination of the protected deposit area and the exploitation reservation.
- 1.4 The anticipated number of boreholes and wells, their location, depth and purpose, technical characteristic (design and isolation of boreholes and wells, isolation of individual oil horizons, allowed declinations of boreholes and wells, security of their collars, or measures for protection of another deposit in the exploitation area) and disposal of drill core, drill cuttings and drilling fluid.
- 1.5 Planned quantity of exploitation, time schedule of opening and exploitation.
- 1.6 Power and water supply and technological means.
- 1.7 Deposit exploitation regime and utilisation of deposit energy.
- 1.8 Technical and technological characteristic of the exploitation method.
- 1.9 Characteristic of the collection system and processing of oil and natural gas.
- 1.10 Using of the secondary and further exploitation methods.
- 1.11 Basic measures against risks of
 - a) the origin and impacts of oil and natural gas explosions,
 - b) explosion and fire,
 - c) other dangerous phenomena.
- 1.12 Survey of structures and interests protected according to the special regulations, which are affected by the planned activity, manner of observance of the requirements arising from the decisions of the authorities and agreements with the authorities and organisations protecting them.

2. Graphical section

- 2.1 Structural maps of productive horizons with boundaries of oil-bearing and gas-bearing horizons and their anticipated changes as a result of their exploitation.
- 2.2 The map of surface layout at the suitable scale with boundaries of the protected deposit area and of the exploitation reservation, the map of reserves affected by the plan with marking of the previous and planned boreholes and probes and surface facilities.
- 2.3 Characteristic cross-sections through the deposit.

ANNEX No. 5

PLAN OF PREPARATORY WORK, OPENING AND EXPLOITATION OF THE LEACHING FIELD

1. Text section

- 1.1 Geological and hydrogeological characteristic of the deposit, its position and characteristic of surrounding rocks.
- 1.2 The quantity and verification of reserves, their preparedness for exploitation and division by their quality, division of the deposit to leaching fields.
- 1.3 Observance of the requirements stated in the decisions on determination of the deposit area and of the exploitation reservation.
- 1.4 Exploitation method used
 - 1.4.1 Technical and technological characteristic of the exploitation process including processing of leaching.
 - 1.4.2 Layout of the network of input wells and pumping wells, their diameter and depth, working regime, distribution of leaching solutions and drainage of leach, layout and procedure of processing of leach.

1.4.3 Method of drilling wells, namely technology of drilling, design of wells including casing and isolation, isolation of individual horizons, control casings of well collars and manner of wells control, as well as disposal of drill core, drill cutting and drilling fluid.

1.5 Measures for protection of surface and underground waters affecting by leaching with the draft network of control monitoring wells.

1.6 Operations time schedule and planned volume of leaches.

1.7 Power, water, technological means and material supply.

1.8 Basic measures to assure safety of labour and protection of health and safety of operations, mainly at work with chemicals, against explosion of gases and vapours, at operation of compressed air equipments, working machines, electrical equipments and for protection against ionising radiation.

1.9 Measures for monitoring of impacts of the mining activity on the surface.

1.10 The manner of observance of the requirements arising from the decisions of the authorities and agreements with the authorities and organisations that protects objects and interests according to the special regulations.

2. Graphical section

2.1 The map of the surface layout at the suitable scale with marking of the protected deposit area, exploitation reservation, individual leaching fields, protected objects and interests (protected areas, protection zones), or monitoring points for monitoring of influences on the surface.

2.2 The map of reserves with marked out probes.

2.3 The map of hydrogeological conditions with marked out monitoring wells and pumping stations and with the anticipated course of isolines in individual horizons, or isopiestic lines or artesian waters.

2.4 Characteristic geological or hydrogeological cross-sections through the deposit with marked out levels in individual horizons.

ANNEX 6

PLAN OF PROTECTION OF WORKINGS AND QUARRIES AND LIQUIDATION OF MAIN WORKINGS AND QUARRIES

1. Text section

1.1 Reasons for protection or liquidation.

1.2 A concise summary of the results of the geological jobs, opening, preparatory work and mining in the affected part of the deposit, as well as of preparation and beneficiation of the minerals being mined shall be given in the plan of liquidation.

1.3 A concise summary of management of reserves in the affected part of the deposit shall be given in the plan of liquidation (it will not be presented, if there is the approved reserve estimation of the exclusive deposit with finishing mining).

1.3.1 The quantity of reserves according to the last approved reserves estimation.

1.3.2 Changes in the quantity of reserves from the last approved reserve estimation (by exploitation, losses, writing-offs and by the other changes).

1.3.3 The reserves, which have not been mined, including the reserves in protection pillars and the method of their possible mining.

1.3.4 The reserves outside the boundaries of the mining area, their protection and possibility of their utilisation.

1.4 The manner of protection of workings and quarries, or liquidation of the main workings and quarries.

1.4.1 Measures taken to avoid their adverse impacts on the surface.

- 1.4.2 Reclaiming quarry faces and quarry bottoms, reclaiming dumps.
- 1.4.3 Manner of inspection of the protected or liquidated workings or quarries and surface facilities.
- 1.5 Basic measures for assurance of health protection and safety of labour and safety operation, measures related to the old workings, adjacent mines and quarries, mainly from the point of view of occurrence of explosive gases and dusts, self-ignition, rock, coal and gas bursts, water and mud inrushes and other dangerous phenomena.
- 1.6 Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.
- 1.7 A time schedule for protection or liquidation operations.
- 1.8 Any possible utilisation of workings, quarries, facilities and buildings for other purposes.
- 1.9 Mine waters disposal.
- 2. Graphical section
 - 2.1 A map of the surface at suitable scale with marked out protected deposit area and mining area, facilities and buildings on the surface and of the areas with anticipated manifestations of adverse effects.
 - 2.2 A mining map of the affected part of the deposit at suitable scale with the marked out time schedule and manner of protection or liquidation.
 - 2.3 Characteristic cross sections through the affected area.

ANNEX No. 7

PLAN OF PROTECTION AND LIQUIDATION OF BOREHOLES AND PROBES

- 1. Text section
 - 1.1 Reasoning of protection or liquidation of a group of boreholes or probes in the affected part of the deposit, manner of protection or liquidation, their safety implementation.
 - 1.2 Location and technical parameters of boreholes and probes.
 - 1.3 Evaluation of the deposit reserves utilisation in the affected part of the deposit, technological losses, non-mined reserves including the used methods of intensification, or a possibility to use secondary mining methods.
 - 1.4 Other exclusive deposits protected by boreholes in the affected part of the mining area and manner of their protection.
 - 1.5 Pressure and hydrodynamic conditions in the affected part of the deposit.
 - 1.6 Technical condition of boreholes and probes designed for protection or liquidation, mainly from the point of view of the isolation of individual horizons.
 - 1.7 Evaluation of results of pumping tests of exploitation opening and of exploitation.
 - 1.8 Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.
 - 1.9 Measures given in the plan of provisions to resume exploitation
 - 1.10 Possible utilisation of boreholes and probes, facilities and buildings for other purposes.
 - 1.11 Manner of subsequent checks of the protected boreholes and probes.
 - 1.12 Basic measures to secure health protection and safety and safety as well as of safety of operation.
- 2. Graphical section
 - 2.1 Structural maps with marked out facts, which are necessary for evaluation of the data stated in items 1.2 and 1.3 and the data on other exclusive deposits.

2.2 Geological and technical profiles through boreholes and probes in the parts affected by protection or liquidation and marking out the manner of their protection or liquidation.

2.3 Characteristic cross sections through the deposit with drawing the facts stated in item 2.1.

ANNEX No. 8

PLAN OF PROTECTION AND LIQUIDATION OF LEACHING FIELD

1. Text section

1.1 Reasoning of protection or liquidation of the leaching field; in the case of liquidation, evaluation of results of exploitation and management of reserves in the leaching field (it will not be presented, if there is the approved reserve estimation of the exclusive deposit with finishing mining).

1.2 Evaluation of impact of protection or liquidation to the adjacent or other leaching fields.

1.3 Manner of protection or liquidation of the leaching field (manner of neutralisation of leaching solutions residues in the exploited horizon, isolation of individual horizons, prevention of pressure water to flow out, or water with residues of solution to be discharged into underground and surface waters, plugging of boreholes and protection of their collars).

1.4 Time schedule of individual protection or liquidation operations.

1.5 Other exclusive deposits in the leaching field, measures for their use and a manner of their protection.

1.6 Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.

1.7 Basic measures for assurance of protection of health and safety of labour and safety of operation at protection and liquidation operations.

1.8 A possible use of boreholes, facilities and buildings for other purposes.

1.9 Measures for resuming exploitation given in the plan of protection.

1.10 Manners and frequency of checks in the case of further inevitable monitoring of the development of hydrogeological conditions in the deposit and in accompanying rocks.

1.11 A manner of cavities detection, which were formed by leaching or in relation to it and surveying of their shape and volume together with the proposal of possible measures for the protection of the surface facilities and interests.

2. Graphical section

2.1 A map at suitable scale with marking out facts, which are necessary for evaluation of the data stated in items 1.1, 1.2 and 1.11.

2.2 A map of the actual and resulting hydrogeological and hydromechanical conditions in leached fields.

2.3 Characteristic cross sections through the deposit with marking out the facts stated in items 2.1 and 2.2.

ANNEX No. 9

DOCUMENTATION OF SPECIAL INTERVENTIONS INTO THE EARTH'S CRUST

1. Text section.

1.1 Purpose of the special intervention into the earth's crust.

1.2 Evaluation of exploration jobs and assessment of suitability of the given territory and its geological structure for utilisation for planned purpose.

1.3 Observance of the requirements arising from the decisions on determination of the protected area designed for special interventions into the earth's crust.

- 1.4 Description, scope, division and time schedule of the planned operations.
- 1.5 The capacity of the natural rock structure, or underground spaces determined for utilisation.
- 1.6 Anticipation of adverse impacts of special interventions into the earth's crust on the surface and underground facilities, mainly impacts making the exploitation of deposits and measures for their protection more difficult or even impossible.
- 1.7 Basic measures for protection of health and safety of labour, mainly
- a) measures against leakage and burst of gases and liquids,
 - b) measures against fire and explosion,
 - c) manner of sealing workings at storage of radioactive and other waste,
 - d) determination of points and frequencies of measurement of possible leakage of harmful substances from the place of their storage.
- 1.8 Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.
2. Graphical section
- 2.1 A map of surface layout at suitable scale with marking out protected area designed for special interventions into the earth's crust, surface facilities, which are necessary for special interventions into the earth's crust and facts stated in items 1.6 and 1.8.
- 2.2 A mining map, or structural maps with marking out workings and facts, which are necessary for evaluation of the data stated in items 1.4 and 1.5.
- 2.3 Characteristic cross sections through the affected area with marking out the facts stated in items 2.1 and 2.2.

ANNEX No. 10

DOCUMENTATION OF PROTECTION AND LIQUIDATION OF SPECIAL INTERVENTIONS INTO THE EARTH'S CRUST

1. Text section
- 1.1 Reasoning of protection or liquidation of workings.
- 1.2 Assessment of utilisation of workings and facilities for other purposes.
- 1.3 Description, division, extent and time schedule of the planned operations.
- 1.4 Basic measures for protection of health and safety of labour.
- 1.5 Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.
2. Graphical section
- 2.1 A map of surface layout at suitable scale with marking out protected area designed for special interventions into the earth's crust, surface facilities, which are necessary for special interventions into the earth's crust and facts stated in item 1.5.
- 2.2 A mining map, or structural maps with markings of workings and facts, that are necessary for the evaluation of data given in items 1.4 and 1.5.
- 2.3 Characteristic cross sections through the affected area with marking out the facts given in items 2.1 and 2.2.

ANNEX No. 11

PLAN OF PROTECTION AND LIQUIDATION OF OLD WORKINGS

1. Text section.

1.1 Description of old workings and assessment of adverse impacts on the surface; facilities and buildings on the surface.

1.2 Manner of protection or liquidation of old workings; time schedule of the planned operations.

1.3 Basic measures for assurance of health protection and safety of labour and safety operation, measures related to the old workings, adjacent mines and quarries, mainly from the point of view of occurrence of explosive gases and dusts, self-ignition, rock, coal and gas bursts, water and mud inrushes and other dangerous phenomena.

1.4 Manner of observance of the requirements arising from the decision of authorities and agreements with the organisations that protect the structures and interests according to the special regulations.

2. Graphical section

2.1 A map of surface layout at suitable scale marking out facts and data stated in items 1.1 and 1.2.

2.2 Characteristic cross sections through the affected area marking out facts and data stated in item 2.1.

2.3 Drawing documentation of manner of protection or liquidation of the old workings.

ANNEX No. 12

REQUIREMENTS OF RECORDS ON DUMPS, DUMP PILES AND SETTING PITS AND OF THE STATEMENT ON THE QUANTITY AND TYPES OF DEPOSITED MATERIALS

1. The name of the organisation.

2. The name of the cadastral area.

3. Numbers of plots and their area.

4. Data on the person, who permitted the dump, dump pile or setting pit and data on the respective decisions.

5. The year of beginning and the planned year of finishing operations.

6. The data on the volume and type of deposited materials and on the free capacity by individual years.

7. Manner of observance of the requirements arising from the decision that protect the environment, structures and interests according to special regulations, or from agreements with both natural persons and legal entities.

8. Maps.