

Document from CIS Legislation database © 2003-2025 SojuzPravoInform LLC

The document ceased to be valid since March 28, 2018 according to Item 1 of the Order of the Government of the Republic of Kazakhstan of March 27, 2018 No. 139

## ORDER OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN

of August 5, 2014 No. 906

### **About approval of requirements for safety of objects of gas supply systems**

According to the subitem 16) of article 5 of the Law of the Republic of Kazakhstan of January 9, 2012 "About gas and gas supply" the Government of the Republic of Kazakhstan DECIDES:

1. Approve the enclosed requirements for safety of objects of gas supply systems.
2. This resolution becomes effective after six months from the date of its first official publication.

*Prime Minister of the Republic of Kazakhstan  
K. Masimov*

Approved by the Order of the Government of the Republic of Kazakhstan of August 5, 2014 No.  
906

### **Requirements for safety of objects of gas supply systems**

#### **1. General provisions Area and procedure for application**

1. These requirements establish requirements to designing, construction and operation of gas supply systems natural gases with the excessive pressure of no more 1,2 of MPa (12 kgfs / sq. cm) and the liquefied oil gases (further - the CIS) with the excessive pressure of no more 1,6 of MPa (16 kgfs / sq. cm) used in fuel quality.

2. Requirements extend on:

1) gas pipelines of the cities, settlements and rural settlements (including inter-settlement), industrial, agricultural and other enterprises (further the companies - the legal entities or physical persons which are owners of objects of gas supply system);

2) gas control Items (further - GRP) and gas control installations (further - GRU);

3) gas-filling stations (further - GNS), gas-filling Items (further - GNP), intermediate storages of cylinders (further - PSB), cupboard gas control Item (ShRP), stationary automobile gas-filling stations (further - AGZS), reservoir, group and individual balloon installations of the liquefied gases;

4) the gas supplying companies (organizations) - the gas-distributing or gas-network organizations enabling retail sale of the commodity or liquefied oil gas, and also operation of gas supply systems;

## 5) internal gas pipelines and gas equipment of buildings of all appointments.

### Terms and determinations

3. In these requirements the following terms and determinations are used:

1) accident - destruction of the buildings, constructions and (or) technical devices used on hazardous production facility, uncontrollable explosion and (or) emission of dangerous substances;

2) incident - refusal or damage of the technical devices used on hazardous production facility, variation from the mode of engineering procedure, violation of the law of the Republic of Kazakhstan;

3) antiemergency protection - the device of emergency shutdown of gas;

4) blocking - the device providing possibility of prohibition of start-up of gas or turning on of the aggregate in case of violation by personnel of safety requirements;

5) the gas-using equipment (installations) - the equipment in which engineering procedure in fuel quality gas is used, (as the gas-using equipment coppers, turbines, furnaces, gas-piston engines, processing lines and other equipment can be used);

6) gas dangerous works - the works performed in the gas-polluted circle or in case of which gas discharge is possible;

7) gas coppers - the coppers intended for combustion only of commodity gases;

8) the gas pipeline input - the gas pipeline from the place of accession to the gas distribution pipeline to the disconnecting device or case in case of input to the building;

9) GRP, GRU - the technology device intended for pressure decrease of gas and its maintenance at the set levels in gas distribution networks;

10) gas control Item block - the technology device of complete factory readiness in transportable block execution (container) intended for pressure decrease of gas and its maintenance at the set levels in gas distribution networks;

11) air-gas path - system of air ducts and smoke (gas) of wires, including intra furnace space of gas-using installation;

12) gas consumption object - the production and technology system including the network of internal gas pipelines, the gas equipment and gas-using installations, system of automatic equipment of safety, blocking, the alarm system, regulation and process control of combustion of gas, the building and construction placed in one production territory;

13) gas supply system objects - gas pipelines, GRU, installations of the CIS, construction on gas pipelines, remedies from electrochemical corrosion, GRP, gas control installations, the gas-equipment of the installed gas factory and administrative and household buildings placed in the territory of the company;

14) dangerous concentration of gas - concentration (volume fraction of gas), equal 20% of lower limit of explosibility of gas;

15) diagnostics - complex of the organizational and technical actions intended for determination of technical condition of gas pipelines, the gas equipment (technical devices) for the purpose of determination of residual resource with development of the recommendations providing its safe operation on all renewal term of lifecycle or reasons for need of replacement;

16) adjustment works - complex of organizational and technical actions for preparation of the equipment, systems and communications to accomplishment of the technology transactions providing production process in the set amounts, required quality with optimum technical and economic indicators in case of reliable and safe operation. Adjustment works include commissioning (individual testing and complex approbation of the equipment) and regime and adjustment testing;

17) connecting details (fitting) - the gas pipeline elements intended for change of its direction, accession, branches, connection of sites;

18) settlement pressure - the maximum excessive pressure in the gas pipeline on which calculation on durability in case of reasons for the main sizes providing reliable operation during settlement resource is made;

19) settlement resource of operation - total operating time of object from the beginning of its operation or its renewal after repair before transition to limiting condition;

20) settlement service life - calendar duration from the beginning of operation of object or its renewal after repair before transition to limiting condition;

21) repair - complex of transactions with development, recovery or replacement of details or nodes after which accomplishment operability and fail-safety of gas pipelines and the gas equipment on the subsequent useful life are guaranteed;

22) gas economy of the company - gas pipelines, installations of the CIS, construction on gas pipelines, remedies from electrochemical corrosion, GRP, GRU, the gas-equipment of the installed gas factory and administrative and household buildings placed in the territory of the company;

23) intersettlement gas pipeline - the gas pipeline of gas-distribution system laid out of the territory of the cities and settlements;

24) the household companies - schools, hospitals, dining rooms, factories, kitchens, hairdressing salons, etc. where the gas equipment is operated;

25) conservation regime, the repair mode - the mode in case of which pipeline installations are exempted from gas are disconnected with installation of cap;

26) the specialized organization - the organization, which core activity - performance of works, connected with designing, construction and operation of gas supply system;

27) the reserve mode - the condition of gas-using installation in case of which gas is not burned and excessive pressure in gas pipelines is absent (shutoff valves on withdrawal of the gas pipeline to installation are fixed in provision "is closed");

28) the outside gas pipeline - the underground, land and elevated gas pipeline laid out of buildings to the disconnecting device or to case in case of input to the building;

29) the object using the liquefied oil gases (LOG) - the subject to production and household appointment providing storage and (or) realization of the CIS, and also its use in fuel quality on hazardous production facilities;

30) the liquefied oil gas - the mix of light hydrocarbons (propane - butane fraction, propane, butane) transformed to liquid state for the purpose of transportation and storage;

31) the alarm system - the device providing giving of sound and light signal in case of achievement of the prevented value of controlled parameter;

32) SKZ - signaling device of control of gas contamination - the device providing giving of sound and light signals, and also automatic shutdown of supply of gas in the internal gas pipeline of network of gas consumption in case of achievement of the established level of controlled concentration of gas in room air;

33) the gas distribution pipeline - the gas pipeline of gas-distribution system providing supply of commodity gas from gas supply source to gas pipelines inputs to consumers of gas;

34) system of maintenance and repair - set of the interconnected means, materials, documentation and the contractors necessary for the prevention of defects in gas supply systems;

35) maintenance - complex of transactions or transaction on maintenance of operability of products (technical devices) in case of operation of objects of gas-distribution system and gas consumption;

Limiting 36) condition - condition of object in case of which its further operation is inadmissible or inexpedient or recovery of its operating state is impossible or inexpedient on the signs established by design (project) documentation and (or) technical regulatory legal acts;

37) cupboard gas control Item - the technology device in cupboard execution intended for pressure decrease of gas and its maintenance at the set levels in gas distribution networks.

#### Organization of control of observance of regulations of requirements

4. Control of observance of these requirements in design process, constructions, repair and reconstruction, commissioning and operation, conclusion from operation, preservation and (or) liquidation of gas-distribution system and gas consumption is performed by the organization performing the called works.

The provision (instruction) on the organization and carrying out production supervision is developed and affirms as each organization (object) the head.

5. The state control of observance of requirements on subjects to housing appointment is exercised by local executive bodies.

6. Production control over observance of requirements is exercised by owners of objects.

## 2. Operation of gas supply systems General requirements

7. At each company the complex of actions, including system of maintenance and repair, providing content of objects of gas-distribution system and gas consumption in good repair and observance of regulations of these requirements for safety of operation of gas pipelines, the

equipment and gas-consuming aggregates is carried out. Ensuring accomplishment of complex of actions is assigned to the first director.

8. The procedure for the organization and work is determined by maintenance and repair of gas supply system by these requirements and technical regulatory legal acts.

9. Maintenance and repair of objects of gas supply system are carried out in amount and the terms established by these requirements and the specifications and technical documentation of the equipment and aggregates.

10. Schedules of maintenance and repair of objects of gas supply system affirm the head of the company owner or company performing the specified works on the agreement.

11. Job, production descriptions and instructions for safe works are developed for persons occupied with technical operation of gas supply system. For working at fire-dangerous sites - instructions on fire safety.

12. The job description determines the rights and obligations of heads and specialists.

13. The production instruction contains requirements for the technical sequence of accomplishment of different transactions, methods and amounts of quality check of the performed works.

Technology schemes with designation of installation sites of shutoff valves and instrumentations are attached to the maintenance manual and repair of the equipment of GRP, gas control installations, GNS, AGZS and boiler rooms.

The production instruction and the technology scheme are reviewed and pereutverzhdatya after reconstruction, modernization and change of engineering procedure before turning on of the equipment in work.

14. The company stores project and performing documentation on the gas pipelines and the installed gas objects which are in operation.

Transfer on storage of the specified documents to the third (operating) parties is allowed only in case of accomplishment of maintenance and repair by them based on terms of the contract.

15. On each outside gas pipeline, electroprotective, reservoir and group balloon installation, GRP (gas control installations), GNS (GNS, AGZS) is constituted the operational passport containing the main technical characteristics, and also data on the made repairs.

16. On flywheels of armature the direction of rotation when opening and closing armature is designated.

17. On gas pipelines of boiler rooms, GNP (gas control installations), GNS (GNP), AGZS are specified the directions of movement of flow of gas.

#### Organization of maintenance and repair of objects of gas supply system

18. At each company the order (order) of its executive body from among the heads or specialists who underwent in accordance with the established procedure examination, acting in the territory of RK of the legislation in the field of industrial safety and these requirements designates person responsible for safe operation of objects of gas supply system.

In the organizations carried to household consumers and also at the companies in which staff the position of the division manager or specialist with technical education is not provided control of safe operation of gas supply system is exercised by the worker who had training according to requirements of the Law of the Republic of Kazakhstan "About industrial safety on hazardous production facilities".

19. In the organizations on person responsible for safe operation of gas supply system of the company, the job description in which are provided is developed:

1) providing the safe mode of gas supply;

2) participation in approval of projects of gas supply and work of the commissions on acceptance of gasifiable objects in operation;

3) development of instructions, the plan of localization and accident elimination in gas economy;

4) participation in the commissions on examination of rules, regulations and instructions on gas economy by employees of the company;

5) check of observance of the procedure for the admission of specialists and workers established by these requirements to independent work;

6) carrying out regular control of safe operation and repair of gas pipelines and gas equipment;

7) check of correctness of maintaining technical documentation in case of operation and repair;

8) assistance in work to persons responsible for safe operation of gas supply system of workshops (sites);

9) development of actions plans and programs for replacement and upgrade of the obsolete equipment;

10) participation in holding antiemergency trainings with specialists and workers;

11) participation in the examinations conducted by state control body.

20. Person responsible for safe operation of gas supply system of the company carries out work on:

1) to implementation of communication with the gas supplying organization, and also the companies performing works on maintenance and repair on the agreement;

2) to discharge from the servicing of the gas equipment and accomplishment of gas dangerous works of persons which did not undergo examination or showed unsatisfactory knowledge of rules, regulations and instructions;

3) to provision to management of offers on accountability of persons breaking regulations of requirements;

4) to non-admission of commissioning of the gas-consuming installations which are not answering to regulations of these requirements;

5) to suspension of operation of the gas pipelines and the gas equipment dangerous in case of further operation, and also self-willedally entered into work;

- 6) to matching of persons responsible for safe operation of gas supply system of workshops, specialists and workers of gas service;
- 7) to issue to heads of workshops of gas service of instructions for elimination of violations of regulations of requirements, obligatory for execution.

21. Maintenance and repair of gas pipelines and the gas equipment of apartment houses, schools, hospitals, public and office buildings, household consumers in the cities, settlements and rural settlements are performed by the organizations certified in the field of industrial safety according to requirements of regulatory legal acts in the field of industrial safety.

22. Operation of gas supply system of industrial, utility and agricultural enterprises is provided with their owner or the certified organization for the agreement.

23. At the company operating gas supply system by own efforts the gas service is organized.

24. Tasks of gas service, structure and its number (depending on amount and complexity of object gas supply systems) are installed by the Regulations on gas service approved by the director and approved with territorial subdivision of authorized body.

25. The administration of the company provides gas service with accommodation with telephone communication, individual protection equipment, tools and devices.

26. Identification and liquidation of korrozionnoopasny zones on underground steel gas pipelines and reservoirs of the liquefied gas, maintenance and repair of installations of electrochemical protection are performed by the gas supplying companies or the organizations specializing in performance of works on protection of underground metal constructions and communications against corrosion. Accomplishment of the specified works by the company owner of gas pipelines in the presence at it the services of protection against corrosion staffed by the prepared personnel, and also equipped with necessary devices, mechanisms is allowed.

27. Transfer of works on maintenance and repair by the company owner to the gas supplying company is drawn up by the agreement.

In the agreement borders and amounts of works are accurately determined by maintenance and repair, obligations of the parties in providing conditions of safe operation of objects of gas supply system are regulated.

#### Outside gas pipelines and constructions

28. Control of gas pressure in networks of the city and settlement is performed by measurement in different points at least two times a year (during the summer and winter periods) in hours of the maximum gas consumption.

29. Verification of presence of moisture and condensate in gas pipelines, their removal are carried out with the frequency excluding possibility of formation of obstruction.

Review frequency is determined by the company of gas economy.

30. The shutoff valves and compensators established on gas pipelines are exposed to annual maintenance, and if necessary - to repair. Data on replacement of latches, cranes, compensators, and also the works performed in case of capital repairs are entered in the passport of the gas pipeline.

31. The gas pipelines which are in operation under systematic observation are exposed to checks of technical condition, routine maintenance and overhaul repairs.

32. Technical condition of outside gas pipelines and constructions is controlled by periodic bypass.

33. In case of bypass of elevated gas pipelines come to light and timely are eliminated:

1) gas leakage;

2) movement of gas pipelines out of limits of support;

3) availability of vibration, flattening, inadmissible deflection of the gas pipeline, sag, bend and damage of support;

4) defects of the disconnecting devices and the isolating flange connections, remedies from fall of electrical wires, fixtures and coloring of gas pipelines;

5) defects of devices of electrochemical protection and dimensional signs on transitions, in places of journey of motor transport.

The bypass is carried out at least 1 time in three months.

34. In case of bypass of underground gas pipelines:

1) trasses of gas pipelines are inspected and gas leakages on external signs come to light, all wells and control tubes, and also wells and cameras of other underground communications, cellars of buildings, the mines, collectors, underground passages located at distance to 15 m on both sides from the gas pipeline are controlled by gas analyzer or the gas-indicator safety, condition of wall indexes and reference points of gas constructions are checked;

2) covers of gas wells and covers are cleared of snow, ice and pollution, the area condition on the pipeline route for the purpose of identification of collapse of soil, washout is inspected by its thawed or rain snow, the conditions of production of construction works providing safety of the gas pipeline at distance of 15 m in both parties and exception of its damage are controlled.

35. In case of detection of gas contamination of constructions on the pipeline route or gas leakages:

1) the emergency and dispatching service and management of service is immediately informed;

2) measures for the prevention of surrounding people (residents of the house, passersby) about gas contamination and inadmissibility of use of naked flame, use of electric devices and need of airing of rooms are taken;

3) are organized check by devices and airing of gas-polluted cellars, socle and first floors of buildings, wells and cameras of underground constructions (communications) in 15-meter and 50-meter zone.

36. Frequency of bypass of routes of underground gas pipelines is established depending on their technical condition, availability and efficiency of electroprotective installations, category of the gas pipeline on pressure, puchinistost, prosadochnost and extent of swelling of soil, seismicity of the area, relief and density of its building, season and other factors, but at least the terms specified in table 1.

Table 1

Gas pipelines	Low pressure in the built-up part of settlements	High and average pressure in the built-up part of settlements	All pressure in vacant part of settlements, and also inter-settlement
1. Again constructed gas pipelines	Directly in day of commissioning and next day		
2. The steel gas pipelines operated up to 40 years in the absence of accidents and incidents	It is established by the technical lead of the gas-distributing organization, but at least:		
	Once a month	2 times a month	1 time in 6 months in case of annual instrument inspection or time in 2 months without its carrying out
2.1. The polyethylene gas pipelines operated up to 50 years in the absence of accidents and incidents	1 time in 3 months	1 time in 3 months	1 time in 6 months
3. Steel gas pipelines after reconstruction by method of broach of polyethylene pipes or recovery by synthetic fabric sleeve	It is established by the technical lead of the gas-distributing organization, but at least:		
	1 time in 3 months	1 time in 3 months	at least 1 time in 6 months
4. The steel gas pipelines operated in the action area of sources of the wandering currents in soil with height corrosion aggression and unsecured the minimum protective electric potential	Once a week	2 times a week	1 time in 2 weeks
5. Steel gas pipelines with not eliminated defects of protective coatings	Once a week	2 times a week	1 time in 2 weeks
6. Steel gas pipelines with positive and sign-variable values of electric potentials	Daily	Daily	2 times a week
7. The gas pipelines in unsatisfactory technical condition which are subject to replacement	Daily	Daily	2 times a week
8. The gas pipelines laid in collapsible soil	Once a week	2 times a week	1 every two weeks
9. Gas pipelines with temporarily eliminated gas leakage (bandage, bandage)	Daily, before carrying out repair		
10. Gas pipelines in zone of 15 m from production site of construction works	Daily, before elimination of threat of damage of the gas pipeline		

11. Coastal sites of gas pipelines in places of transitions through water barriers and ravines	Daily in the period of flood		
12. The steel gas pipelines operated after 40 years in case of positive results of diagnostics	Once a month	2 times a month	1 time in 6 months in case of annual instrument inspection or 1 time in 2 months without its carrying out
13. The polyethylene gas pipelines operated after 50 years in case of positive results of diagnostics	1 time in 3 months	1 time in 3 months	1 time in 6 months
14. The steel gas pipelines after 40 years in case of negative results of diagnostics appointed to turn or reconstruction	daily	daily	2 times a week
15. The polyethylene gas pipelines after 50 years in case of negative results of diagnostics appointed to turn	daily	daily	2 times a week

37. The bypass of routes of underground gas pipelines is made by crew as a part of at least two people. Bypass of routes of gas pipelines in vacant part of the city (settlement), and also out of the carriageway of roads in case of absence in 15-meter zone from gas pipelines of wells, other underground communications it is allowed to make one worker.

38. The worker-inspectors of underground gas pipelines are handed on receipt route cards on which schemes of routes of gas pipelines with location of gas constructions, cellars of buildings and wells of other communications which are subject to check on gas contamination are specified. Route cards are specified. Before the admission to the first bypass workers examine the pipeline route on the area.

39. Results of bypass of gas pipelines are reflected in the special magazine according to appendix 28 to these requirements. The revealed defects are reflected in the official report.

40. In the territory of the company along the route of the underground gas pipeline on both sides are allocated with strip 2 m wide within which warehousing of materials and the equipment is not allowed.

41. Heads of the organization in the territory of which the gas pipeline is laid by transit provide access for personnel of the gas-distributing organization for carrying out bypass, maintenance and repair of the gas pipeline, localization and liquidation of emergencies.

42. Owners of the adjacent underground communications laid in radius of 50 m from the gas pipeline provide timely cleaning of covers of wells and cameras of pollution, snow and frost for their check on gas contamination.

43. Owners of buildings or municipal services provide operability of consolidation of inputs of underground engineering communications, contain cellars and technical undergrounds in the condition providing possibility of their permanent airing and check on gas contamination.

44. The underground gas pipelines which are in operation are exposed to technical inspection by means of special devices.

45. Technical inspection of steel underground gas pipelines is made at duration of operation them up to 25 years at least once in five years, lasting operation more than 25 years - at least once in three years. The gas pipelines included in the plan of overhaul or replacement with idle electrochemical protection, are inspected at least once a year.

46. Extraordinary comprehensive instrument examination of steel gas pipelines is conducted in case of detection of leakage or gap of welded joints, end-to-end corrosion damages, and also in case of work stoppages of electroprotective installations within year:

- 1) more than 1 month - in zones of dangerous action of the wandering currents;
- 2) more than 6 months - in zones of lack of the wandering currents if protection of the gas pipeline is not provided with other installations.

The corrosion condition of metal and insulating covering of pipe is determined in all holes which are torn off in use the gas pipeline or constructions, adjacent to it.

47. For the purpose of safe operation of gas supply systems owners or municipal services in case of technical inspection of underground steel gas pipelines check:

- 1) hermeticity of pipelines;
- 2) quality of welded joints;
- 3) exposure of corrosion danger;
- 4) condition of protective coating and metal of pipes.

48. Survey of steel underground gas pipelines for the purpose of determination of condition of protective coating of metal of pipe (by opening on gas pipelines of control holes length m 1,5 suffices) is carried out not only in places of identification of damages of coverings, and also on sites where use of devices is complicated by industrial radio noises.

Places of opening of control holes, their quantity in zones of industrial radio noises are determined by the chief engineer of the company of gas supply system or the chief of gas service. For visual inspection the sites subject of the greatest corrosion danger, the place of crossing of gas pipelines with other underground communications, kondensatosbornik, hydrolocks are chosen. At the same time on each 500 m of gas distribution pipelines and on each 200 m of gas pipelines inputs at least one hole is opened.

49. Check of hermeticity and detection of places of leakages of gas from underground gas pipelines during frost penetration in soil, and also on the sites located under advanced pavings are made by well-drilling with the subsequent sampling by the gas-indicator.

On the gas distribution pipeline of well are drilled at gas pipeline joints. In the absence of the scheme of arrangement of joints, and also on gas pipelines inputs of well are drilled through each 2 m. In winter time depth is drilled at least depth of frost penetration in soil, in the rest of the time - corresponds to depth of stacking of tube. Wells are pledged at distance of at least 0,5 of m from gas pipeline wall.

When using highly sensitive gas-indicators for determination of gas it is allowed to reduce depth of wells and to carry out them on gas pipeline axis provided that the distance between top of pipe and bottom of well will be at least 40 cm.

50. Use of naked flame for determination of availability of gas in wells is not allowed.

51. It is allowed to check hermeticity of gas pipelines pressure testing by air on regulations of testing according to appendix 4 to these requirements.

52. In case of technical inspection of polyethylene gas pipelines by the operating organization hermeticity of gas pipelines by means of the highly sensitive gas-indicator (in the built-up part - at least 1 time a year, it is preferential during the spring and autumn period, in vacant part - at least 1 time in 5 years) is checked.

53. By results of technical inspection the statement in which taking into account the revealed defects and assessment of technical condition it is necessary to draw the conclusion about possibility of further operation of the gas pipeline, need and terms of carrying out its repair or replacement is drawn up. The act of technical inspection affirms the head of the organization performing these works.

54. Technical inspection of underwater transitions of gas pipelines is carried out at least 1 time in 5 years by the specialized organization having the corresponding equipment, equipment and the trained staff. At the same time location of the gas pipeline concerning bottom and availability of damages of insulating covering is specified.

Also determination of integrity, interposition of priguz on underwater transitions and in places where measures against possible emersion of gas pipelines are taken is carried out. Results of inspections are drawn up by acts or reports.

55. Gas leakages on gas pipelines are eliminated in emergency procedure. In case of detection of dangerous concentration of gas in cellars, undergrounds of buildings, collectors, underground passages, galleries gas pipelines are immediately switched-off. Before leakage elimination their operation is not allowed.

56. The collars and bandages providing hermeticity of connection in case of their daily survey are applied to temporary elimination of leakages of gas.

57. Defective welded joints, end-to-end corrosion and mechanical damages of gas pipelines, cavities over 30% in depth of thickness of wall of metal of pipe are eliminated by cutting of defective sites and vvarka of coils at least 200 mm long.

58. About shutdown of the gas pipelines connected with their repair and also gas supply renewal time consumers are warned beforehand.

59. The company owner timely takes measures for repair of protective coatings, prevention of further destruction of steel underground gas pipelines. Defects of isolation on the gas pipelines located in action areas of the wandering currents or near buildings with possible accumulation of people need to be eliminated first of all and not later than in month after their detection.

60. Production of welding and insulating works in case of accession and repair of steel underground gas pipelines, control of their quality are carried out according to requirements of technical regulations.

61. Production construction, including earth, works at distance less than 15 meters from the gas pipeline is allowed only according to the written permission of the operating organization of gas supply system in which conditions and procedure for their carrying out are specified. The scheme of arrangement of the gas pipeline with bindings is attached to permission.

The organization conducting earthwork represents to the company of gas supply system for review the draft of the plan of their production.

62. Prior to operation of shock mechanisms and the digging equipment near the route of the underground gas pipeline it is necessary to determine the actual location in its way of opening of holes manually. Shock mechanisms can be used to loosening of soil at distance at least 3 m from the underground gas pipeline, and the mechanisms capable to deviate considerably from vertical axis (sphere, wedge woman, etc.) - at distance at least 5 m.

63. In case of mechanical damages of steel gas pipelines with the shift of their rather basic position both across, and down along with work on elimination of leakages of gas are opened and checked by physical method on one next joint in both parties from the place of damage. In case of detection in them of the gaps and cracks caused by damage of the gas pipeline in addition the following joint of the gas pipeline is opened and checked by physical control method. The damaged joints are cut out and replaced by vvarka of coils.

Note: in case of identification of not pro-pitch, accumulation of time and other defects of joints extraordinary quality check of welded joints is carried out.

64. Gas pipelines in places of crossing with railway tracks and highways, irrespective of date of the previous check and repair, are checked and if necessary are repaired or replaced in case of work on expansion and capital repairs of foundations of the road.

About the forthcoming repair or expansion of ways (roads) of the organization, operating gas-distribution system, are notified beforehand.

#### Gas control Items and gas control installations

65. The operating mode of GRP and GRU of the industrial, agricultural and utility enterprises, and also head (intermediate) GRP is established according to the project.

66. Settings of the equipment of city GRP are set by the chief engineer of the company of gas economy, at the same time for residential customers the maximum working pressure of gas after the regulator does not exceed 300 mm. water column; the safety waste valves including which are built in pressure regulators provide dumping of gas in case of exceeding of the maximum working pressure after the regulator no more than for 15%, the upper limit of operation of safety locking valves does not exceed the maximum working pressure of gas after the regulator more than for 25%.

Settings of the equipment of GRP, ShRP, GRU, gas-using installations of industrial, agricultural organizations, and also intermediate GRP are established by the project and specified when commissioning.

67. The fluctuation of pressure of gas at the exit from GRP or gas control installations exceeding 10% of working pressure is not allowed. The defects of regulators causing increase or lowering of working pressure, malfunction in operation of safety valves and also leakages of gas are

eliminated in emergency procedure.

68. Inclusion in operation of the regulator of pressure in case of interruption in supply of gas is made after establishment of the reason of operation of the safety and locking valve and taking measures to its elimination.

69. Locking devices on the bypass line (bypass) and in front of the waste safety valve are sealed up.

Gas on the bypass line is allowed to be given only during the time necessary for repair of the equipment and armature, and also during pressure decrease of gas before GRP or gas control installations up to the size which is not ensuring reliable functioning of the regulator of pressure. Work is performed by crew of workers as a part of at least two people, one of whom is appointed the senior.

70. Air temperature indoors where the equipment and gages are placed, is supported not below, specified in the passport of manufacturing plant.

71. Outside of the building of GRP or near barrier of gas control installation warning labels - "FLAMMABLLY - GAZ" are in a visible place put.

72. In case of operation of GRP and gas control installations the following operations are performed:

1) survey of technical condition in the terms established by the instruction ensuring safety and reliability of operation;