

Technical Regulations TR EEU 049/2020

In accordance with Article 52 of the Treaty on the Eurasian Economic Union dated 29 May 2014 and paragraph 29 of Annex No. 1 to the Rules of Procedure of the Eurasian Economic Commission, approved by Decision No. 98 of the Supreme Eurasian Economic Council dated 23 December 2014, the Council of the Eurasian Economic Commission **decided:**

1. To adopt the attached Technical Regulation of the Eurasian Economic Union "On Requirements for Main Pipelines for the Transportation of Liquid and Gaseous Hydrocarbons" (TR EAEU 049/2020).
2. To establish that the Technical Regulation of the Eurasian Economic Union "On Requirements for Main Pipelines for the Transportation of Liquid and Gaseous Hydrocarbons" (TR EAEU 049/2020) shall enter into force on 1 July 2021.
3. This Decision shall enter into force upon the expiry of 30 calendar days from the date of its official publication.

Members of the Council of the Eurasian Economic Commission:

From the Republic of Armenia	From the Republic of Belarus	From the Republic of Kazakhstan	From the Kyrgyz Republic	From the Russian Federation
M. Grigoryan	I. Petrishenko	A. Smailov	A. Novikov	A. Overchuk

ADOPTED
by Decision of the Council
of the Eurasian Economic Commission
dated 23 December 2020 No. 121

TECHNICAL REGULATION

of the Eurasian Economic Union "On Requirements for Main Pipelines for the Transportation of Liquid and Gaseous Hydrocarbons" (TR EAEU 049/2020)

I. Scope of Application

1. This Technical Regulation establishes requirements for main pipelines for the transportation of liquid and gaseous hydrocarbons that are mandatory for application and compliance in the customs territory of the Eurasian Economic Union (hereinafter referred to as the Union) during design (including engineering surveys), construction (reconstruction), operation (acceptance and commissioning, mothballing), disposal (decommissioning), as well as rules for assessing their conformity.
2. The objects of technical regulation under this Technical Regulation are main pipelines, including branches from them, with a nominal diameter of up to and including *DN* 1 400, with a gauge pressure from 1,2 to 14 MPa inclusive for the transportation of liquid hydrocarbons and with a gauge pressure exceeding 1,2 and up to 25 MPa inclusive for the transportation of gaseous hydrocarbons.
3. This Technical Regulation has been developed to ensure the protection of human life and (or) health, property, the environment, and the life and (or) health of animals and plants, to prevent actions that mislead consumers, and to ensure energy efficiency and resource conservation.

4. The requirements of this Technical Regulation do not apply to pipelines of gas distribution and gas consumption networks, pipelines of autonomous gas supply networks and automotive gas-filling compressor stations, offshore pipelines, field and interfield pipelines, pipelines for the transportation of a broad fraction of light hydrocarbons and liquefied hydrocarbon gases, or pipelines intended for the performance and provision of technological processes for the extraction and (or) processing of hydrocarbon feedstock.

II. Key Terms

5. For the purposes of applying this Technical Regulation, the following terms are used:

"commissioning of a main pipeline facility" – an event documented by the main pipeline owner that records the commencement of use of the main pipeline facility for its intended purpose;

"in-line inspection" – a type of technical diagnostics consisting of a set of works that ensures the acquisition of information on defects and features of the pipeline wall and welds, and their locations, using in-line inspection tools implementing the relevant non-destructive testing methods;

"in-line inspection tool" – a device moved inside a pipeline and equipped with means for monitoring and recording data on defects and features of the pipeline wall and welds, and their locations;

"gas metering station" – a main pipeline facility intended to measure the quantity of transported gaseous hydrocarbons and their physical and chemical properties;

"gas distribution station" – a main pipeline facility intended to regulate and maintain operating parameters before gaseous hydrocarbons are supplied to consumers;

"compressor station" – a main pipeline facility intended to create and maintain pressure in the pipeline connected to it when transporting gaseous hydrocarbons in accordance with the operating process mode of a main pipeline;

"mothballing of a main pipeline facility or part thereof" – performance of a set of measures to ensure the preservation of the main pipeline facility or part thereof in an operable technical condition during a temporary cessation of its operation;

"decommissioning of a main pipeline facility" – performance of a set of measures to terminate operation, dismantle and/or disassemble the facility, dispose of waste, and restore the territory occupied by the main pipeline facility to a condition suitable for subsequent use;

"linear section of a main pipeline" – a main pipeline facility intended to move transported liquid or gaseous hydrocarbons, including the pipeline itself, along-route power transmission lines, cable lines and communications structures, electrochemical corrosion protection devices, and other structures and technical devices ensuring its operation;

"main pipeline" – a single production and technological complex intended to transport liquid or gaseous hydrocarbons from receiving points to delivery points for consumers or to transshipment of liquid hydrocarbons onto road, rail or water transport, consisting of structurally and technologically interconnected facilities, including structures and buildings used for servicing and managing main pipeline facilities;

"minimum distances to main pipeline facilities" – the minimum distance between facilities, buildings and structures not forming part of the main pipeline and main pipeline facilities, at which the minimum necessary level of their protection against hazardous factors that may arise during operation of main pipeline

facilities is ensured;

"pumping station" – a main pipeline facility intended to create and maintain pressure in the pipeline within the values of the operating process mode parameters for transporting liquid hydrocarbons established in the design documentation;

"nominal diameter" – a numerical designation of size equal to the internal diameter rounded to a whole number and expressed in millimetres without a dimensional designation;

"main pipeline facility" – a component of a main pipeline intended to perform one or more interconnected technological operations during the transportation or technological storage of liquid or gaseous hydrocarbons, or the transshipment of liquid hydrocarbons onto road, rail or water transport, including a set of relevant buildings, structures and technical devices;

"liquid hydrocarbon transshipment facility" – a main pipeline facility intended to receive liquid hydrocarbons from the linear section of a main pipeline, store them and load them onto road, rail or water transport;

"security zone" – a territory or water area with special conditions of use adjoining main pipeline facilities, intended to ensure the safety of main pipeline facilities and create the necessary conditions for their operation, within which activities incompatible with the purposes of its establishment are restricted or prohibited;

"consumer" – a person (consignor, consignee) receiving a service for the transportation of liquid or gaseous hydrocarbons through a main pipeline;

"acceptance of a main pipeline facility" – a form of conformity assessment of a main pipeline facility completed by construction (reconstruction)

against the design documentation, the requirements of this Technical Regulation and other Technical Regulations of the Union applicable to it, confirming the readiness of the main pipeline facility for commissioning;

"oil heating station" – a main pipeline facility intended to heat transported oil in order to reduce its viscosity during transportation through a main pipeline;

"liquid hydrocarbon custody transfer point" – a main pipeline facility intended to measure and record the quantitative and physical and chemical properties of liquid hydrocarbons transferred by the delivering party (or its representatives) to the receiving party (or its representatives);

"repair of a main pipeline facility" – performance of a set of measures for the full or partial restoration of the service life and/or operating parameters of a main pipeline facility;

"main pipeline owner" – an entity holding ownership rights to a main pipeline in accordance with the legislation of the Member States of the Union;

"technical corridor of main pipelines" – a territory where at least two pipelines are laid in the same direction with adjoining security zones, forming part of the linear sections of the respective main pipelines, or sections of those pipelines, and which is bounded on the outside by the security zones of the linear sections of main pipelines;

"technical diagnostics" – a set of works to determine the technical condition of the diagnostic facility;

"technical device" – a set of technical elements (machines, equipment, parts) constituting a single structure;

"operating process mode of a main pipeline" – a set of values of the parameters of the technological process for transporting liquid or gaseous hydrocarbons through a main pipeline, established within the values specified in the design documentation;

"gaseous hydrocarbons" – combustible natural gases prepared for transportation through a main pipeline;

"liquid hydrocarbons" – oil and gas condensate prepared for transportation through a main pipeline, motor and aviation gasoline, diesel and marine fuel, and jet fuel;

"authorized representative of the main pipeline owner" – a legal entity registered in accordance with the legislation of a Member State of the Union in the territory of that Member State, designated by the main pipeline owner to perform specified actions on its behalf;

"operating documentation" – a set of documents defining the operating rules and the values of the operating parameters of main pipeline facilities, and also containing information on their operation;

"operating parameters of a main pipeline" – a set of technical characteristics of a main pipeline established within the values specified in the design documentation;

"operational control" – a form of conformity assessment involving a set of measures aimed at identifying and eliminating non-conformities with the requirements of this Technical Regulation during the operation of main pipeline facilities;

"operation of a main pipeline" – activities to ensure the functioning of a main pipeline in accordance with the operating documentation, including, among other things, technical maintenance, repair, technical diagnostics and operational dispatch control;

"operating organization" – a legal entity established in accordance with the legislation of a Member State of the Union that operates a main pipeline on the basis of ownership or another lawful basis and is responsible for the safety of its operation, and is provided with the personnel and material and technical resources necessary to manage the operation of the main pipeline, service it and maintain its operating parameters.

III. Rules for Commissioning

6. Main pipelines (main pipeline facilities) commissioned in the territories of the Member States of the Union (hereinafter, the "Member States") shall comply with the requirements of this Technical Regulation, as well as the requirements of other Technical Regulations of the Union applicable to them.

7. When commissioning a main pipeline (main pipeline facility), operating documentation shall be available.

The operating documentation shall be prepared by the operating organization on the basis of the design documentation and the documentation included in the delivery set of technical devices, machines and equipment.

8. Main pipeline facilities shall be commissioned in accordance with the procedure established by the legislation of the Member States.

IV. Requirements for Main Pipelines

9. The safety of a main pipeline shall be ensured by:

a) carrying out a set of research, technological, experimental design and design and survey works and implementing their results aimed at improving the safety, operational and energy efficiency of main pipeline facilities, as well as of the technologies, technical devices, machinery,

equipment and materials used;

б) complying with the operating process modes of the main pipeline, carrying out maintenance and technical diagnostics, and maintaining the established operating parameters;

в) carrying out calculations to determine the operating parameters of main pipeline facilities that ensure their safety, energy efficiency and resource conservation, and using the results thereof;

г) conducting conformity assessment of the main pipeline in accordance with Section VI of this Technical Regulation;

д) establishing security zones in accordance with the boundary characteristics specified in Annex No. 1;

е) ensuring the reliability of control systems for technological processes and the production activities of main pipeline facilities.

10. When designing (including conducting engineering surveys) and constructing (reconstructing) a main pipeline, the energy efficiency and resource conservation requirements effective in the territories of the Member States shall be complied with in respect of:

а) the structural, functional-technological and engineering measures used;

б) the characteristics of the technical devices, equipment and materials used;

в) the indicators characterizing the specific amount of consumption of energy resources.

11. The minimum distances from projected, under-construction or reconstructed facilities, buildings and structures not forming part of the main pipeline to the main pipeline shall be determined in accordance with

the procedure set out in Annex No. 2.

The minimum distances determined in accordance with Annex No. 2 to this Technical Regulation shall be applied when designing main pipelines.

The application of minimum distances in regulatory areas not falling within the scope of this Technical Regulation shall be determined by the legislation of the Member States.

12. When designing (including conducting engineering surveys) pipelines forming part of the linear section of a main pipeline (hereinafter referred to as the pipeline), underground installation shall be considered their primary installation method.

Aboveground installation (on supports) of pipelines is permitted in individual sections in desert and mountainous areas, marshlands, areas of mining operations, landslides and areas with permafrost soils, on unstable soils, as well as at crossings over natural and artificial obstacles, and shall be determined by the design documentation.

Ground-level installation (in an embankment) of pipelines is permitted in individual sections in marshlands, solonchaks and areas with permafrost soils, and shall be determined by the design documentation.

13. Measures shall be provided to prevent damage to the pipeline at locations where it transitions from underground installation to aboveground or ground-level installation.

14. The siting of main pipelines in settlements, specially protected natural areas and sanitary protection zones of drinking water sources shall be carried out in accordance with the legislation of the Member States.

15. When designing (including conducting engineering surveys) a main pipeline, the design loads and effects, as well as their adverse

combinations affecting the strength and stability of main pipeline facilities, shall be taken into account. The design diagrams and methods for calculating the strength and stability of the main pipeline shall take into account the principal features of the effects of the relevant loads on its facilities.

16. When designing a pipeline, pipeline shut-off valve assemblies shall be provided to ensure the shut-off of the flow of transported liquid or gaseous hydrocarbons in the pipeline.

The distance between adjacent pipeline shut-off valve assemblies shall be determined by the design documentation.

17. Pipeline valves and fittings that disconnect a pumping station, compressor station, gas distribution station (including pipeline valves and fittings that disconnect a consumer), gas metering station, underground gas storage facilities or tank farms from the pipeline shall be equipped with remote monitoring and control systems and shall have local controls.

The equipping of pipeline valves and fittings intended to shut off the flow of transported liquid or gaseous hydrocarbons in the pipeline and at connection assemblies with remote monitoring and control systems shall be determined by the design documentation.

18. When designing (including conducting engineering surveys) the linear section of a main pipeline, measures to compensate for longitudinal movements of the pipeline shall be provided.

19. Main pipeline facilities shall be protected against corrosive effects.

20. An aboveground pipeline shall be electrically insulated from its supports.

21. When designing (including conducting engineering surveys) a main pipeline installed in areas with active tectonic faults, special engineering measures to ensure the safety of the main pipeline shall be provided.

22. Pipeline installation is not permitted:

a) in railway and road tunnels;

6) on railway and road bridges.

23. When designing (including conducting engineering surveys) and constructing (reconstructing) main pipeline facilities, measures shall be implemented to preserve wild animal migration routes and their permanent habitats, including during breeding and wintering periods.

24. To ensure control of the technical condition of the pipeline, the design documentation shall provide engineering measures for cleaning the internal cavity and conducting in-line inspection of the pipeline.

The pipeline design shall ensure the unobstructed passage of in-line cleaning, diagnostic and separation devices used to ensure sequential transportation of liquid hydrocarbons, and shall be equipped with launching and receiving assemblies for such devices.

25. When designing (including conducting engineering surveys) the installation of a pipeline beneath a water obstacle (an underwater crossing), engineering measures shall be provided to prevent soil erosion within the boundaries of the underwater crossing during operation of the pipeline and to reinforce the banks if the natural terrain changes during construction (reconstruction) of the pipeline.

Engineering measures to prevent soil erosion shall also be provided when designing (including conducting engineering surveys) the installation of a pipeline on terrain with a slope exceeding 20 percent.

26. When designing (including conducting engineering surveys) the installation of a pipeline above a water obstacle, engineering protection of the supporting structures shall be provided.

27. When designing (including conducting engineering surveys) main pipelines installed in mountainous areas and areas with rugged terrain, engineering measures shall be provided to ensure the resistance of main pipelines to the effects of water flows, collapses, rockfalls, landslides, snow avalanches, mudflows and other hazardous phenomena.

28. When designing (including conducting engineering surveys) main pipelines installed in areas with permafrost soils, the most favorable sections from the geocryological and engineering-hydrological perspectives shall be identified on the basis of advance scientific and engineering studies of the territory, making it possible to implement measures to minimize changes in the geocryological and physical properties of permafrost soils.

29. When designing (including conducting engineering surveys) main pipelines installed in areas with permafrost soils, engineering measures shall be provided to ensure the operating temperature regime of the main pipeline established by the design documentation and to minimize its thermal impact on the environment.

30. When designing (including conducting engineering surveys) a main pipeline for the transportation of liquid hydrocarbons in cold climatic areas, solutions shall be provided for the use of thermal insulation systems and (or) oil heating stations.

31. In accordance with the design documentation, main pipeline facilities shall be equipped with protection against static electricity, direct lightning strikes and secondary lightning effects.

32. Pumping stations, compressor stations and liquid hydrocarbon transshipment facilities shall be supplied with electricity from 2 independent power sources, as well as emergency power supply sources.

33. Main pipeline facilities shall incorporate structural and organizational measures to protect against unauthorized entry and (or) encroachment on their integrity and safety.

34. The locations of main pipeline facilities shall be marked with special warning and identification signs, including signs containing information about the security zone of main pipeline facilities.

35. Main pipelines shall be equipped with means for warning of accidents and incidents and for localizing and eliminating their consequences, as determined by the design documentation.

36. Changes to the design documentation for the construction (reconstruction) of a main pipeline or its facilities shall be made in accordance with the legislation of the Member States.

37. During the construction (reconstruction) of main pipeline facilities, measures shall be taken to protect the environment, reclaim land, improve the territories and handle waste in accordance with the legislation of the Member States.

38. After completion of the construction (reconstruction) of a pipeline for the transportation of liquid hydrocarbons with a nominal diameter of DN 150 or more and gaseous hydrocarbons with a nominal diameter of DN 300 or more, as well as for restoring the load-bearing capacity of a section of such pipeline with replacement of pipes in accordance with the design documentation, the following shall be carried out:

a) monitoring of the geometric parameters of pipeline sections with a length of 1 000 m or more by passing an in-line inspection tool;

6) monitoring of the geometric parameters of pipeline sections with a length of less than 1 000 m using instrumental methods;

в) in-line inspection of:

pipeline sections with a length of 10 000 m or more;

pipeline sections with a length of less than 10 000 m, provided that the need for such inspection is substantiated in the design documentation;

г) in-line inspection of sections of underwater crossings laid across a river or body of water with a width measured along the water surface during the low-water season of more than 10 m and a depth exceeding 1,5 m, or with a width measured along the water surface during the low-water season of 25 m or more, regardless of depth;

д) monitoring of the condition of the protective coating.

39. After completion of construction (reconstruction), the newly installed pipeline shall be tested for strength and checked for leak tightness.

During repair of a pipeline, the section being replaced shall be tested for strength and checked for leak tightness.

40. During operation of a main pipeline, the following shall be ensured:

а) compliance with the operating parameters of a main pipeline;

6) monitoring of the technical condition of a main pipeline, including technical diagnostics, monitoring of leaks of liquid or gaseous hydrocarbons and hazardous gas concentrations in accordance with the design documentation, as well as operational control;

в) implementation of measures to prevent possible accidents and incidents on a main pipeline and to localize and eliminate their

consequences;

г) compliance with the requirements for the prevention of emergency situations and environmental protection requirements in accordance with the legislation of the Member States;

д) compliance with the energy intensity and energy efficiency indicators of a main pipeline specified in the design documentation.

41. Measuring instruments and technical systems and devices with measuring functions that form part of gas metering stations and liquid hydrocarbon custody transfer points or are used to determine the security zones of a main pipeline and the minimum distances from a main pipeline to facilities, buildings and structures not forming part thereof, as well as measurement procedures (methods), are subject to state regulation in the field of ensuring uniformity of measurements, including state metrological control (supervision), and shall comply with the mandatory metrological and technical requirements established in accordance with the legislation on ensuring uniformity of measurements of the Member State in whose territory they are used and Union law in the field of ensuring uniformity of measurements.

42. The performance of works (actions, measures) by third-party organizations (persons) in the security zone of a main pipeline without obtaining written permission from the main pipeline owner or the authorized representative of the main pipeline owner is not permitted.

43. It is prohibited to restrict access by personnel or the entry of vehicles belonging to the main pipeline owner or the authorized representative of the main pipeline owner into the security zone of a main pipeline for the purposes of technical maintenance or repair of the main pipeline, carrying out emergency restoration and emergency rescue works and (or) works to eliminate the consequences of accidents and incidents.

44. The conditions for use of the security zone of a main pipeline and the procedure for interaction between interested persons shall be determined by the legislation of the Member States.

45. The design and as-built documentation for the construction (reconstruction) of a main pipeline, operating documentation, as well as materials relating to investigations of accidents and incidents, shall be kept by the main pipeline owner or the operating organization throughout the entire operating life of the main pipeline.

46. When designing and carrying out works for the mothballing of a main pipeline facility or part thereof, measures shall be provided to ensure protection against corrosion, prevention of destruction and the formation of leaks of the preservative, environmental protection, prevention of the formation of an explosive mixture at a maximum permissible concentration, hydrates and freezing of the preservative, monitoring of the main pipeline facility (or part thereof) throughout the entire period during which it remains mothballed, and commissioning of the main pipeline facility (or part thereof) after recommissioning from mothballing.

47. When designing and carrying out works for the waste disposal (decommissioning) of a main pipeline facility, measures shall be provided to ensure the reclamation of disturbed land, waste disposal, prevention of damage to buildings and structures located within the area of influence of the facility being decommissioned, as well as prevention of pollution of the subsoil and water bodies.

V. Ensuring compliance of a main pipeline with the requirements of the Technical Regulation

48. Compliance of a main pipeline with this Technical Regulation shall be ensured either by directly fulfilling its requirements or by applying the provisions of the standards included in the list of international and regional

(interstate) standards, and, in their absence, national (state) standards, the application of which on a voluntary basis ensures compliance with the requirements of this Technical Regulation.

49. Methods of research (testing) and measurement shall be established in the standards included in the list of international and regional (interstate) standards containing rules and methods of research (testing) and measurement, including sampling rules, necessary for the application and fulfilment of the requirements of this Technical Regulation and for conformity assessment of technical regulation objects.

VI. Conformity Assessment of a Main Pipeline for Compliance with the Technical Regulation Requirements

50. Conformity assessment of a main pipeline for compliance with the requirements of this Technical Regulation is carried out in the following forms:

- a) expert review of the design documentation (including the results of engineering surveys) – during design (including engineering surveys);
- б) construction control (technical supervision), design supervision and state supervision – during construction (reconstruction);
- в) acceptance – upon completion of construction (reconstruction);
- г) operational control, state control (supervision) – during operation;
- д) construction control and design supervision – during waste disposal (decommissioning).

51. The procedure for applying the forms of conformity assessment of a main pipeline for compliance with the requirements of this Technical Regulation is established by the legislation of the Member States.

52. When conformity assessment is carried out, measuring instruments and measurement procedures (methods) that are subject to state regulation in the field of ensuring uniformity of measurements, including state metrological control (supervision), and that comply with the mandatory metrological and technical requirements established by the legislation of the Member State in whose territory they are used, as well as with the provisions of acts of the Union bodies in the field of ensuring uniformity of measurements with regard to the mutual recognition of the results of work to ensure uniformity of measurements, are used.

53. Main pipeline facilities whose construction (reconstruction) has been completed are subject to acceptance.

54. Acceptance of a main pipeline (main pipeline facility) after completion of construction (reconstruction) is carried out both in full and in separate stages in accordance with the legislation of the Member States and is completed by the preparation of a main pipeline acceptance certificate (main pipeline facility acceptance certificate).

55. Acceptance of a main pipeline facility is carried out on the basis of the as-built documentation, as well as the results of comprehensive testing, technical diagnostics and tests confirming that the main pipeline facility being accepted complies with the design documentation and the requirements of this Technical Regulation.

56. The elimination of defects in construction and installation works whose parameters do not correspond to the values established in the design documentation and which are discovered during the acceptance of a main pipeline facility and its operation during the warranty period is carried out by the construction and installation organization that performed the construction (reconstruction) of the relevant main pipeline facility.

57. The acceptance and commissioning of a main pipeline (main pipeline facility) with unresolved non-conformities with the design documentation, as well as without completion of the works provided for by the design documentation, are prohibited in accordance with the legislation of the Member States in whose territories the main pipeline (main pipeline facility) is located.

58. Operational control is carried out by operating organizations.

VII. Marking of a main pipeline with the single mark of product circulation on the market of the Union

59. A main pipeline (main pipeline facility) that complies with the requirements of this Technical Regulation and has undergone, after completion of construction (reconstruction), conformity assessment in the form of acceptance shall be marked with the single mark of product circulation on the market of the Union. The single mark of product circulation on the market of the Union shall be affixed to the upper left part of the first page of the main pipeline acceptance certificate (main pipeline facility acceptance certificate).

VIII. Final provisions

60. The requirements established by clauses 12 – 32, 38, 45 of this Technical Regulation shall not apply to:

- a) main pipeline facilities commissioned before the date of entry into force of this Technical Regulation;
- 6) main pipeline facilities whose construction (reconstruction) is carried out in accordance with design documentation approved or submitted for state expert review before the date of entry into force of this Technical Regulation;

в) main pipeline facilities for which a construction (reconstruction) permit was obtained, or for which notification of the commencement of construction (reconstruction) was submitted, before the date of entry into force of this Technical Regulation.

ANNEX No. 1
to the Technical Regulation
of the Eurasian Economic Union
"On requirements for main pipelines for
the transportation of liquid and gaseous
hydrocarbons" (TR EAEU 049/2020)

LIST OF characteristics of the boundaries of the security zones of a main pipeline

Name of the main pipeline facility (structure)	Characteristics of the boundaries of the security zone	
	location	dimensions
1. Pipeline	on the land plot enclosed between parallel planes	at least 25 m on each side from the pipeline axis*
2. Two or more pipelines laid in the same technical corridor	on the land plot enclosed between parallel planes	at least 25 m from the axis of the outermost pipeline on each side of the technical corridor**

3. Underwater crossing	in the section of water space from the water surface to the bottom, enclosed between parallel planes	at least 100 m from the axes of the outermost pipelines on each side***
4. Pumping station, compressor station, gas distribution station, gas metering station, gas cooling station, liquid hydrocarbon transshipment facility of a main pipeline, tank farm of main pipeline facilities, liquid and gaseous hydrocarbon metering unit, liquid hydrocarbon custody transfer point, oil heating station, loading or unloading trestle, site with a compressor station at a facility for underground storage of gaseous hydrocarbons	on the land plot bounded by a closed line	at least 100 m from the boundary of the territory of the respective facility in all directions

5. Tank for the storage and degassing of condensate, earthen pit for the emergency discharge of liquid hydrocarbons	on the land plot bounded by a closed line	at least 50 m from the boundary of the territory of the specified facility in all directions
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* For the Republic of Armenia, on agricultural land, the size of the security zone for a pipeline shall be at least 15 m on each side from the pipeline axis.

** For the Republic of Armenia, on agricultural land, the size of the security zone for two or more pipelines laid in the same process corridor shall be at least 15 m from the axis of the outermost pipeline on each side of the technical corridor.

*** For the Republic of Armenia, the size of the security zone for an underwater crossing shall be at least 50 m from the axes of the outermost pipelines on each side.

Note. The legislation of the Member States of the Eurasian Economic Union may establish other sizes of security zones, but not less than the values specified in this list.

ANNEX No. 2
to the Technical Regulation
of the Eurasian Economic Union
"On Requirements for Main Pipelines for
the Transportation of Liquid and Gaseous
Hydrocarbons" (TR EAEU 049/2020)

PROCEDURE

for determining the minimum distances from a main pipeline to facilities, buildings and structures not forming part of the main pipeline

1. This Procedure applies in the territories of the Member States of the Eurasian Economic Union (hereinafter referred to as the Member States) and is mandatory for public authorities, local government bodies, legal entities and individuals that own, possess or use land plots adjacent to land plots occupied by main pipelines, or design residential, civil and industrial facilities, engineering, transport and social infrastructure facilities.
2. The minimum distances from facilities, buildings and structures not forming part of the main pipeline to the main pipeline shall be applied with respect to:
 - a) individual buildings and structures — from their nearest projecting parts;
 - б) buildings and structures of cities and other settlements — from their nearest projecting parts;
 - в) industrial enterprises, railway stations, aerodromes, seaports and river ports and landing stages, oil and gas facilities located in marine waters, hydraulic structures, storage facilities for combustible and flammable materials, artesian wells — from the nearest projecting parts of their fences;
 - г) railways — from the toe of the embankment or the edge of the cut on the pipeline side, but not less than 10 m from the boundary of the railway right-of-way;

д) roads — from the toe of the embankment or the edge of the cut of the roadbed;

е) bridges — from the toe of the cones.

3. The proximity of facilities not forming part of the main pipeline to the pipeline shall be determined by the shortest distance between the vertical planes passing through the external boundaries of these facilities and the pipeline axis (for parallel pipelines, from the axis of each pipeline).

4. The proximity of facilities not forming part of the main pipeline to other main pipeline facilities shall be determined by the shortest distance between the vertical planes passing through the external boundaries of these facilities.

5. The minimum distances from other facilities not forming part of the main pipeline to a pipeline intended for the transportation of liquid hydrocarbons shall be established for:

a) individual buildings and structures, buildings and structures of cities and other settlements, collective gardens, summer cottage and cottage settlements, individual industrial enterprises, livestock farms, greenhouse crop production enterprises, agricultural product processing and storage enterprises, mineral extraction quarries, covered and open parking areas for more than 20 motor vehicles, individually located buildings with mass occupancy (educational, training, medical, health-improving, commercial, entertainment buildings, railway stations, etc.), residential buildings (3 storeys and above), railway stations, airports, seaports and river ports and landing stages, hydroelectric power plants, hydraulic structures for maritime and river transport, treatment facilities and water pumping stations not related to the main pipeline for the transportation of liquid hydrocarbons, bridges of general-network railways and roads of categories I and II with a span exceeding 20 m (where the pipeline for the

transportation of liquid hydrocarbons is located downstream below the bridges), facilities intended for receiving, storing, dispensing and loading flammable and combustible liquids and gases (bases, storage facilities, filling stations, bulk loading points, etc.), masts (towers) and structures of multichannel communications lines not related to the main pipeline, television towers — not less than the values specified in Table 1:

Table 1

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	75
above DN 300 to DN 500	100
above DN 500 to DN 1 000	150
above DN 1 000 to DN 1 400	200

6) general-network railways (on interstation sections) and roads of categories I-III running parallel to the pipeline, individually located 1 – 2-storey residential buildings, garden houses, dachas, cemeteries, agricultural farms and fenced areas for organized livestock grazing, field camps — not less than the values specified in Table 2:

Table 2

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	50
above DN 300 to DN 500	50
above DN 500 to DN 1 000	75
above DN 1 000 to DN 1 400	100

в) individually located non-residential and auxiliary structures, wellheads of oil, gas and artesian wells under construction and in operation, sewage facilities, railways of industrial enterprises, roads of categories IV and V running parallel to the pipeline — not less than the values specified in Table 3:

Table 3

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	30
above DN 300 to DN 500	30
above DN 500 to DN 1 000	30
above DN 1 000 to DN 1 400	50

г) bridges of industrial-enterprise railways, roads of categories III-V with a span exceeding 20 m (where the main pipeline for the transportation of liquid hydrocarbons passes downstream below the bridges) — not less than the values specified in Table 4:

Table 4

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	75
above DN 300 to DN 500	100
above DN 500 to DN 1 000	150
above DN 1 000 to DN 1 400	200

д) territories of pumping stations, compressor stations, integrated oil and gas treatment units, underground gas storage stations, group and gathering points of oil and gas fields, field gas distribution stations, gas purification and dehydration units — not less than the values specified in Table 5:

Table 5

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	30
above DN 300 to DN 500	30
above DN 500 to DN 1 000	50
above DN 1 000 to DN 1 400	50

e) heliports and landing sites without helicopter basing — not less than 50 m;

ж) bridges of railways and roads, industrial enterprises and hydraulic structures (where the pipeline passes underwater upstream) — not less than the values specified in Table 6:

Table 6

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	300
above DN 300 to DN 500	300
above DN 500 to DN 1 000	300
above DN 1 000 to DN 1 400	500

3) landing stages and river terminals (where the pipeline passes underwater upstream) — not less than the values specified in Table 7:

Table 7

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	1 000
above DN 300 to DN 500	1 000
above DN 500 to DN 1 000	1 000
above DN 1 000 to DN 1 400	1 500

и) water intakes (where pipelines pass underwater upstream) — not less than 3 000 m.

The placement of main pipelines in sanitary protection zones of drinking water supply sources shall be carried out in accordance with paragraph 14 of the Technical Regulation of the Eurasian Economic Union "On Requirements for Main Pipelines for the Transportation of Liquid and Gaseous Hydrocarbons" (TR EAEU 049/2020);

к) automated power plants with thermoelectric generators — not less than 15 m;

л) main irrigation canals and collectors, artificial water bodies along which the pipeline runs, water intake facilities and structures of irrigation systems — not less than the values specified in Table 8:

Table 8

Nominal diameter of the pipeline	Minimum distance to the pipeline, m
DN 300 and less	75
above DN 300 to DN 500	100
above DN 500 to DN 1 000	150
above DN 1 000 to DN 1 400	200

м) high-voltage overhead power lines running parallel to the pipeline, high-voltage overhead power lines running parallel to the pipeline under constrained route conditions, supports of high-voltage overhead power lines where they cross the pipeline, outdoor and indoor transformer substations, indoor switchgear with a voltage of 35 kV or higher — not less

than the values specified in Table 9:

Table 9

Voltage of a high-voltage overhead power line, kV	Minimum distance to the pipeline, m	
	when approaching and running in parallel, from the outermost non-deflected wire to any part of the pipeline	when approaching and running in parallel under constrained conditions and when crossing, from the grounding electrode or underground part (foundations) of the support to any part of the pipeline
up to 20	10	5
35	15	5
110	20	10
150	25	10
220	25	10
330	30	15
500	40	25
750	40	25

n) buildings and structures of special-purpose enterprises, sites, protected zones, storage facilities for explosive and explosion-hazardous substances, mineral extraction quarries where extraction involves blasting operations – shall be determined on the basis of calculations and agreed with the main pipeline operating organization;

o) long-distance communication cables and power cables – at least 10 m.

6. The minimum distances from other facilities not forming part of the main pipeline to pumping stations shall apply to:

a) separate buildings and structures; buildings and structures in cities and other settlements; community gardens; dacha and cottage settlements; individual industrial enterprises; livestock farms; greenhouse crop production enterprises; enterprises for the processing and storage of agricultural products; mineral extraction quarries; covered and open parking areas for more than 20 motor vehicles; integrated oil and gas treatment units and their group gathering points and gathering points; separately located buildings with mass occupancy (educational, healthcare, medical and health-improvement, retail, entertainment buildings, railway stations, etc.); residential buildings (3 storeys and higher); railway stations; airports; seaports and river ports and landing stages; hydroelectric power plants; hydraulic structures for maritime and river transport; treatment facilities and water supply pumping stations not related to a main pipeline for the transportation of liquid hydrocarbons; railway bridges of the general network and roads of Categories I and II with a span exceeding 20 m; facilities intended for receiving, storing, dispensing and shipping flammable and combustible liquids and gases (bases, storage facilities, filling stations, bulk loading points, etc.); masts (towers) and structures of multi-channel communication lines not related to the main pipeline; television towers – at least the distances specified in Table 10:

Table 10

Category of pumping stations	Minimum distances to pumping stations, m
III	100
II	150
I	200

Note. The following categories are established for pumping stations:

Category I – where the capacity of the tank farm exceeds 100 000 m³;

Category II – where the capacity of the tank farm exceeds 20 000 and is up to 100 000 m³ inclusive;

Category III – where the capacity of the tank farm is up to 20 000 m³, and for pumping stations without tank farms.

b) general-network railways (on railway sections) and roads of Categories I–III; separately located 1 – 2-storey residential buildings; cemeteries; agricultural farms; fenced areas for organized livestock grazing; field camps; industrial-enterprise railways – at least the distances specified in Table 11:

Table 11

Category of pumping stations	Minimum distances to pumping stations, m
III	50
II	75
I	100

c) roads of Categories IV and V – at least the distances specified in Table 12 (but at least 100 m from the nearest aboveground tank or tank farm):

Table 12

Category of pumping stations	Minimum distances to pumping stations, m
III	20
II	20
I	50

d) separately located non-residential and auxiliary structures (sheds, etc.); wellheads of oil, gas and artesian wells under construction and in operation; treatment facilities and sewage pumping stations – at least the distances specified in Table 13:

Table 13

Category of pumping stations	Minimum distances to pumping stations, m
III	30
II	50
I	75

e) outdoor switchgear of electrical substations (35 kV, 110 kV, 220 kV) supplying compressor and pumping stations of pipelines and other electricity consumers – at least 100 m;

f) heliports and landing sites without basing of heavy helicopters with a maximum take-off mass exceeding 10 t – at least 100 m;

g) heliports and landing sites without basing of medium helicopters with a maximum take-off mass from 5 to 10 t – at least 75 m;

h) heliports and landing sites without basing of light helicopters with a maximum take-off mass of less than 5 t – at least the distances specified in Table 14:

Table 14

Category of pumping stations	Minimum distances to pumping stations, m
III	60
II	60
I	75

i) buildings and structures of special-purpose enterprises, sites, protected zones, storage facilities for explosive and explosion-hazardous substances, mineral extraction quarries where extraction involves blasting operations – shall be determined on the basis of calculations and agreed with the main pipeline operating organization;

j) high-voltage overhead power lines – at least the distances specified in Table 15:

Table 15

Voltage of a high-voltage overhead power line, kV	Minimum distances to pumping stations, m
up to 20	40
21 - 35	40
36 - 110	60
111 - 150	80
151 - 220	100
221 - 330	120
331 - 500	150
501 - 750	150

7. The minimum distances from a pipeline intended for the transportation of gaseous hydrocarbons to other facilities not forming part of the main pipeline shall apply to:

a) separate buildings and structures; buildings and structures in cities and other settlements; community gardens; dacha and cottage settlements; individual industrial enterprises; livestock farms; greenhouse crop production enterprises; enterprises for the processing and storage of agricultural products; mineral extraction quarries; covered and open

parking areas for more than 20 motor vehicles; separately located buildings with mass occupancy (educational, healthcare, medical and health-improvement, retail, entertainment buildings, railway stations, etc.); residential buildings (3 storeys and higher); railway stations; airports; seaports and river ports and landing stages; hydroelectric power plants; hydraulic structures for maritime and river transport; treatment facilities and water supply pumping stations not related to a main pipeline for the transportation of gaseous hydrocarbons; railway bridges of the general network and roads of Categories I and II with a span exceeding 20 m; facilities intended for receiving, storing, dispensing and shipping flammable and combustible liquids and gases (bases, storage facilities, filling stations, bulk loading points, etc.); masts (towers) and structures of multi-channel communication lines not related to the main pipeline; television towers – at least the distances specified in Table 16:

Table 16

Nominal diameter of the pipeline	Minimum distance to the pipeline, m			
	at an operating pressure exceeding 1,2 up to and including 2,5 MPa*	at an operating pressure exceeding 2,5 up to and including 9,8 MPa**	at an operating pressure exceeding 9,8 up to and including 14,7 MPa***	at an operating pressure exceeding 14,7 up to and including 25 MPa
DN 300 and less	75	100	125	160
exceeding DN 300 up to DN 600	125	150	185	240
exceeding DN 600 up to DN 800	125	200	245	320
exceeding DN 800 up to DN 1 000	125	250	310	395

exceeding DN 1 000 up to DN 1 200	125	300	370	475
exceeding DN 1 200 up to DN 1 400	125	350	430	550

* For the Republic of Armenia – exceeding 1,2 up to and including 3 MPa.

** For the Republic of Armenia – over 3 up to and including 9,8 MPa. For the Republic of Kazakhstan – over 2,5 up to and including 10,0.

*** For the Republic of Kazakhstan – over 10,0 up to and including 14,7.

b) railways of the general network (on interstation sections) and roads of categories I-III, parallel to which the pipeline is laid, separately located 1 – 2-storey residential buildings, garden houses, dachas, cemeteries, agricultural farms and fenced areas for organized livestock grazing, field camps – not less than the distances specified in Table 17:

Table 17

Nominal pipeline diameter	Minimum distance to the pipeline, m			
	at an operating pressure exceeding 1,2 up to and including 2,5 MPa*	at an operating pressure exceeding 2,5 up to and including 9,8 MPa**	at an operating pressure exceeding 9,8 up to and including 14,7 MPa***	at an operating pressure exceeding 14,7 up to and including 25 MPa
DN 300 and below	75	75	95	120
exceeding DN 300 up to DN 600	100	125	155	200
exceeding DN 600 up to DN 800	100	150	185	240
exceeding DN 800 up to DN 1 000	100	200	245	320

exceeding DN 1000 up to DN 1 200	100	225	280	360
exceeding DN 1 200 up to DN 1 400	100	250	310	395

* For the Republic of Armenia – exceeding 1,2 up to and including 3 MPa.

** For the Republic of Armenia – exceeding 3 up to and including 9,8 MPa.
For the Republic of Kazakhstan – exceeding 2,5 up to and including 10,0.

*** For the Republic of Kazakhstan – exceeding 10,0 up to and including 14,7.

в) separately located non-residential and auxiliary structures, wellheads of oil, gas and artesian wells under construction and in operation, sewage structures, railways of industrial enterprises, roads of categories IV-VI running parallel to the pipeline, heliports and landing sites without helicopter basing – not less than the values specified in Table 18:

Table 18

Nominal pipeline diameter	Minimum distance to the pipeline, m			
	at an operating pressure exceeding 1,2 up to and including 2,5 MPa*	at an operating pressure exceeding 2,5 up to and including 9,8 MPa**	at an operating pressure exceeding 9,8 up to and including 14,7 MPa***	at an operating pressure exceeding 14,7 up to and including 25 MPa
DN 300 and below	30	50	65	80
exceeding DN 300 up to DN 600	50	50	65	80
exceeding DN 600 up to DN 800	50	100	125	160
exceeding DN 800 up to DN 1 000	50	150	185	240

Exceeding DN 1 000 up to DN 1 200	50	175	215	280
exceeding DN 1 200 up to DN 1 400	50	200	245	320

* For the Republic of Armenia – exceeding 1,2 up to and including 3 MPa.

** For the Republic of Armenia – exceeding 3 up to and including 9,8 MPa.
For the Republic of Kazakhstan – exceeding 2,5 up to and including 10,0.

*** For the Republic of Kazakhstan – exceeding 10,0 up to and including 14,7.

г) railway bridges of industrial enterprises and bridges of category III and IV roads with a span exceeding 20 m, integrated oil and gas treatment units, underground gas storage stations, group and gathering points of oil and gas fields, and field gas distribution stations – not less than the values specified in Table 19:

Table 19

Nominal pipeline diameter	Minimum distance to the pipeline, m			
	at an operating pressure exceeding 1,2 up to and including 2,5 MPa*	at an operating pressure exceeding 2,5 up to and including 9,8 MPa**	at an operating pressure exceeding 9,8 up to and including 14,7 MPa***	at an operating pressure exceeding 14,7 up to and including 25 MPa
DN 300 and below	75	75	95	120
exceeding DN 300 up to DN 600	125	125	155	200
exceeding DN 600 up to DN 800	125	150	185	240
exceeding DN 800 up to DN 1 000	125	200	245	320

exceeding DN 1 000 up to DN 1 200	125	225	280	360
exceeding DN 1 200 up to DN 1 400	125	250	310	395

* For the Republic of Armenia – exceeding 1,2 up to and including 3 MPa.

**For the Republic of Armenia – exceeding 3 up to and including 9,8 MPa.
For the Republic of Kazakhstan – exceeding 2,5 up to and including 10,0.

*** For the Republic of Kazakhstan – exceeding 10,0 up to and including 14,7.

д) main irrigation canals and collectors, water intake facilities and irrigation system structures – not less than 25 m;

е) buildings and structures of special-purpose enterprises, sites, protected zones, storage facilities for explosive and explosion-hazardous substances, mineral extraction quarries where extraction is carried out with blasting operations – shall be determined on the basis of calculations and agreed with the main pipeline operating organization;

ж) long-distance communication cables and power cables – not less than 10 m;

з) high-voltage overhead power lines running parallel to the main pipeline, supports of high-voltage overhead power lines where they cross the

pipeline, open and enclosed transformer substations, and enclosed switchgear rated at 35 kV or higher – not less than the values specified in Table 20:

Table 20

Voltage of the high-voltage overhead power line, kV	Minimum distance to the pipeline, m	
	for proximity and parallel routing, from the outermost non-deflected conductor to any part of the pipeline for the transportation of gaseous hydrocarbons with a gas pressure exceeding 1,2 MPa	for proximity and parallel routing under constrained conditions, and at crossings, from the grounding electrode or underground part (foundation) of the support to any part of the pipeline for the transportation of gaseous hydrocarbons with a gas pressure exceeding 1,2 MPa
up to 20	10	5
21 - 35	15	5
36 - 110	20	10
111 - 150	25	10
151 - 220	25	10
221 - 330	30	15
331 - 500	40	25

551 – 750	40	25
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и) automated power plants with thermoelectric generators – not less than 15 m.

8. The minimum distances from compressor stations, gas cooling stations, gas metering stations and gas distribution stations to other facilities not forming part of the main pipeline shall apply to:

a) individual buildings and structures; buildings and structures in cities and other settlements; collective gardens; summer-house and cottage settlements; individual industrial enterprises; livestock farms; greenhouse crop production enterprises; agricultural product processing and storage enterprises; mineral extraction quarries; covered and open parking areas for more than 20 motor vehicles; integrated oil and gas treatment units and their group and gathering points; separately located buildings with mass occupancy (educational, childcare, medical, health and wellness, commercial, entertainment buildings, railway stations, etc.); residential buildings (3 storeys or more); railway stations; airports; seaports, river ports and landing stages; hydroelectric power plants; hydraulic structures for maritime and river transport; treatment facilities and water supply pumping stations not related to a main pipeline for the transportation of gaseous hydrocarbons; railway bridges of the general railway network and category I and II roads with a span exceeding 20 m; facilities intended for receiving, storing, dispensing and loading flammable and combustible liquids and gases (bases, storage facilities, filling stations, bulk loading points, etc.); masts (towers) and structures of multichannel communication lines not related to the main pipeline; television towers – not less than the values specified in Table 21:

Table 21



Station type	Minimum distances to compressor stations, gas cooling stations, gas distribution and gas metering stations, m						
	at the nominal pipeline diameter						
	DN 300 and less	over DN 300 to DN 600	over DN 600 to DN 800	over DN 800 to DN 1 000	over DN 1 000 to DN 1 200	over DN 1 200	
	at an operating pressure of over 1,2 to 2,5 MPa inclusive						
Compressor and gas cooling	500	-	-	-	-	-	500
Gas distribution and gas metering	100	-	-	-	-	-	125
	at an operating pressure of over 2,5 to 9,8 MPa inclusive*						
Compressor and gas cooling	500	500	700	700	700	700	-

Gas distribution and gas metering	150	175	200	250	300	350	–
	at an operating pressure of over 9,8 to 14,7 MPa inclusive**						
Compressor and gas cooling	615	615	860	860	860	860	–
Gas distribution and gas metering	185	215	245	310	370	430	–
	at an operating pressure of over 14,7 to 25 MPa inclusive						
Compressor and gas cooling	795	795	1 110	1 110	1 110	1 110	–
Gas distribution and gas metering	240	280	320	395	475	550	–

* For the Republic of Kazakhstan – over 2,5 to 10 MPa inclusive.

**For the Republic of Kazakhstan – over 10,0 to 14,7 MPa inclusive.

b) railway bridges of the general network and road bridges of categories I and II with a span of over 20 m, water supply structures – not less than those specified in Table 22:

Table 22

Station type	Minimum distances to compressor stations, gas cooling stations, gas distribution and gas metering stations, m						
	at the nominal pipeline diameter						
	DN 300 and less	over DN 300 to DN 600	over DN 600 to DN 800	over DN 800 to DN 1 000	over DN 1 000 to DN 1 200	over DN 1 200	
	at an operating pressure of over 1,2 to 2,5 MPa inclusive						
Compressor and gas cooling	250	-	-	-	-	-	300
Gas distribution and gas metering	100	-	-	-	-	-	125
	at an operating pressure of over 2,5 to 9,8 MPa inclusive*						
Compressor and gas cooling	250	300	350	400	450	500	-

Gas distribution and gas metering	150	175	200	225	250	300	-
at an operating pressure of over 9,8 to 14,7 MPa inclusive**							
Compressor and gas cooling	310	370	430	490	555	615	-
Gas distribution and gas metering	185	215	245	280	310	370	-
at an operating pressure of over 14,7 to 25 MPa inclusive							
Compressor and gas cooling	395	475	555	635	715	795	-
Gas distribution and gas metering	240	280	320	360	395	475	-

* For the Republic of Kazakhstan – over 2,5 to 10 MPa inclusive.

**For the Republic of Kazakhstan – over 10,0 to 14,7 MPa inclusive.

c) general-network railways (on sections between stations) and roadways of categories I-III, separately located 1 – 2-storey residential buildings, cemeteries, agricultural farms and fenced areas for organized livestock grazing, field camps – not less than those specified in Table 23:

Table 23

Station type	Minimum distances to compressor stations, gas cooling stations, gas distribution and gas metering stations, m						
	at the nominal pipeline diameter						
	DN 300 and less	over DN 300 to DN 600	over DN 600 to DN 800	over DN 800 to DN 1 000	over DN 1 000 to DN 1 200	over DN 1 200	
	at an operating pressure of over 1,2 to 2,5 MPa inclusive						
Compressor and gas cooling	75	-	-	-	-	-	150
Gas distribution and gas metering	75	-	-	-	-	-	100
	at an operating pressure of over 2,5 to 9,8 MPa inclusive*						
Compressor and gas cooling	100	150	200	250	300	350	-

Gas distribution and gas metering	75	125	150	200	225	250	-
at an operating pressure of over 9,8 to 14,7 MPa inclusive**							
Compressor and gas cooling	125	185	245	310	370	430	-
Gas distribution and gas metering	95	155	185	245	280	310	-
at an operating pressure of over 14,7 to 25 MPa inclusive							
Compressor and gas cooling	160	240	320	395	475	550	-
Gas distribution and gas metering	120	200	240	320	360	395	-

* For the Republic of Kazakhstan – over 2,5 to 10 MPa inclusive.

**For the Republic of Kazakhstan – over 10,0 to 14,7 MPa inclusive.

d) railway bridges of industrial enterprises, road bridges of categories III-V with a span of over 20 m – not less than those specified in Table 24:

Table 24

Station type	Minimum distances to compressor stations, gas cooling stations, gas distribution stations and gas metering stations, m					
	for the nominal diameter of the pipeline					
	DN 300 and less	over DN 300 to DN 600	over DN 600 to DN 800	over DN 800 to DN 1 000	over DN 1 000 to DN 1 200	over DN 1 200
	with gauge pressure over 1,2 to 2,5 МПа inclusive					
Compressor station, gas cooling station	100	-	-	-	-	150
Gas distribution station, gas metering station	75	-	-	-	-	125
	with gauge pressure over 2,5 to 9,8 МПа inclusive*					

Compressor station, gas cooling station	125	150	200	250	300	350	-
Gas distribution station, gas metering station	100	125	150	200	225	250	-
with gauge pressure over 9,8 to 14,7 МПа inclusive**							
Compressor station, gas cooling station	155	185	245	310	370	430	-
Gas distribution station, gas metering station	125	155	185	245	280	310	-
with gauge pressure over 14,7 to 25 МПа inclusive							

Compressor station, gas cooling station	200	240	320	395	475	550	–
Gas distribution station, gas metering station	160	200	240	320	360	395	–

* For the Republic of Kazakhstan – over 2,5 to 10 МПа inclusive.

**For the Republic of Kazakhstan – over 10,0 to 14,7 МПа inclusive.

d) railways of industrial enterprises and roads of categories IV and V – not less than those specified in Table 25:

Table 25

Station type	Minimum distances to compressor stations, gas cooling stations, gas distribution stations and gas metering stations, m						
	for the nominal diameter of the pipeline						
	DN 300 and less	over DN 300 to DN 600	over DN 600 to DN 800	over DN 800 to DN 1 000	over DN 1 000 to DN 1 200	over DN 1 200 to DN 1 400	over DN 300
	with gauge pressure over 1,2 to 2,5 МПа inclusive						
Compressor station, gas cooling station	50	–	–	–	–	–	100
Gas distribution station, gas metering station	50	–	–	–	–	–	75
	with gauge pressure over 2,5 to 9,8 МПа inclusive*						

Compressor station, gas cooling station	75	100	150	175	200	250	-
Gas distribution station, gas metering station	50	75	100	150	175	200	-
with gauge pressure over 9,8 to 14,7 МПа inclusive**							
Compressor station, gas cooling station	95	125	185	215	245	310	-
Gas distribution station, gas metering station	65	95	125	185	215	245	-
with gauge pressure over 14,7 to 25 МПа inclusive							

Compressor station, gas cooling station	120	160	240	280	320	395	–
Gas distribution station, gas metering station	80	120	160	240	280	320	–

* For the Republic of Kazakhstan – over 2,5 to 10 МПа inclusive.

**For the Republic of Kazakhstan – over 10,0 to 14,7 МПа inclusive.

e) separately located non-residential and auxiliary structures (sheds, etc.), wellheads of oil, gas and artesian wells under construction and in operation, treatment facilities and sewage pumping stations – not less than those specified in Table 26:

Table 26

Station type	Minimum distances to compressor stations, gas cooling stations, gas distribution stations and gas metering stations, m					
	for the nominal diameter of the pipeline					
	DN 300 and less	over DN 300 to DN 600	over DN 600 to DN 800	over DN 800 to DN 1 000	over DN 1 000 to DN 1 200	over DN 1 200
	with gauge pressure over 1,2 to 2,5 МПа inclusive					
Compressor station, gas cooling station	50	-	-	-	- -	75
Gas distribution station, gas metering station	30	-	-	-	- -	50
	with gauge pressure over 2,5 to 9,8 МПа inclusive*					

Compressor station, gas cooling station	50	75	150	200	225	250	-
Gas distribution station, gas metering station	50	75	100	150	175	200	-
	with gauge pressure over 9,8 to 14,7 МПа inclusive**						
Compressor station, gas cooling station	65	95	185	245	280	310	-
Gas distribution station, gas metering station	65	95	125	185	215	245	-
	with gauge pressure over 14,7 to 25 МПа inclusive						

Compressor station, gas cooling station	80	120	240	320	360	395	–
Gas distribution station, gas metering station	80	120	160	240	280	320	–

* For the Republic of Kazakhstan – over 2,5 to 10 МПа inclusive.

**For the Republic of Kazakhstan – over 10,0 to 14,7 МПа inclusive.

f) for heliports and landing sites without basing heavy helicopters on them, with a maximum take-off mass of more than 10 t – not less than those specified in Table 27:

Table 27

Nominal diameter of the pipeline	Minimum distances to compressor stations, gas cooling stations and gas distribution and gas metering stations, m	
	with an operating pressure above 2,5 up to and including 25 MPa	with an operating pressure above 1,2 up to and including 2,5 MPa
DN 300 and below	100	100
above DN 300 up to DN 600	100	100
above DN 600 up to DN 800	150	100
above DN 800 up to DN 1 000	200	100
above DN 1 000 up to DN 1 200	225	100
above DN 1 200 up to DN 1 400	250	100

z) heliports and landing sites without basing of medium helicopters with a maximum take-off mass from 5 to 10 t at such heliports and landing sites –

not less than those specified in Table 28:

Table 28

Nominal diameter of the pipeline	Minimum distances to compressor stations, gas cooling stations and gas distribution and gas metering stations, m	
	with an operating pressure above 2,5 up to and including 25 MPa	with an operating pressure above 1,2 up to and including 2,5 MPa
DN 300 and below	75	75
above DN 300 up to DN 600	75	75
above DN 600 up to DN 800	150	75
above DN 800 up to DN 1 000	200	75
above DN 1 000 up to DN 1 200	225	75
above DN 1 200 up to DN 1 400	250	75

- i) heliports and landing sites without basing of light helicopters with a maximum take-off mass of less than 5 t at such heliports and landing sites – not less than those specified in Table 29:

Table 29

Nominal diameter of the pipeline	Minimum distances to compressor stations, gas cooling stations and gas distribution and gas metering stations, m	
	with an operating pressure above 2,5 up to and including 25 MPa	with an operating pressure above 1,2 up to and including 2,5 MPa
<i>DN 300 and below</i>	60	60
above <i>DN 300</i> up to <i>DN 600</i>	75	60
above <i>DN 600</i> up to <i>DN 800</i>	150	60
above <i>DN 800</i> up to <i>DN 1 000</i>	200	60
above <i>DN 1 000</i> up to <i>DN 1 200</i>	225	60
above <i>DN 1 200</i> up to <i>DN 1 400</i>	250	60

k) buildings and structures of special-purpose enterprises, sites, protected zones, storage facilities for explosive and explosion-hazardous substances, and mineral extraction quarries where extraction is carried out using blasting operations – shall be determined on the basis of a calculation and agreed with the main pipeline operating organization;

l) high-voltage overhead power lines – not less than those specified in Table 30:

Table 30

Voltage of the high-voltage overhead power line, kV	Minimum distances to compressor stations, gas cooling stations and gas distribution and gas metering stations, m
up to 20	80
35	80
110	100
150	120
220	140
330	160
500	180
750	200

9. The minimum distances to aboveground main pipelines transporting gaseous hydrocarbons shall be increased by a factor of 2 for the facilities, buildings and structures specified in subparagraph "a" of paragraph 7 of this Procedure, and by a factor of 1,5 for the facilities, buildings and structures specified in subparagraphs "b"-"d" of paragraph 7 of this Procedure.

10. The minimum distances from facilities, buildings and structures not specified in this Procedure to a main pipeline shall be established in accordance with the legislation of the Member States.

11. Where it is impossible to ensure the minimum distances from the facilities, buildings and structures not forming part of the main pipeline specified in this Procedure to a main pipeline under construction, or from such facilities, buildings and structures not forming part of the main pipeline specified in this Procedure to an operating main pipeline, including a mothballed main pipeline, due to constrained conditions (natural factors, developed social, industrial and transport infrastructure), deviations from the specified minimum distances are permitted in accordance with the legislation of the Member States, provided that compensatory engineering measures are ensured.

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