Technical Regulation in the Oil and Gas Industry

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1. General provisions, principles and features of the technical regulation system in the oil and gas industry

1. Scope of application of the Federal Law on Technical Regulation.

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3. Principles of technical regulation.

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The main theoretical provisions

1. Accreditation - official recognition by the accreditation body of the competence of an individual or legal entity to perform work in a certain area of conformity assessment safety of products, processes of production, operation, storage, transportation, sale and disposal (hereinafter referred to as safety) - a condition in which there is no unacceptable risk associated with harm to the life or health of citizens, property of individuals or legal entities, state or municipal property, the environment, the life or health of animals and plants.

2. Declaration of conformity is a form of confirmation of conformity of products to the requirements of technical regulations.

3. Declaration of conformity - a document certifying the conformity of products put into circulation with the requirements of technical regulations.

4. The applicant is a natural or legal person who, in order to confirm compliance, accepts a declaration of conformity or applies for a certificate of conformity, receives a certificate of conformity.

5. The mark of circulation on the market is a designation that serves to inform purchasers about the compliance of products put into circulation with the requirements of technical regulations.

6. Conformity mark is a designation used to inform purchasers about the conformity of the certification object with the requirements of the voluntary certification system or the national standard.

7. Product identification - establishing the identity of product characteristics to its essential features.

8. Control (supervision) of compliance with the requirements of technical regulations - verification of compliance by a legal entity or an individual entrepreneur with the requirements of technical regulations for products or related processes of design (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal and taking measures based on the results of the inspection.

9. Certification system - a set of rules for the performance of certification work, its participants and the rules for the functioning of the certification system as a whole.

10. Standard is a document in which, for the purpose of voluntary reuse, product characteristics, rules for the implementation and characteristics of the processes of design (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal, performance of works or provision of services are established.

11. Standardization is the activity of establishing rules and characteristics for the purpose of their voluntary reuse, aimed at achieving order in the areas of production and circulation of products and increasing the competitiveness of products, works or services.

12. Technical regulation - legal regulation of relations in the field of establishing, applying and fulfilling mandatory requirements for products or related design processes (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal, as well as in the field of establishing and applying on a voluntary basis requirements for

products, design processes (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal, performance of works or provision of services and legal regulation of relations in the field of conformity assessment.

13. Technical regulations - a document adopted by an international treaty of the Russian Federation, ratified in accordance with the procedure established by the legislation of the Russian Federation, or an intergovernmental agreement concluded in accordance with the procedure established by the legislation of the Russian Federation, or a federal law, or a decree of the President of the Russian Federation, or a decree of the Government of the Russian Federation, or a regulatory legal act of the federal executive authority for technical regulation and establishes mandatory requirements for the application and execution of technical regulation objects (products, including buildings, structures and structures or processes related to product requirements for design (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal).

14. Conformity assessment form - a certain procedure for documenting the conformity of products or other objects, design processes (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal, performance of works or provision of services to the requirements of technical regulations, provisions of standards or terms of contracts.

15. Conformity assessment scheme - a list of actions of conformity assessment participants, the results of which are considered by them as evidence of conformity of products and other objects to the established requirements in order to comply with the requirements of technical regulations.

16. Code of Rules - a document in the field of standardization, which contains technical rules and (or) a description of the processes of design (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal of products and which is applied on a voluntary basis.

17. Regional Organization for Standardization - an organization whose members (participants) are national bodies (organizations) for standardization of states belonging to one geographical region of the world and (or) a group of countries in accordance with international treaties in the process of economic integration.

18. A foreign state standard is a standard adopted by a national (competent) body (organization) for standardization of a foreign state.

19. Regional standard - a standard adopted by a regional organization for standardization.

20. Code of rules of a foreign state - a set of rules adopted by the competent authority of a foreign state.

21. Regional code of rules - a set of rules adopted by a regional organization for standardization

Related questions

1. What relations are regulated by this Federal Law "On Technical Regulation" No. 184-FZ?

2. Explain the rights and obligations of participants regulated by this Federal Law of relations.

3. What relations are not regulated by this Federal Law "On Technical Regulation" No. 184-FZ?

2. Characteristics of the current system of technical regulation

1. Objectives of the adoption of technical regulations.

2. Content and application of technical regulations.

3. The procedure for the development, adoption, amendment and cancellation of technical regulations

4. The procedure for the development, adoption, amendment and cancellation of technical regulations adopted by a regulatory legal act of the federal executive authority for technical regulation.

5. Special procedure for the development and adoption of technical regulations.

The main theoretical provisions

1. Technical regulations are adopted for the purposes of: protecting the life or health of citizens, property of individuals or legal entities, state or municipal property; protecting the environment, life or health of animals and plants; preventing actions misleading purchasers; ensuring energy efficiency.

2. Any person may be the developer of the draft technical regulations.

3. A notice on the development of a draft technical regulation must be published in the printed edition of the federal executive authority for technical regulation and in the public information system in electronic and digital form.

4. From the moment of publication of the notification on the development of the draft technical regulations, the relevant draft technical regulations should be available to interested persons for review. The developer is obliged, at the request of the interested person, to provide him with a copy of the draft technical regulations. The fee charged for providing this copy cannot exceed the cost of its production.

5. The developer finalizes the draft technical regulations taking into account the comments of interested parties received in writing, conducts a public discussion of the draft technical regulations and draws up a list of comments of interested parties received in writing with a summary of the content of these comments and the results of their discussion.

6. The period of public discussion of the draft technical regulations from the date of publication of the notification on the development of the draft technical regulations to the date of publication of the notification on the completion of the public discussion may not be less than two months.

7. The draft federal law on technical regulations adopted by the State Duma in the first reading is published in the printed edition of the federal executive authority for technical regulation and in the public information system in electronic and digital form.

8. The federal executive authority for Technical Regulation is obliged to publish in its print edition the draft federal law on technical regulations within ten days from the date of payment for its publication. The procedure for publishing the draft federal law on technical regulations and the amount of payment for its publication are established by the Government of the Russian Federation.

9. A draft resolution of the Government of the Russian Federation on technical regulations, developed in accordance with the established procedure and prepared for consideration at a meeting of the Government of the Russian Federation, is sent for examination to the relevant expert commission on technical regulation, which has been established and carries out its activities in accordance with the established procedure, no later than thirty days before the day of its consideration.

10. The draft resolution of the Government of the Russian Federation on technical regulations is considered at a meeting of the Government of the Russian Federation, taking into account the conclusion of the relevant expert commission on technical regulation.

11. The draft resolution of the Government of the Russian Federation on technical regulations must be published in the printed edition of the federal executive authority for technical regulation and placed in the public information system in electronic and digital form no later than thirty days before

the day of its consideration at a meeting of the Government of the Russian Federation. The procedure for publishing and posting the said draft resolution is established by the Government of the Russian Federation.

12. The examination of draft technical regulations is carried out by expert commissions on technical regulation, which include representatives of federal executive authorities, scientific organizations, self-regulatory organizations, public associations of entrepreneurs and consumers on a parity basis.

13. The conclusions of expert commissions on technical regulation are subject to mandatory publication in the printed edition of the federal executive authority for technical regulation and in the public information system in electronic and digital form. The procedure for publishing such conclusions and the amount of payment for their publication are established by the Government of the Russian Federation.

Related questions

1. What should the technical regulations contain?

2. What should not the technical regulations contain, taking into account the degree of risk?

3. What can not contain technical regulations?

4. Who can be the developer of the draft technical regulations?

5. How should international standards be used as a basis for the development of draft technical regulations?

6. When does the technical regulation adopted by a federal law, a decree of the Government of the Russian Federation or a regulatory legal act of the federal executive authority for technical regulation come into force?

7. What is the special procedure for the development and adoption of technical regulations?

3. The structure of the technical regulation system in the oil and gas industry and its relationship with other technical regulation systems

1. Standardization and its goals.

2. Principles of standardization.

3. Documents in the field of standardization.

4. The National Body of the Russian Federation for Standardization, technical committees for standardization.

5. National standards, all-Russian classifiers of technical, economic and social information.

6. Rules for the development and approval of national standards.

7. Rules for the formation of a list of documents in the field of standardization, as a result of the application of which compliance with the requirements of technical regulations is ensured on a voluntary basis.

8. Standards of organizations.

The main theoretical provisions

1. The objectives of standardization are: to increase the level of safety of life and health of citizens, property of individuals and legal entities, state and municipal property, objects, taking into account the risk of natural and man-made emergencies, to increase the level of environmental safety, safety of life and health of animals and plants; ensuring the competitiveness and quality of products (works, services), uniformity of measurements, rational use of resources, interchangeability of technical means (machinery and equipment, their components, components and materials), technical and information compatibility, comparability of research results (tests) and measurements, technical and economic-statistical data, analysis of characteristics products (works, services), execution of government orders, voluntary confirmation of conformity of products (works, services); assistance in compliance with the requirements of technical regulations; creation of classification and coding systems for technical, economic and social information, cataloging systems for products (works, services), quality assurance systems for products (works, services), search and data transmission systems, assistance in carrying out unification work.

2. Standardization is carried out in accordance with the principles of: voluntary application of documents in the field of standardization; maximum consideration of the legitimate interests of interested persons in the development of standards.

3. The National Standardization Body of the Russian Federation (hereinafter referred to as the national standardization body): approves national standards; adopts a program for the development of national standards; organizes the examination of draft national standards, as well as standards and codes of rules submitted for registration; ensures compliance of the national standardization system with the interests of the national economy, the state of the material and technical base and scientific and technological progress; keeps records of documents in the field of standardization in the Federal Information Fund of Technical Regulations and Standards and ensures their availability to interested persons; creates technical committees for standardization, approves regulations on them and coordinates their activities; organizes the official publication and dissemination of national standards, all-Russian classifiers of technical, economic and social information, standardization rules, norms and recommendations in the field of standardization in print and in the public information system in electronic and digital form; provides information and documents in the field of standardization in accordance with the obligations of the Russian Federation arising from international treaties of the Russian Federation Federations in the field of technical regulation.

4. National standards are developed in accordance with the procedure established by this Federal Law and approved by the national standardization body in accordance with the rules of standardization, norms and recommendations in this field.

5. The national standard is applied on a voluntary basis equally and equally regardless of the country and (or) the place of origin of products, the implementation of the processes of production, operation, storage, transportation, sale and disposal, performance of works and services, types or features of transactions and (or) persons who are manufacturers, performers, sellers, purchasers.

6. The application of the national standard is confirmed by the sign of compliance with the national standard.

7. The National Standardization Body develops and approves a program for the development of national standards.

8. The national standardization body should ensure that the program for the development of national standards is accessible to interested persons for familiarization.

9. Any person can be the developer of the national standard. The developer of the national standard should ensure that the draft national standard is available to interested persons for review.

10. The developer is obliged, at the request of the interested person, to provide him with a copy of the draft national standard. The fee charged by the developer for providing the specified copy cannot exceed the cost of its production.

11. The notification of the completion of the public discussion of the draft national standard must be published in the print edition of the federal executive authority for technical regulation and in the public information system in electronic and digital form.

12. From the date of publication of the notification of the completion of the public discussion of the draft national standard, the revised draft national standard and the list of comments received in writing by interested persons should be available to interested persons for review.

13. Based on the results of the examination, the technical committee for standardization prepares a reasoned proposal for approval or rejection of the draft national standard. This proposal, together with the documents specified in paragraph 7 of this article and the results of the examination, is sent to the national standardization body.

14. The national Standardization Body, based on the documents submitted by the technical committee for Standardization, decides on the approval or rejection of the national standard.

15. In the absence of national standards in relation to individual requirements of technical regulations or objects of technical regulation, codes of rules are developed in order to ensure compliance with the requirements of technical regulations for products or related processes of design (including surveys), production, construction, installation, commissioning, operation, storage, transportation, sale and disposal.

16. The development and approval of sets of rules are carried out by federal executive authorities within their powers. The draft code of rules must be posted in the public information system in electronic and digital form no later than sixty days before the date of its approval.

17. The procedure for developing and approving sets of rules is determined by the Government of the Russian Federation.

18. The list of documents in the field of standardization is approved by the National standardization body no later than thirty days before the date of entry into force of the technical regulations, published in the printed edition of the federal executive authority for technical regulation and placed in the public information system in electronic and digital form, as a result of the application of which compliance with the requirements is ensured on a voluntary basis adopted technical regulations.

19. The list may include national standards and codes of rules, as well as international standards, regional standards, regional codes of rules, standards of foreign states and codes of rules of foreign states, provided that these standards and codes of rules are registered in the Federal Information Fund of Technical Regulations and Standards.

20. Registration of international standards, regional standards, regional codes of rules, standards of foreign states and codes of rules of foreign states in the Federal Information Fund of Technical Regulations and Standards is carried out in accordance with the procedure established by Article 44 of this Federal Law.

21. National standards and codes of practice may specify the requirements of technical regulations, for compliance with which national standards and (or) codes of practice are applied on a voluntary basis.

22. Documents in the field of standardization included in the list specified in paragraph 1 of this Article are subject to revision and, if necessary, revision and (or) updating at least once every five years.

Related questions

1. List the goals of standardization.

2. Which body of the Russian Federation approves national standards?

3. Who develops national standards?

4. Who develops and approves sets of rules?

4. Principles and features of technical regulation of the oil and gas industry

1. Structure of the technical regulation system in the oil and gas industry:

1.1. drilling and development of fields onshore and offshore;

1.2. extraction of hydrocarbon raw materials on land and on the shelf;

1.3. transportation and storage of hydrocarbon raw materials and finished products;

1.4. oil, gas processing and petrochemistry;

1.5. gas supply processes and systems;

1.6. fuel and lubricants;

1.7. oil and gas and oil and gas field equipment;

1.8. equipment for the development of offshore fields.

2. List of technical regulations of the oil and gas industry.

3. The system of objects of technical regulation and technical regulations of the oil and gas industry.

4. The relationship of the system of technical regulation in the oil and gas industry with other systems of technical regulation.

5. Assessment and confirmation of compliance in the oil and gas industry.

6. The system of objects of technical regulation and forms of conformity assessment on the examples of special technical regulations in the oil and gas industry

The main theoretical provisions

1. List of technical regulations of the oil and gas industry

	No. in the Program of the Government of the Russian Federation	**Name of the special technical regulations**
Field development	1***	On the safety of offshore oil and gas field facilities
Hydrocarbon production	2 (26)*	On the safety of production processes of oil and gas extraction, transportation and storage
	3***	On the safety of production processes of extraction, collection and preparation of oil and gas on the continental shelf
Transportation, storage and transshipment of oil, gas and their refined products	4 (29)*	On the safety of trunk pipeline transport, in-field and local distribution pipelines
	5***	On the safety of the processes of production and transport of liquefied gas and LPG
	6 (121)**	About the requirements for the safety of oil, petroleum products, and liquefied gas storage facilities.
Oil and gas refining	7(119)**	About the requirements for the safety of oil refineries
	8 (50)*	About the requirements for gasoline, diesel fuel and individual fuels and lubricants

	9***	About the safety of gas processing plants
Petrochemical production	10 (27)*	On the safety of production processes in the petrochemical industry
Gas distribution and gas supply	11 (28)*	On the safety of production processes and gas supply systems
Machinery and equipment (NGO – oil and gas equipment)	12 (117)**	About safety requirements for oil and gas equipment
	13 (120)**	On the safety of oil and gas field and drilling equipment for the development of offshore oil and gas fields
	14***	About the safety of gas consumption

* - draft regulations have been prepared in accordance with the Government Program;

** - regulations are included in the next stage of the Government Program;

*** - proposals to supplement the Government Program

2. The system of objects of technical regulation and technical regulations of the oil and gas industry

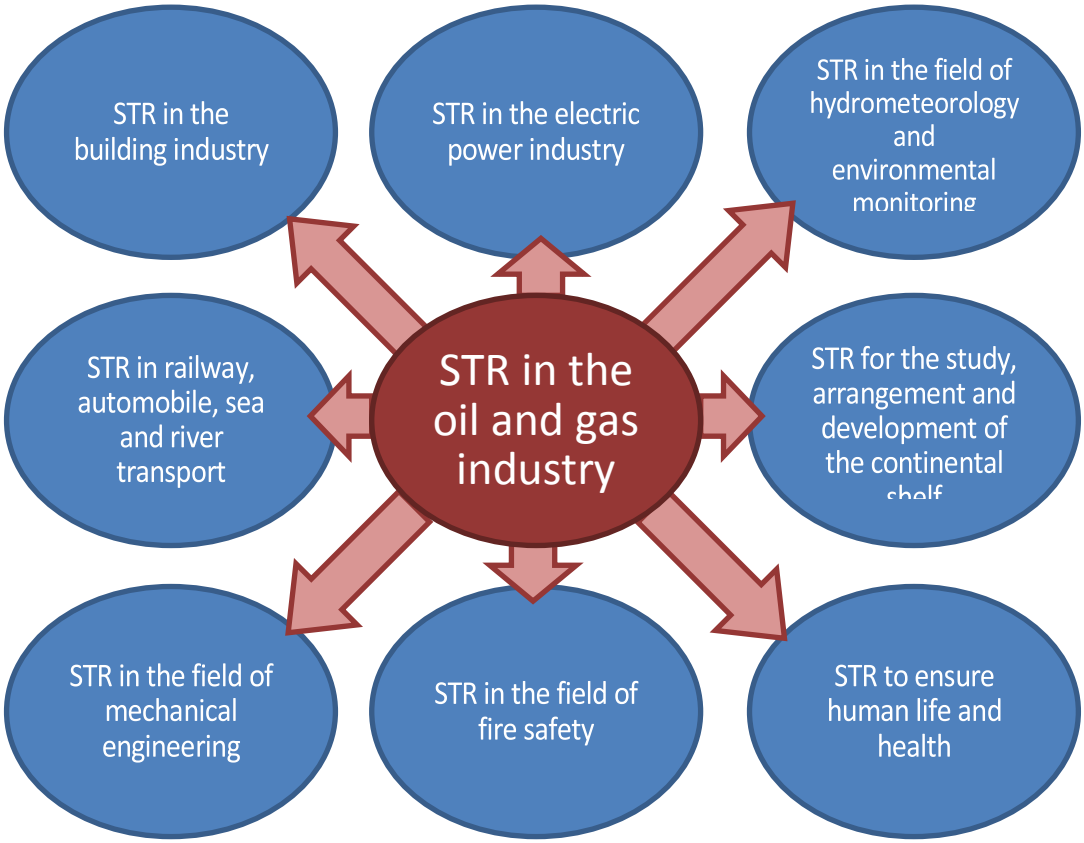
№	Title of the regulation	Title of the regulation Objects of technical regulation
1	On the safety of offshore oil and gas field facilities	Design, construction (new and reconstruction), operation, conservation and liquidation of the following offshore oil and gas field hydraulic structures: • Offshore stationary platforms • Artificial island structures • Floating platforms with tension devices • Underwater mining complexes • Overpasses • Marine shipping terminals and installations for gratuitous oil filling • Stationary offshore oil storage facilities • Floating oil storage facilities • Underwater pipelines
2	On the safety of production processes of oil and gas extraction, transportation and storage	Construction, development, operation, repair, reconstruction, conservation and liquidation of wells; Collection and preparation of oil and gas; Transportation of oil and gas in collection and preparation systems; Oil storage in oil collection and treatment systems; Gas storage in underground gas storage facilities.
3	On the safety of production processes of extraction, collection and preparation of oil and gas on the continental shelf	Construction, development, operation, repair, reconstruction, conservation and liquidation of wells; Operation of offshore drilling facilities (self-lifting, semi-submersible drilling rigs, on stationary bases, drilling vessels, etc.); Operation of oil, gas and gas condensate wells Collection, preparation of oil and gas in the conditions of offshore oil and gas production Transportation of oil and gas production products via underwater pipelines Oil and gas storage Transshipment of oil and gas and their transportation by tankers

4	On the safety of trunk pipeline transport, in-field and local distribution pipelines	Main pipelines intended for the transportation of hazardous substances; In-field pipelines intended for the transportation of hazardous substances; Local distribution pipelines intended for the transportation of hazardous substances at the stages of construction, operation, reconstruction, overhaul, liquidation of pipelines
5	On the safety of the processes of production and transportation of liquefied gas and a wide fraction of light hydrocarbons	Production, storage, quality control, shipment (reception) in bulk (discharge) to (from) transport containers (including containers), transportation through product pipelines of liquefied gas (liquefied hydrocarbon gases), LPG and other multicomponent light hydrocarbon mixtures
6	About the requirements for the safety of oil, petroleum products, and liquefied gas storage facilities	Storage and warehousing of oil and its refined products Storage and warehousing of gas and its processed products Storage of oil, petroleum products and liquefied gas
7	About the requirements for the safety of oil refineries	Production of motor fuel: gasoline, kerosene, etc.; Production of fuel: light distillate fuel, medium distillate fuel and heavy distillate fuel (diesel, fuel oil), gases (ethane, propane, butane, etc.); Production of lubricating oils and greases from oil (including residues of its distillation) and from spent (regenerated) oil; Production of products for the petrochemical industry and for the production of road surfaces; Production of various products: white spirit, petroleum jelly, paraffin, petroleum coke; Production of lubricants
8	About the requirements for gasoline, diesel fuel and individual fuels and lubricants	Product requirements: automotive gasoline, aviation gasoline, jet fuel, diesel fuel, marine fuel and heating oil in their production, sale and use, as well as the processes of their storage, transportation and disposal
9	About the safety of gas processing plants	Production of gases (ethane, propane, butane, etc.); Production of gaseous fuel with a certain specific heat of combustion; Production of high-octane components from hydrocarbon gases.
10	On the safety of production processes in the petrochemical industry	Production of synthetic ethyl alcohol; Production of plastics and synthetic resins in primary forms; Production of organoelement compounds; Production of chemical fibers; Production of carbon black (soot); Production of synthetic rubber; Production of rubber products.
11	On the safety of production processes and gas supply systems	Transportation of natural gas through pipelines of gas distribution and gas consumption networks; Natural gas combustion in gas-using equipment; Gas distribution networks of settlements, industrial, agricultural and other enterprises; Gas consumption networks of industrial, agricultural and other industries.
12	About safety requirements for oil and gas equipment	Oil and gas equipment, (including geological exploration, geophysical oil and gas pumping); Oil and gas field equipment.

13	On the safety of oil and gas field and drilling equipment for the development of offshore oil and gas fields	Well equipment; Capacitive equipment; Pumping and compressor equipment; Gas drying plants; Pipelines, shut-off and control valves; Filters; Control and measuring devices.
14	About the safety of gas consumption	Gas-using equipment Processes of design, construction, operation and utilization of gas-using equipment

3. The system of technical regulation in the oil and gas industry is interconnected and coordinated with other systems of technical regulation in related sectors of the economy

Interrelations of the system of technical regulation (STR) of the oil and gas industry with other systems of technical regulation



Related questions

1. Explain the structure of the technical regulation system in the oil and gas industry.

2. Give the characteristics of the interrelationships of the technical regulation system in the oil and gas industry with other technical regulation systems.

3. Present an analysis of the system of objects of technical regulation and forms of conformity assessment using examples of special technical regulations in the oil and gas industry.

5. Study of the characteristics of the current system of technical regulation

1. Analysis of possible sources of formation of the system of technical regulation of the oil and gas industry.

2. Participants in the system of technical regulation in the oil and gas industry.

3. Legislative field.

4. Regulatory documents of federal authorities.

5. Regulatory documents of the authorities of the subjects of the Federation.

6. State standards.

7. Economic efficiency and resources for the development of a system of technical regulation of the oil and gas industry.

8. Administrative issues of development and maintenance of a system of technical regulation in the oil and gas industry.

The main theoretical provisions

1. The system of technical regulation in the oil and gas industry is formed on the basis of the current system of regulatory and technical support of the industry and international experience.

2. The current system includes: legislative acts of the Russian Federation; regulatory documents of federal executive authorities (the Ministry of Industry and Energy of Russia, the Ministry of Natural Resources of Russia, the Ministry of Regional Development of Russia, Rostechnadzor, etc.); regulatory documents of the authorities of the subjects of the Russian Federation (the Government of Tatarstan, KhMAO-Yugra, YANAO, etc.); state standards of the GOST-R system; interstate standards of the Commonwealth of Independent States of the GOST system; standards of vertically integrated companies or natural monopolies (Gazprom, Transneft, Rosneft, etc.); standards of organizations (operating and service enterprises, public organizations, institutes, etc.); technical specifications (TU, STU) for products; technical requirements for projects, processes.

3. Participants in the system of technical regulation in the oil and gas industry are: state control, supervision and management bodies; organizations engaged in field development, production, transportation, processing, storage, transshipment and distribution of hydrocarbons; service organizations providing services for design, configuration, construction, commissioning, technical supervision.

4. The legislative field regulating the activities of the Russian oil and gas industry includes laws of general jurisdiction (Civil, Tax, Urban Planning, Land, Water, Forest Codes) and Federal laws ("On Subsoil", "On the Production Sharing Agreement", etc.). A number of important legislative projects for the industry are under development, in particular in particular, the draft federal law "On pipeline Transport".

5. Regulatory documents of federal executive authorities constitute the main part of regulatory documents in the oil and gas industry, the topics of which cover almost all areas considered in the System: subsoil use, field development, placement, construction and operation of fields, pipelines, oil refining (refineries), industrial safety, manufacture of oil and gas equipment, and so on.

6. Regulatory documents of the authorities of the constituent entities of the federation relate mainly to the organization of geological information, monitoring of development and environmental protection.

7. The state standards of the GOST-R system regulating activities in NGOs are divided into several series: 13, 21, 23, 71, 75, 77, 83, 91 with a total of about 1500. The central part of this array is occupied by the standards of the 75th series "Oil and gas production and processing and related industries", containing about 450 specialized standards. More than 50% of these standards account for measurement and testing methods of petroleum products, liquid and gaseous fuels. About 30% relate to technical specifications for specific types of products. The remaining (less than 20%) are classifiers, general technical requirements for product groups, and safety requirements.

Related questions

1. Specify possible sources of formation of the system of technical regulation in the oil and gas industry.

2. Who is a participant in the system of technical regulation in the oil and gas industry?

3. List the main regulatory documents of the authorities of the subjects of the Federation.

6. Study of international experience of state regulation of technical standards in other countries

1. Interstate standards of the Commonwealth of Independent States (CIS).

2. International standards (using the example of ISO/TC 67 standards).

3. International experience.

4. State regulation of technical standards in other countries.

5. Standards of organizations.

6. General assessment of the current system and directions of its modernization.

7. Participants of the technical regulation system in the oil and gas industry.

8. The system of state (national) GOST, GOST-R, used in the oil and gas sector of Russia and the CIS.

9. State and International standards of the GOST-R OKS 75 system "Extraction and processing of oil, gas and related industries".

10. List of technical regulations of the oil and gas complex.

The main theoretical provisions

1. CIS interstate standards continue to be developed and adopted within the GOST system. During the period 2001-2004, 10 interstate standards of ACS 75.180 "Equipment for the oil and gas industry" were developed: 6 were developed and presented by the Republic of Azerbaijan, 4 more by Russia.

2. For 10 years, the Russian oil and gas industry has been participating in programs to harmonize state GOST-R standards with recognized international standards: before 2000, these were API standards (American Petroleum Institute) (ANSI (American National Standards Institute)/API), after 2000 – ISO (International Organization for Standardization). 100% monitoring and examination of the development and adjustment of all ISO standards was carried out through the State Standard through technical committees (TC/67 - Technical Committee/67). Almost all ISO standards related to the oil and gas industry have an official translation into Russian and are quite fully used in projects, in the manufacture of equipment, etc. International standards are of very high quality and, if all accepted formal procedures are followed, can be adopted as national standards.

3. The following points should be taken into account. Firstly, the procedures for the harmonization of international and national standards are not based on unambiguous algorithms and can be interpreted in different ways. They may involve exact copying or only a certain level of convergence that allows the use of various reference materials, and may also have the character of an "arithmetic" addition of several standards used in different fields, under one common name.

4. Secondly, in all developed countries there is no 100% harmonization of national and international standards. The usual average level of expertly built harmonization is 40-60%. The mechanisms of international and separate national standardization are used, depending on the situation, as a competitive tool.

5. Thirdly, when adopting international standards, the interests of various financial and economic, state and economic groups are usually lobbied, and those participants who are more fully represented in the composition of the secretariats or as members of working groups receive an advantage.

6. In developed countries, technical regulation in the oil and gas industry is carried out not so much through national and international standards as through the standards of authorized regulatory and supervisory authorities. The options for the interaction of state regulation norms, national and international standards, are very diverse. For example, in Germany, everything related to the use of subsurface and underground structures is regulated by WEG documents (State Federal Supervision Authority), and not by national DIN standards (German Standards Institute). In Canada (the province

of Alberta), the technical standards for the operation of wells for oil and gas production are regulated by the documents of the commission under the Ministry of Energy.

7. In the United States, all federal regulatory activities are under the control of Congress, which approves the relevant appropriations to federal ministries, as well as under the control of a special commission under the President of the United States evaluating the expediency, legality, effectiveness and efficiency of regulatory intervention. The development of each new regulatory document requires justification in terms of calculating the risks (for the national economy and various social groups) associated with its creation or, conversely, with its non-creation. Mandatory technical requirements are contained in CFR documents (codes of federal regulation), which cover almost all technological processes. In particular, CFR-29.1910 regulates the activities of state supervision during drilling and operation of wells. In the UK, the norms of technical regulation in the energy sector are developed and published under the management of a special government body OFGEM (the British Gas and Electricity Markets Authority), while the relevant work is funded by mandatory targeted contributions from energy companies. These documents have equal legal force with national standards. In the UK, as in other countries, along with regulatory documents and standards, judicial and arbitration decisions are of decisive importance.

8. In some countries, the general industrial standards of the quality system are supplemented by special partnership programs between state regulatory authorities and oil and gas companies. For example, in the oil and gas complexes of a number of leading European countries (GB, the Netherlands, Norway), programs based on a safety culture (COB) have been adopted, for which a five-point scale has been introduced. The upper limit of the scale is the creative (creative) level, according to which all employees of enterprises participate in ensuring safe operating conditions of oil and gas facilities, and this process is equated to the main production processes. The higher the security system is certified, the lower the level of supervision. The ideal model to strive for is the "one object - one inspector" model, in which both parties are essentially partners and have a very high level of professional readiness.

9. In the domestic and global oil and gas industry, the standards of organizations are the most significant part in the general system of technical regulation. They are designed to accumulate the experience and competitive advantages of companies, implement the strategy and engineering approaches of companies. Financing of such documents owned by companies does not have the problems typical for financing documents of collective use. The costs of their development are quite obviously justified and quickly recouped. The development of this section can be a locomotive for the development of technical regulation of the oil and gas industry as a whole. In this case, from the point of view of financing organization, other sections of technical regulation are considered as an infrastructure in which the standards of large oil and gas companies operate. In developed countries, it is common practice to synchronize time and participants to develop company standards, international and national standards, and even state regulatory documents. Standards are often developed not by one, but by two or three interested companies (a pool), under the auspices of an association (for example, API). In this case, the documents have a limited number of users and are not available for free sale

Related questions

1. Describe the interstate standards of the Commonwealth of Independent States (CIS).

2. What is the basis of the system of state (national) GOST, GOST-R, used in the oil and gas sector of Russia and the CIS.

3. How the state regulation of technical standards is carried out in other countries.

4. What is the peculiarity of the system of state (national) GOST, GOST-R, used in the oil and gas sector of Russia and the CIS.

References

1. Быкадоров В.А. Техническое регулирование и обеспечение безопасности: учебное пособие для студентов вузов, обучающихся по специальности «Юриспруденция» / Быкадоров В.А., Казюлин В.А.; под ред. Ф.П. Васильева.- М.: Из-во ЮНИТИ- ДАНА; Закон и право, 2014.- 639 с.

2. Мишин В.М. Основы стандартизации, метрологии и сертификации: учебник. М.: Из-во ЮНИТИ-ДАНА; 2012.- 447 с. 3. Сергеев А.Г. Сертификация [Электронный ресурс]: учебное пособие. М.: Из-во Университетская книга; 2012.- 447 с.

4. Гусаков, Н.В. Техническое регулирование в автомобилестроении: Словарь-справочник [Электронный ресурс] : учебное пособие / Н.В. Гусаков, Б.В. Кисуленко. — Электрон. дан.— М. : Машиностроение, 2008. — 272 с. — Режим доступа: http://e.lanbook.com/books/element.php?pl1_id=732

5. Федеральный закон от 27.12.2002 № 184-ФЗ (ред. от 13.07.2015) «О техническом регулировании»

6. Закон РФ от 21.02.1992 № 2395-I (ред. от 13.07.2015) «О недрах»

7. Земельный кодекс Российской Федерации от 25 октября 2001 г. № 136-ФЗ (ред. от 05.10.2015) (с изм. и доп., вступ. силу с 19.10.2015)

8. Водный кодекс Российской Федерации от 03.06.2006 №74-ФЗ (ред. от 13.07.2015) (с изм. и доп., вступ. силу с 24.07.2015)

9. Лесной кодекс Российской Федерации от 04.12.2006 №200-ФЗ (ред. от 13.07.2015) (с изм. и доп., вступ. силу с 01.10.2015)

10. Налоговый кодекс Российской Федерации (часть первая) от 31.07.1998 № 146-ФЗ (ред. от 13.07.2015)

11. Налоговый кодекс Российской Федерации (часть вторая) от 05.08.2010. № 117-ФЗ (ред. от 05.10.2015)

12. Градостроительный кодекс Российской Федерации от 29.12.2004 № 190-ФЗ (ред. от 13.07.2015) (с изм. и доп., вступ. силу с 19.10.2015)

13. Федеральный закон от 04.05.1999 № 96-ФЗ (ред. от 13.07.2015) «Об охране атмосферного воздуха» 14. Федеральный закон от 21.12.1994 № 69-ФЗ (ред. от 13.07.2015) «О пожарной безопасности» // СПС Консультант + [Электронный ресурс].- Доступ в локальной сети НТБ.

15. Федеральный закон от 21.07.1997 № 116-ФЗ (ред. от 13.07.2015) «О промышленной безопасности опасных производственных объектов»

16. Приказ Минэнерго России от 22.02.2013 №70 «О Консультативном совете по инновационному развитию нефтегазового комплекса Российской Федерации»

17. Федеральный закон от 30.03.1999 № 52-ФЗ (ред. от 13.07.2015) «О санитарно-эпидемиологическом благополучии населения» (с изм. и доп., вступ. силу с 24.07.2015)

18. Федеральный закон от 10.01.2002 № 7-ФЗ (ред. от 13.07.2015) «Об охране окружающей среды» // СПС Консультант + [Электронный ресурс].- Доступ в локальной сети НТБ.

19. Федеральный закон от 09.07.1999 № 160-ФЗ (ред. от 05.05.2014) «Об иностранных инвестициях в Российской Федерации»