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# Liability of the supervisor under petroleum drilling contract

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**Abstract.** Petroleum industry supervision is not properly regulated by current legislation. This results in the lack of common vision to the provision of such kind of services, the uncertainty of the subject under contract as well as the degree of supervisor's liability for improper duty performance. The article discusses the main issues of supervisor services contract. Considering supervising specifications, place of supervisor in the system of customer-contractor relations during work realization is marked. The authors highlight the degree of supervisor organization liability and conceptually new approach to its definition.

## 1. Introduction

The need to improve the quality of oil and gas objects construction in the 1990s, at the dawn of Russian Federation market economy, spontaneously formed a new service market - supervising. Supervising as a phenomenon of petroleum industry is reflected in the hiring of engineers and engineering organizations to realize supervision over contractor services. At that, the relationships between the customer and the supervisor are regulated by the contract.

## 2. Research Methods

System approach. Supervising of well construction is studied from the standpoint of its varieties. The authors also conduct the research of supervising services in whole as a collective set.

Method of comparison. Petroleum supervising is studied in comparison with the current methods of well construction monitoring.

## 3. Subject of supervisor service provision under the contract

Today, supervising as a category has consolidated in the petroleum industry as self-existing economic-productive phenomena, covering a variety of activities. At this, supervising service according to its definition is common industry "slang". This is explained by the fact that during 20 years of supervising existence there was no sufficient legal and regulatory framework to manage these relations. There is one intradepartmental document of the Federal Agency for Subsoil Use - Order of 18<sup>th</sup> April 2006 "About organization of technical-technological and methodological instruction of oil and gas geological exploration, carried out at the expense of the Federal Budget," which regulates certain functions of supervisors as representatives of the client organization and their basic liabilities. However, such notion as well construction and workover supervising is not protected by current law and there is no list of supervisor services.



Supervising in petroleum engineering, as productive-economic phenomenon, has established its own system of production and economic relations. This reflects in the fact that supervisors could be on the one hand the experts working at the customer's enterprise and performing the control and supervision over the contractor. In this case, the liability of such specialists is primarily determined by Employment Regulations. On the other hand, specially attracted independent engineers or engineering organizations could realize supervisor functions. In this situation, the liability of such experts will be determined by the rules of the Civil Code of Russian Federation and contract.

Existing law does not directly regulate this kind of contracts, but at the same time allows making contracts for the provision of supervisor services based on the principle of contractual freedom [1], thus the terms of the contract will be determined at the discretion of the parties, except the cases when the contract terms are regulated by law or other legislation. [2]

The basis of the contractual relationship between the construction customer, the contractor and the supervisor is a provision of the Civil Code of Russian Federation, according to which the customer in order to realize the control and supervision over the construction work as well as to make decisions, can sign a contract for the provision of services with the relevant engineer (engineering company) without contractor's agreement. In this case, the construction contract regulates the liability of the engineer (engineering organization). [3]

The implementation of Russian Federation legislation forms a system of contractual relations including: construction contract signed between the customer and the construction contractor; contract for the provision of supervisor services signed between the customer and the construction supervisor. It should also be mentioned that there is no direct relationship between the contractor and the supervisor, their relations are only regulated by liabilities of construction contract.

The structure of supervising service is complex. Whereas there is an alliance of civil matters (two independent relations) - implementation of contract work and supervisor services in one productive-economic phenomenon, where the realization of construction works by the contractor will become a subject of supervisor's control. Realization of contract for the provision of supervisor services is impossible without contract relations. For the construction customer, the contract for the provision of supervisor services will be an independent subsidiary contract interrelated with construction contract.

Subject of the contract for the provision of supervisor services, based on the current practice of contractual relations could be defined according to the existing forms of organization supervisor services as: technical and technological supervision and construction management of oil and gas wells. Each of these forms has its own characteristics [4].

#### **4. The uniqueness of the supervising contract subject**

Supervisor service as a form of technical-technological activity has its own uniqueness and fundamental differences from the other types of production processes monitoring. Supervisor in accordance with the civil contract provides independent supervision over the construction technology, realizes final and intermediate control over the quality of contractor's work.

The main difference between supervisor's control and field supervision lies in competences. Supervisor is not the designer of project documentation, while the field supervision could be provided only by the developer of the project or by the representative of the design organization. By definition, field supervision is one of the types of services considering the project documentation developers (individuals and legal entities) supervision over the compliance of the construction works to the construction documents. Liabilities of a person realizing field supervision are as follows: monitoring the construction works compliance to the documentation and requirements of construction regulations; control over the quality and work production technology considering the strength, stability, durability of the construction and process of engineering equipment installation [5]. Supervising control is expressed in constant supervision of construction technology as a process of construction carried out by the contractor and other involved individuals. This activity is the principal sphere of supervisor's responsibility. At that, supervisor may also realize field supervision, considering customer needs, established by contract relations.

Supervisor control also differs from the construction control realized by the project developer. Project developer construction control is:

- to check that the contractor has all necessary documents (certificates in certain cases) confirming the quality of the applied materials, tools and equipment, results of entry material control and laboratory testing;

- to monitor the rules of warehousing and storage of the applied materials, tools and equipment; if violations occur a representative of technical supervision could prohibit the usage of improperly stored materials;
- to control the compliance of the executed works to the operating control requirements;
- to control correctness of the contractor's documentation, including the geodetic schemes fairness of random element accuracy control placement assessment;
- to eliminate the deficiency in project documents revealed during construction works, to return incorrect project documentation, to control and receive documented approval of the revised documentation, to give documentation to the contractor;
- to control the execution of State supervisory body and local authority requirement;
- to notify State supervisory body about all the emergency conditions at the construction site;
- to control the compliance of construction volumes and time to the contract terms and the schedule of construction;
- to evaluate (together with the contractor) the relevance of executed work, constructions, areas of utilities, signing of bilateral acts confirming the relevance; to monitor the contractor over the realization of requirements concerning prohibition of work execution before signing the act;
- to realize final evaluation (together with the contractor) of construction object in order to define its local legislation and project documentation relevance [6].

Supervising control can cover both individual and all project developer liabilities towards construction control established by independent contractual relations. Supervisor fulfilling field supervision at the construction object, represents the customer, protects its interests, while the construction supervision is organized on the basis of internal customer service for realization of production and operational control over the contractor's work. Internal supervisor is not always an independent specialist. There is a dependency from the authorities, targeted to key performance indicators. This can lead to the concealing of process deviations and irregularities committed in the course of construction.

Thus, due to the character of construction works, as well as the features established by legislation concerning supervision of work realization at the construction object, supervising can be considered as an alliance of all existing individual control elements that may be significantly expanded on a contractual basis due to the customer's needs.

## **5. Contract liability of the supervisor**

The question, concerning the degree of service company liability in the system of customer-contractor relationship, arises on the basis of the supervisor services contract subject. At that the liabilities of the supervisor should be clearly noted in the contract and cover the specificity of the main production risks.

The following risks could be referred to the main customer's risks:

- 1) Project risks: non-compliance of contractors work to the cost estimating documents;
- 2) Presence of falsified and counterfeit materials nonconforming inventory project documentation;
- 3) Non-compliance of contractor's production technology to regulatory and legal framework;
- 4) Information risks: delay in notification, concealing of violations described above, lack of relevant information concerning the progress of work;
- 5) Failure to comply the rules of labor safety as well as the environment protection at the customer's site.

The specificity of above mentioned risks lies in the fact that the processes of well production (construction, workover) are of probabilistic nature and random character. Omissions could be sometimes detected only after a considerable period of time. Liability of contractor towards the customer is strictly regulated by the Civil Code of Russian Federation. The Contractor bears full liability in case any deficiencies or construction defects occur and ensures work realization in accordance with the requirements of design documentation, within 5 years of the warranty period or other specified terms of the contract between the contractor and the customer. [7]

The current tendency of contractual relations is the design of contract attachments in the form of work quality violation list and contractor's liabilities for such violations. At that, it is obligatory to attach the justification of decreasing the quality of work, namely the approval of the document confirming the fact of quality decrease. For example, in case the well fails to get in to the target area considering the tolerance range of the permissible instrumental error up to 10 m, the contractor could burden 50% of the well cost. Geophysical data will be the justification. The additional term to contractor's organization in the context of fines excess of more than 20% of the total well construction cost, could be the liability considering re-drilling of wells at the contractor's expense.

Late detection of deviations associated with the work quality decrease is the basic difficulty in determining the degree of supervisor organization liability directed to the prevention of such defects. As it has been previously noted, Russian Federation legislation is lack of regulations concerning liabilities of supervisor organizations towards the customer and the contractor, so these aspects should be clearly defined in the contractual relations, as the degree of supervisor liability is the main factor motivating the proper execution of supervisor duties.

The degree of liability directly depends from the supervisor duties, that is the liability of service company at various forms of supervising will be different. Thus the main purpose of supervisor organization in the form of technical and technological control is the detection of deviations and defects that influence the quality of construction realized for the customer. At that the supervisor is not a co-executor of the contract and therefore bears secondary liability for the result of this construction. In other words, the supervisor will only be liable for the delay or undetermined violations of technology or other factors affecting further performance of the construction contract. The main method of providing liability under supervisor services contract is penalty. In this case the customer is not obliged to prove the amount of losses, despite the degree of supervisor organization fault. Customer's financial damages will be covered by the contracting organization [8]. Normally the amount of fine is 0.1% of the contract value for the improper performance of obligations. Fines do not free the supervisor from the recovery of financial damages in case supervisor's fault is proved.

In the case when supervisor is attracted as a construction manager, supervisor becomes the subject and a direct participant of the construction. That is, the supervisor becomes the executor under the contract. Supervisor's actions are regulated by liability rules of the contractor towards the customer. The liabilities become equal to that of the contractor, at that the supervisor is not liable to choose the contractors and subcontractors this is the prerogative of the customer. It is necessary to set the financial liability of supervisor organization for the construction result, since the whole process of construction should be under supervisor control under equal liabilities of general contractor and supervisor. The fine is a method ensuring the quality of supervisor organization duties performance. However, the fine could not always cover customer losses caused by faulty contract work performance. In this case, the terms of financial damage cover must be established in the supervisor services contract (in accordance with Civil Code, Article № 394).

The presence of such terms in the contract means full supervisor's financial liability for the result the work. A difficult question arises - how to determine the degree of supervisor organization fault for undetected violations, which resulted in significant losses for the customer. For example, geophysical data indicate that the contractor performed faulty run-in-hole operations, at that the inability of further well operation is proved, but the supervisor failed in noticing that. Such serious violation of construction technology leads to redrilling of wells at the expense of the accused party. The degree of supervisor's fault from the financial point of view is difficult to determine, as both parties are guilty - the contractor for procedural violations and the supervisor for being not attentive.

Therefore the following economic criteria in determining the degree of supervisor organization liability is offered, considering the establishment of supervisor organization liability towards the customer losses relating the construction contract value to the value of supervisor services contract. At such approach, the supervisor financial liability could be expressed in the range of up to 10% from the total cost of well construction, depending on the specificity of supervisor services. The penalties for the customer will not exceed the cost of supervisor services contract. The contractor is proposed to bear the rest of uncovered losses. Thus the contractor and the supervisor will bear equal liability towards the customer. However, this approach could be of negative consequences in terms of market relations development for the attraction of supervisor services. Revealing of such cases, could lead to the unprofitability of supervisor organizations, since not all organizations could bear such liability. Therefore the amount of liability could be adjusted by establishing the decreasing coefficient related to the priority of works performed by the contractor and the complexity of faults and deviations detection during the construction.

## 6. Conclusion

Lack of regulatory acts in Russian Federation, results in the uncertainty concerning the supervising role in the process of oil and gas wells construction and workover. The uniqueness and the fundamental difference between supervisor services lies in combination of existing oil and gas wells quality construction and workover control in Russian Federation. At that, the range of supervisor organization liabilities in implementing service management and<sup>4</sup> construction control, could be significantly extended,

based on the specifics of work performance and customer needs. Liabilities of supervisor organizations toward the customer are established by contractual relations. The main difficulty that arises is to determine the degree of supervisor organization liability for the performance of work under the contract. In various forms of supervising the degree of responsibility will be different. At realizing of technical and technological supervision the method of providing liability under supervisor services contract is penalty, yet the customer is not obliged to prove the amount of losses for undetected defects and failures in production technology. In case when supervisor is attracted as a construction manager, supervisor becomes the subject and a direct participant of the construction. This means that supervisor bears equal liability together with the contractor. At that an additional liability of supervisor toward the customer is offered – recovery of financial damages not covered by defective construction fine. The economic criteria in determining the degree of supervisor organization liability is offered, namely the establishing of supervisor organization liability toward customer losses relating the construction contract value to the value of supervisor services contract.

## References

- [1] Article 1. Civil Code of Russian Federation
- [2] Article 421. Civil Code of Russian Federation
- [3] Article 749. Civil Code of Russian Federation
- [4] Sizov A V, Boyarko G Y and Shenderova I V 2014 Development of well construction and workover supervising in Russian Federation [Electronic resources] *IOP Conference Series: Earth and Environmental Science* Vol. **21** 1-5 Mode of access: <http://iopscience.iop.org/1755-1315/21/1>
- [5] SNiP (Construction norms and regulations) «Construction management» approved by Gosstroy (Russian State Committee for Construction), 10<sup>th</sup> June 1999, №44
- [6] SNiP (Construction norms and regulations) 12-01-2004 «Construction management» approved by Gosstroy (Russian State Committee for Construction), 19<sup>th</sup> April 2004, № 70
- [7] Article 756. Civil Code of Russian Federation
- [8] Shirenkova E A 2010 Legal aspects of supervising services *Drilling and Oil* **9** 52-55.