



# Subsoil and Subsoil Use Code

Hydrocarbons | Project Documents and Specific Issues (Chapters 19 & 20)



# Chapter 19. Project Documents of Hydrocarbons Subsoil Use

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# General on Project Documents

All subsoil use activities must be documented with the following Project Documents:

1. Primary Documents:
  - a. Project of appraisal survey;
  - b. Project of experimental exploitation; and
  - c. Project of hydrocarbons field development.
2. Technical Project Documents as listed in the Unified Rules on Rational and Complete Utilisation of Subsoil in Exploration and Production №239 dated 15 June 2018 («**Rational Utilisation Rules**»).

Such documents can only be prepared by special licensed firms on the basis of (i) Rational Utilisation Rules and (ii) best practices.

Any change in technology or timeframe of exploration & production requires prior change in Project Documents.

All Project Documents that were approved with positive state expertise are *mandatory for compliance* by the oil company in all relevant activities covered by such project document.

Daily indicators of oil and gas treatment  
of the RK  
22.04.2020

Oil and gas condensate, thousand tons 245.0

Gas production, million cubic meters 155.0

Processing of oil at the refinery of the RK thousand tons 42.4



# Project of Appraisal Survey

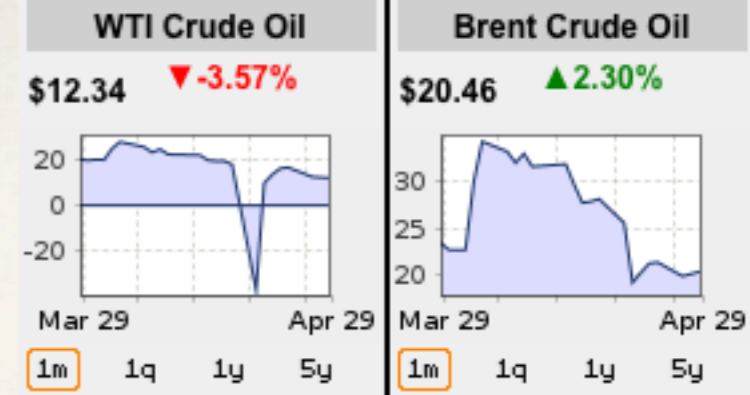
- ❖ Must be completed within 1 year as of the contract's registration.
- ❖ Must cover all of the exploration period, full volume and all time specified for the works declared by the oil company according to the Program of Works.
- ❖ Must include:
  - (1) description of types, techniques, technologies and volume of works in respect of each block;
  - (2) measures to secure rational utilization and protection of subsoil;
  - (3) information on time frames conditions and costs for performing works on liquidation of consequences of the exploration.
- ❖ No work can be done unless oil company specifies this work in the project of appraisal survey and receives positive state expertise conclusion for such work.

Gas production of the largest companies, mln cu. m. 2018 first half	
LLP "Karachaganak Petroleum Operating B.V."	9776,7
LLP "Tengizchevroil"	8074,0
North Caspian Operating Company B.V.	3587,3
JSC "CNPC-AMG"	3101,1
LLP "Zhaikmunai"	511,4
LLP "KazAzot"	519,2
JSC "Mangistaumunaigas"	394,5
LLP «KazakhOil Aktobe»	217,7
LLP "JV "Kazgermunai"	262,5
JSC «Ozenmunaigas»	307,3



# Project of Experimental Exploitation

## Exchange oil prices



- ❖ Must be completed within 3 months as of oil company's corporate decision on the need to conduct such exploitation.
- ❖ These document must describe: types, methods, techniques and technologies of experimental expectation as well as expected production volumes.
- ❖ Experimental exploitation during exploration of the reservoir can only be conducted if Project of experimental exploitation received positive state expertise.
- ❖ If oil company decides to go for experimental exploitation then each reservoir must have a separate Project.
- ❖ Any change in the works or even additional works that oil company may need must be reflected in the Project before such works take place.



# Project of Field Development

- ❖ Must be prepared within the exploration period or preparation period
- ❖ Must cover all of the *profitable production time* in the field.
- ❖ Includes types, techniques, technologies, volume and timeframe for conducting industrial development of the field.
- ❖ Any change in the works requires reflection in the project and receipt of positive expertise (approval by the relevant institution).
- ❖ No production work is allowed unless it is described in the Project that obtained positive state expertise.

## Oil production of the largest companies, 1000 tons 2018 first half

LLP "Tengizchevroil"	14739
Karachaganak Petroleum Operating BV	6279,2
North Caspian Operating Company BV	6173,3
JSC "Mangistaumunaigas"	3159,4
JSC «Ozenmunaigas»	2727,5
JSC "CNPC-Aktobemunaigaz"	1911,4
LLP "JV "Kazgermunai"	1330,4
JSC "Embamunaigas"	1399,2
"Buzachi Operating" ltd	685,2
JSC "Petro Kazakhstan Kumkol Resources"	523,2



# Technical Project Documents

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- ❖ Technical project documents are prepared on the basis of Projects for appraisal serving, experimental exploitation or development of field.
- ❖ If change in the Primary Project Document causes change in parameter specified in the technical project documents then the technical project documents must be altered accordingly.
- ❖ Project on liquidating consequences of exploration must be prepared simultaneously with the Project of appraisal survey. [PLEASE TRY TO EXPLAIN WHY LIQUIDATION PROJECT MUST BE PREPARED SO EARLY?]





# State Expertise and Conclusions Project Documents

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- ❖ Project documents in the subsoil use area are subject to mandatory state **environmental** expertise that must be contacted according to ecological legislation of Kazakhstan.
- ❖ Project of appraisal survey that does not include drilling or well testing can be sent to the competent ministry *as a notice* after obtaining positive conclusion of state environmental expertise.
- ❖ Project documents that do include drilling or well testing first receive positive conclusion of state environmental expertise and then must also receive state expertise by Central Commission (see next Slide).
- ❖ Project of experimental exploitation first of all must receive positive conclusion on current estimation of geological reserves. After that it may be filed for state expertise.
- ❖ Project of field development first of all must receive positive conclusion on the report of calculating geological reserves. After that it may be filed for state expertise.
- ❖ If technical projects include urban or architectural construction they must first pass construction expertise according to the construction legislation of Kazakhstan.



# State Expertise of Primary Project Documents

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- ❖ The main purpose of state expertise is to provide rational utilization of subsoil use during exploration and production in accordance with best practices of subsoil use.
- ❖ State expertise of primary project documents is processed by **Central Commission on Exploration and Development of Hydrocarbons Fields (the «Central Commission»)**. Search commission may involve independent experts with specific knowledge in the area of geology and development and that have no conflict of interest.
- ❖ Governance of the Central Commission its membership and procedures shall be approved by the Minister of Energy.
- ❖ State expertise of the project of appraisal survey takes 2 months.
- ❖ State expertise of the projects on experimental exploitation and field development takes 3 months.



# Process for State Expertise of Project Documents

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1. After receiving Primary Project Document the Central Commission sends it to the independent expertise operator, *Information-Analytical Center of Oil and Gas JSC* wholly-owned by the Ministry of Energy.  
<http://www.iacng.kz>
2. The Operator selects and enters into agreements with independent experts in geology, development, economy and law to provide expertise of the primary project document. Example of recent announcement searching for experts: <http://www.iacng.kz/ru/news/8641/>
3. After receipt of independent expertise the Central Commission holds meeting to decide on state expertise of primary project document. The results of state expertise is formulated in the *Experts' Opinion* which can be either positive or negative.



# Reasons for Negative Experts Opinion

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1. Incompliance with the legislation or contract provisions
  2. Incompliance with legal and technical requirements on content, structure and formulation
  3. Incompliance with best practices of subsoil use
  4. Inaccuracy of data on quantity and quality of explored reserves of hydrocarbons
  5. Incapacity of objective evaluation of quality of the project solutions.
  6. Lack of positive conclusion on current estimation of geological reserves (for Project of experimental exploitation).
- \* Lack of positive conclusion on the report of calculating geological reserves (for Project of field development).



# State Expertise of Subsoil

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- \* State expertise of subsoil is made to ensure establishment of conditions for rational use of subsoil state accounting of geological reserves of hydrocarbons as well as evaluation of data accuracy on quantity and quality of explored geological reserves
- \* State expertise of south soil is made by analyzing the report on calculation of geological reserves prepared by licensed design institution in accordance with specific legal and technical requirements approved by the Ministry of energy.
- \* State expertise of the subsoil shall be done by the [Central Commission on Hydrocarbons Reserves in the Republic of Kazakhstan](#) with involvement of independent experts that have no conflict of interest.



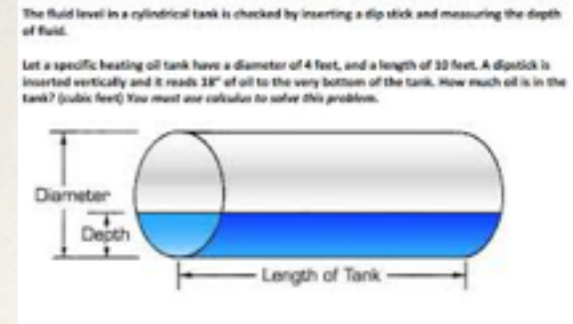
# Chapter 20. Specific Issues of Hydrocarbons Subsoil Use

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# Accounting control of Crude Oil and Gas Condensate

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- ❖ Kazakhstan has established information system on accounting of crude oil and gas condensate that allows daily collect and use data on these commodities that are in turnover and ready to be supplied for consumption.
- ❖ The operator of this information system is *Information-Analytical Center of Oil and Gas JSC* wholly-owned by the Ministry of Energy). <http://www.iacng.kz>
- ❖ **Turnover of crude oil and gas condensate** means it's preparation, transport, storage, delivery, sale, import and export from Kazakhstan
- ❖ Oil and gas companies in Kazakhstan always must equip the production facilities with special measuring devices that are approved in accordance with the legislation. **Production of oil and gas without such measuring devices is prohibited.**





# Unified Data Management System

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- \* All subsoil users and entities conducting activities in **production and turnover of oil, gas, uranium and coal**, including their authorized representatives provide all reports through unified state system of subsoil use management.
- \* Such reports must be verified by electronic digital signature according to form and procedure of reporting approved by Ministry of Energy / Ministry of Industry and Industrial Development.
- \* Integrated information system called «*Unified State System of Subsoil Use Management in the Republic of Kazakhstan*» and is located at <https://egsu.energo.gov.kz>



# Gas Flaring Ban and Gas Utilisation

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Gas flaring is prohibited except for the following:

1. Danger of or occurrence of accidents endangering life of personnel or health of the population and environment
2. During testing of the wells
3. During experimental exploitation of the field
4. When gas flaring is *technologically inevitable*.

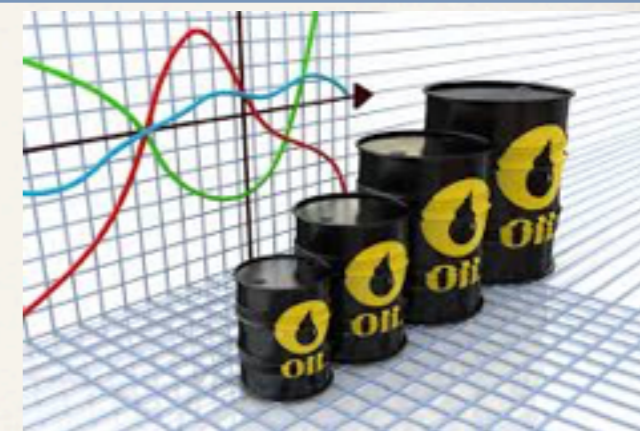
All of the above require a permit except for item 1 which requires notification.

Subsoil user must take measures to minimize the volume of gas flaring.

All subsoil users must include processing and utilization of progress into the project of field development on mandatory basis. **Kazakhstan prohibits to extract hydrocarbons without full processing of crude gas.**



# Mene, mene, tekkel, upharsin



- ❖ Measurement and weighing of oil produced by the subsoil user on the plot must be calculated in accordance with the Order 163 of the Minister of Energy dated 5th of May 2018.
- ❖ Oil company must regularly conduct tests of the equipment and devices used for measuring in accordance with the legislation of Kazakhstan.



Thank you and Good Bye!

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