

OPEN JOINT STOCK COMPANY
"Surgutneftegas"

APPROVED
Director of the Civil Defense Department
Ministry of Emergency Situations of Russia
Letter No. 14-6-1497

_____A. V. Lutoshkin

13 July 2018

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APPROVED
Director General
OJSC "Surgutneftegas"

_____V. L. Bogdanov

dated 02 July 2018

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Head of Oil and Gas Production and
Transportation Department
Ministry of Energy of the Russian Federation
Order No. 696

_____A. A. Gladkov

22 August 2018

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PLAN

of prevention and elimination of oil and oil spills in the facilities of OJSC
"Surgutneftegas"
correction (revision)

the city of Surgut

GENERAL PART

Plan of prevention and elimination of oil and oil products spills in the facilities of the OJSC "Surgutneftegas" (hereinafter – "the Plan") is developed in compliance with legislative and regulatory requirements of the Russian Federation in the field of prevention and elimination of emergency situations due to oil and oil products spills (hereinafter referred to as "ES(O)"), aimed at organization and implementation of measures for prevention and elimination of them.

Planning of measures for prevention and elimination of oil and oil products spills is aimed at advance implementation of measures for prevention of ES(O), keeping instant readiness of forces and means of their elimination and minimization of safety hazard for population and the environment.

The present Plan adheres to the requirements of the legislation of the Russian Federation and has **federal significance**.

The Plan consists of 3 volumes: Conceptual volume (the first volume), appendices to the Plan regarding Khanty-Mansiysky Autonomous Okrug – Yugra and Yamalo-Nenetsky Autonomous Okrug and Tyumenskaya oblast (the second volume) appendices to the Plan regarding the Republic of Sakha – Yakutia (the third volume), appendices to the Plan. The structure of volumes adheres to the requirements of the Rules of development and concurrence of the Plans of prevention and elimination of oil and oil products spills in the territory of the Russian Federation approved by the order of the Ministry of Emergency Situations (MES) of Russia No. 621 dated 28.12.2004.

The Conceptual volume represents conceptual (general) approaches of OJSC "Surgutneftegas" to implementation of the requirements of legislative and regulatory acts of the Russian Federation and measures for prevention and elimination of ES(O).

The Volumes with Appendices to the Plan represent the Conceptual volume materials with regard to specific conditions and peculiarities of the Company's facilities location and functioning in the following constituent entities of the Russian Federation: the Republic of Sakha (Yakutia), Khanty-Mansiysky Autonomous Okrug – Yugra, Yamalo-Nenetsky Autonomous Okrug, Tyumenskaya, Novosibirskaya and Irkutskaya Oblasts and Krasnoyarsky Krai.

Aim and regulatory basis of the Plan development

Aims and goals

Aim of the Plan:

- advance implementation of measures for prevention of ES(O);
- keeping instant readiness of forces and means for elimination of emergency situations to provide safety for population and the environment;
- the greatest possible minimization of damage and losses in case of ES(O).

Goals of the plan (defined by the Order of MES of Russia No. 621 "On approval of the Rules of development and concurrence of Plans of prevention and elimination of oil and oil products spills in the territory of the Russian Federation" dated 28.12.2004):

- level substantiation of possible ES(O) and consequences

of its occurrence;

- establishment of basic principles of implementation of measures for ES(O) prevention and elimination on an appropriate level in order to determine sufficiency of planned measures with regard to characteristics of possible ES(O) source as well as geographical, navigational and hydrographical peculiarities of possible oil spill zone;
- monitoring and control of socioeconomic consequences of ES(O), monitoring of the environment and the situation in OJSC "Surgutneftegas" and the adjacent territories;
- determining order of interaction between outside agencies, management bodies, forces and means under conditions of emergency situation, implementation of measures for providing of information interchange;
- substantiation of the sufficient amount and structure of forces and means of the organization for elimination of ES(O) involving rescue units tooled up with special technical devices, facilities, equipment and materials, certified in the established order (hereinafter referred to as ARU(O)) and/or the need of other organizations involvement regarding to their location, in compliance with ARU(O) legislation;
- establishment of the procedure of providing and control of management bodies and means readiness to action providing for planning of exercises and training;
- working out a situational chart (calendar schedule) of operative actions for elimination of ES(O);
- implementation of focused and scientific and technical programs aimed at prevention of ES(O) and increasing of management bodies functioning stability in case of emergency situation occurrence, as well as expert evaluation, supervision and control in the field of protection of population and territories from ES(O);
- planning of measures for ES(O) consequences elimination.

The Plan is an executive directive establishing actions of the oil spill elimination system of OJSC "Surgutneftegas" for implementation of measures for prevention and elimination of ES(O) and their consequences. Commissions for prevention and elimination of emergency situations and fire safety (hereinafter referred to as "CES") of OJSC "Surgutneftegas" and its business units follow the Plan when solving problems of implementation of measures for prevention and elimination of ES(O) in hazardous production facilities of OJSC "Surgutneftegas".

The present document contains necessary information, directions and operational recommendations for implementation of tiered response, providing readiness of forces and means for elimination of ES(O) in order to ensure effective and timely carrying out of works on elimination of ES(O) within RSCHS. It involves the list of organizational and functional duties of the officials, procedure of measures implementation, reporting requirements, as well as recommendations for

choosing strategy and tactics of localization and elimination of oil and oil products spills, creation of necessary financial and material resources.

Besides, the Plan provides its users with necessary information about implementation of measures for prevention and elimination of ES(O) in OJSC "Surgutneftgas" and allows to plan measures for prevention and elimination of ES(O) within territorial and functional RSCHS subsystems.

The users of the Plan are:

MES of Russia and Siberian regional center of civil defense emergencies and disaster relief and corresponding territorial bodies of MES of Russia in the Republic of Sakha (Yakutia), Tyumenskaya, Irkutskaya, Novosibirskaya Oblasts, Khanty-Mansiysky Autonomous Okrug – Yugra, Yamalo-Nenetsky Autonomous Okrug and Krasnoyarsky Krai.

CES of the Republic of Sakha – Yakutia, Tyumenskaya, Irkutskaya and Novosibirskaya Oblasts, Khanty-Mansiysky Autonomous Okrug and Yamalo-Nenetsky Autonomous Okrug and Krasnoyarsky Krai.

The users of the calendar plans of operative actions, which are the part of the present Plan and define the actions of oil spills elimination system of OJSC "Surgutneftgas" in case of ES(O) of local and municipal significance occurrence, are CES of corresponding municipal entities and chief directorates of MES of Russia.

The level of the Plan of oil spills elimination is determined by:

- volume of the prognosed oil spill (table 1.4.1-1.4.2) (in compliance with Order of the Ministry of Environmental Resources No. 156 dated 03.03.2003, Decree of the Government of the Russian Federation No. 613 dated 21.08.2000);
- location (area) of the prognosed spill.

According to this:

The Federal level of the Plan of oil spills elimination is defined in compliance with Decree of the Government of the Russian Federation No. 613 dated 21.08.2000 as amended by No. 240 dated 15.04.2002.

The period of validity of the present Plan is five years.

Procedure of usage in practical activity:

The Plan comes into power after its concurrence and approval.

The Plan is the basic and adjusting document for organization of oil spills elimination in the facilities of OJSC "Surgutneftgas" subject to compulsory implementation by all officials and organizations involved in oil spills elimination insofar as it refers to elimination of an emergency situation with oil and oil products spill.

Acquaintance with the Plan of prevention and elimination of oil and oil products spills is proved with the personal signature of the Company's employee on the sheet of acquaintance attached to the present Plan (*see Appendix*).

All current changes not requiring additional concurrence are immediately introduced in the Plan that is registered in the sheet of changes attached to the Plan. Changes are brought to the attention of all the Company's employees with signature confirmation.

The introduction of changes to the document is subject to accounting and control. OJSC "Surgutneftegas" is responsible for timeliness of introduction of amendments and notification about their application.

The Chief Engineer is responsible for implementation of the Plan and bringing of its statements to the attention of all persons and organizations concerned.

The Plan correction procedure:

Plans are subject to early correction (revision) by the decision of one of the bodies that approved it or in case of adoption of relevant legal regulations.

Correction (revision) of the Plan is performed in case of changes in initial data affecting the level and organization of response to ES(O), with notification of executive bodies which approved this Plan.

Main characteristics of the organization and projected contaminated areas in case of ES(O)

Open Joint Stock Company "Surgutneftegas" is an economically autonomous structural subdivision (is not a branch or representative office). OJSC Company "Surgutneftegas" consists of 58 business units with the total number of 104,653 employees as of 01 January 2018.

The following oil and gas production divisions (hereinafter – OGPD) of the Company are in charge of oil and gas production, treatment and transportation:

OGPD "Surgutneft";
OGPD "Fedorovskneft";
OGPD "Bystrinskneft";
OGPD "Komsomolskneft";
OGPD "Lyantorneft";
OGPD "Nizhnesortymyskneft";
OGPD "Talakanneft".

In-house divisions of OJSC "Surgutneftegas" perform the full spectrum of oil and gas fields exploration and development, field facility construction and oil and gas production.

The main activities are performed by:

Prospecting and Exploration Division and trust "Surgutneftegeofizika" – geological exploration in the license areas;
Three Drilling Divisions – development drilling of oil wells;
Five Construction Trusts of various types of activities – production and non-production construction;
Gas Processing Division – associated gas processing;
Six Industrial Transport Divisions and PTF «Surgutneftetransservis» – provision of all types of business activities with the automotive vehicles and engineering, specialized equipment.

"SurgutNIPIneft" – R&D and design work in oil and natural gas production.

Communication and Telecommunication Division – provision of the corporate communication network over the entire territory of the Company's operation.

Surgut State District Power Stations No. 1 and No. 2 are the main electric power suppliers.

To ensure sustainable electric power supply to its remote oil fields, the Company put into operation 22 gas turbine power plants with a total capacity of 733 MW, seven gas reciprocating engine power plants with a total capacity of 48.7 MW which cover up to 44% of the Company's energy consumption.

Divisions of Electricity Supply Networks of OGPDs and Intra-field Petroleum Gas Gathering and Utilization Division (UVSING) are in charge of maintenance of the main facilities of electric power supply of the Company's business units.

Round-the-clock central dispatch services (hereinafter – CDS) perform daily production management and monitoring of the hazardous production facilities and are in charge of day-to-day management operations within RSCHS.

The coordinating bodies within RSCHS are represented by CES of OJSC "Surgutneftegas" and CES of oil and gas production divisions.

Department No. 2 of OJSC "Surgutneftegas" is the continuing management body within RSCHS.

CDSs of OJSC "Surgutneftegas" and its business units are in charge of day-to-day management within RSCHS.

Forces and means of RSCHS oil spill response include the personnel trained and certified to eliminate ES(O) and equipment for elimination of ES(O) and the Company's transportation vehicles.

Oil and Gas Production Divisions have the specialized structural units specially trained and equipped to eliminate oil and oil products spills, gas condensate and surface water as well as to perform activities specified in the land reclamation plans (workshops, pipelines maintenance and repair departments).

<u>Form of legal organization</u>	<u>Open Joint Stock Company</u>
<u>Full corporate name</u>	<u>Open Joint Stock Company "Surgutneftegas"</u>
<u>Abbreviated name:</u>	<u>OJSC "Surgutneftegas"</u>
<u>Legal address</u>	<u>ul.Grigoriya Kukuyevitskogo, 1, building 1, Surgut, Khanty-Mansiysky Autonomous Okrug – Yugra, Tyumenskaya Oblast, Russian Federation</u>
<u>Postal address</u>	<u>628415 ul.Grigoriya Kukuyevitskogo, 1, building 1, Surgut, Khanty-Mansiysky Autonomous Okrug – Yugra, Tyumenskaya Oblast, Russian Federation</u>
<u>Telephone</u>	<u>+7 (3462) 42 61 33; 42 60 28</u>
<u>Fax</u>	<u>+7 (3462) 42 64 94</u>
<u>INN</u>	<u>8602060555</u>
<u>KPP</u>	<u>997150001</u>
<u>OGRN</u>	<u>1028600584540</u>
<u>OKPO</u>	<u>05753490</u>
<u>OKVED</u>	<u>11.10.11</u>
<u>OKTMO</u>	<u>71876000000</u>
<u>Management bodies:</u>	
<u>Head</u>	<u>Vladimir L. Bogdanov</u>
<u>Position in compliance with constituent documents</u>	<u>Director General</u>
<u>Acts on the grounds of</u>	<u>The Charter</u>
<u>Bank details</u>	
<u>Bank's name</u>	<u>JSC BANK "SNGB"</u>
<u>The city of</u>	<u>Surgut</u>
<u>Settlement account</u>	<u>40702810000000100368</u>
<u>Corr. account</u>	<u>30101810600000000709</u>
<u>Bank identification code (BIK):</u>	<u>047144709</u>

The Company's production facilities are located in the Company's license areas in Republic of Sakha (Yakutia), Khanty-Mansiysky Autonomous Okrug and Yamalo-Nenetsky Autonomous Okrug, Tyumenskaya, Novosibirskaya and Irkutskaya Oblasts, Krasnoyarsky Krai, in the territories adjacent to the city of Surgut, the town of Lyantor, poselok Fedorovsky, Nizhnesortymsky and Bely Yar.

The Company holds 167 licenses for geological study, exploration and production of hydrocarbons and operates 70 oil fields which are located mostly in a swampy area in places of watercourses of various intensity. The location diagram is contained in Appendix 2.1 and Appendix 3.1. Information on license blocks within the Company's fields is contained in Table 1.2.1.

Table 1.2.1.

No.	License block	Field
1	No. 12- Zarechny	Maloichskoye field prospecting
2	Vostochno-Elovy	Vostochno-Elovoye
3	Vostochno-Surgutsky	Vostochno-Surgutskoye Zapadno-Surgutskoye
4	Vostochno-Tukansky	field prospecting
5	Vostochno-Chupalsky	field prospecting
6	Zabolotny	field prospecting
7	Zapadno-Polunyahsky	Zapadno-Polunyahskoye field prospecting
8	Zapadno-Surgutsky	Zapadno-Surgutskoye
9	Lower part of the Zapadno-Surgutsky license block	field prospecting
10	Zapadno-Tukansky	Zapadno-Tukanskoye field prospecting
11	Severo-Tukansky	field prospecting
12	Tukansky	Tukanskoye field prospecting
13	Uzhno-Tukansky	the Shcherbina field field prospecting
14	the Medvedev field	the Medvedev field field prospecting
15	Nelymsky	Yuzhno-Nyurymskoye Demyanskoye field prospecting
16	Shalimovsky	Yuzhno-Nyurymskoye Demyanskoye field prospecting
17	Demyansky	Demyanskoye field prospecting
18	Saygatinsky	Saygatinskoye
19	Salymsky 4	field prospecting

No.	License block	Field
20	Tonchinsky	Tonchinskoye
		Severo-Tonchinskoye
		Yaunlorskoye
		field prospecting
21	Ugansky	Uganskoye
		field prospecting
22	Ugansky 2	field prospecting
23	Ugansky 3	field prospecting
24	Ugansky 5	Uganskoye
		field prospecting
25	Ugansky 9	field prospecting
26	Ugansky 10	field prospecting
27	Ugansky 15	field prospecting
28	Ugansky 44	field prospecting
29	Uzhno-Aykurusky	field prospecting
30	Yaunlorsky	Yaunlorskoye
31	Dunaevsky	Dunaevskoye
32	Fedorovsky	Fedorovskoye
		Ravenskoye
33	Vostochno-Lyaminsky	Vostochno-Lyaminskoye
		exploration
34	Vostochno-Sakhalinsky	Vostochno-Sakhalinskoye
		Yavinlorskoye
		Zapadno-Sakhalinskoye
		field prospecting
35	Vostochno-Serginsky	Vostochno-Serginskoye
36	the Vostochno-Synyeganskoye field	Vostochno-Synyeganskoye
		exploration
37	Emangalsky	Emangalskoye
		field prospecting
38	Zapadno-Kamynsky	Zapadno-Kamynskoye
39	Zapadno-Karpamansky	Yuzhno-Mytayakhinskoye
40	Zapadno-Nyalinsky	Zapadno-Nyalinskoye
41	Zapadno-Tumannyy	Uzhno-Lyaminskoye
		Zapadno-Tumannoye
		field prospecting
42	Ityakhsky	Ityakhskoye
		field prospecting
43	Larkinsky	Larkinskoye
		field prospecting
44	Lyantorsky	Lyantorskoye
		Larkinskoye
45	Maslikhovsky	Maslikhovskoye

No.	License block	Field
46	Novonyalinsky	Novonaylinskoye field prospecting
47	Panlorsky 1	field prospecting
48	Panlorsky 4	field prospecting
49	Sakhalinsky	Sakhalinskoye Zapadno-Sakhalinskoye Priobskoye exploration
50	Severo-Seliyarovsky	Severo-Seliyarovskoye Uzhno-Lyaminskoye field prospecting
51	Synyegansky	Synyeganskoye field prospecting
52	Uzhno-Kamynsky	Nazargaleevskoye Ulyanovskoye Bitemskoye Kamynskoye Saninskoye Tretyakovskoye
53	the Uzhno-Lyaminskoye field	Uzhno-Lyaminskoye exploration
54	Yuzhno-Mytayakhinsky	Yuzhno-Mytayakhinskoye
55	Bolsheatlymsky	field prospecting
56	Bystrinsky	Bystrinskoye Vachimskoye
57	Vachimsky	Vachimskoye
58	Vostochno-Rogozhnikovskiy	Vostochno-Rogozhnikovskoye exploration
59	Vysotny	Vysotnoye exploration
60	the Zapadno-Nazymenskoye field	Zapadno-Nazymenskoye
61	the Severo-Nazymenskoye field	Severo-Nazymenskoye
62	the Uzhno-Nazymenskoye field	Yuzhno-Nazymenskoye
63	Vostochno-Nazymsky	Vostochno-Nazymenskoye
64	Zapadno-Solkinsky	Zapadno-Solkinskoye
65	Nizhny Zapadno-Solkinsky	field prospecting
66	Komaryinsky	Komaryinskoye Tundrinskoye
67	Lyaminsky 1	field prospecting
68	the Filipenko field	the Filipenko field field prospecting
69	Novobystrinsky	Novobystrinskoye Bystrinskoye

No.	License block	Field
		field prospecting
70	Rogozhnikovsky	Rogozhnikovskoye
		the Shpilman field (Severo-Rogozhnikovskoye)
		Vostochno-Rogozhnikovskoye
		Vysotnoye
		field prospecting
71	Rogozhnikovsky 4	Rogozhnikovskoye
		the Baybakov field
		field prospecting
72	Rogozhnikovsky 5	the Baybakov field
		field prospecting
73	Rogozhnikovsky 6	field prospecting
74	Rogozhnikovsky (block No. 2)	field prospecting
75	Severo-Yuryevsky	Severo-Yuryevskoye
		Russkinskoye
76	Solkinsky (nothern part)	Solkinskoye
		Bystrinskoye
77	Tundrinsky	Tundrinskoye
		field prospecting
78	The subsoil area of federal significance that includes part of the Shpilman field (Severo-Rogozhnikovskoye)	the Spilman field (Severo-Rogozhnikovskoye)
		field prospecting
79	Uzhno-Olkhovsky	field prospecting
80	Agapsky	field prospecting
81	Alyutinsky	field prospecting
82	Vostochno-Konitlorsky	field prospecting
83	Dolgansky	field prospecting
84	Zapadno-Sarutayusky	Zapadno-Sarutayuskoye
85	Kamyshinsky	field prospecting
86	Konitlorsky	Konitlorskoye
87	Korobkovsky	field prospecting
		field prospecting
88	Nenetsky	Nenetskoye
89	Rodnikov	Rodnikovoye
		Kechimovskoye
90	Russkinskoy	Russkinskoye
		Tevlinsko-Russkinskoye
91	Savuysky	Savuyskoye
92	Severo-Layavozhsky	Uzhno-Khalmeryuskoye
		field prospecting
93	Severo-Liginsky	field prospecting

No.	License block	Field
94	Sykhtymsky	Zapadno-Sukuryaunskoye
		Sykhtymskoye
		field prospecting
95	Syamayusky	Syamayuskoye
96	Tychelsky	field prospecting
97	Tsentralno-Sarutayusky	Tsentralno-Sarutayuskoye
98	Unyagsky	field prospecting
99	Uzhno-Konitlorsky	Uzhno-Konitlorskoye
		exploration
100	Uzhno-Sarutayusky	Tsentralno-Sarutayuskoye
		field prospecting
101	Ai-Pimsky	Ai-Pimskoye
		Zapadno-Chigorinskoye
		Zapadno-Kamynskoye
102	Alekhinsky	Alekhinskoye
		Kamynskoye
		Larkinskoye
		Nizhne-Sortymskoye
103	Bitemsky	Bitemskoye
		Saninskoye
		Zapadno-Chigorinskoye
104	Vatlorsky	Vatlorskoye
105	Verkhne-Kazymsky	Verkhnekazymskoye
		field prospecting
106	Verkhnenadymsky (southern part)	Verkhnenadymskoye
		Novonadymskoye
		field prospecting
107	Verkhne-Nadymsky (northern part)	Verkhnenadymskoye
		field prospecting
108	Vostochno-Mytayakhinsky	Vostochno-Mytayakhinskoye
109	Nizhny Vostochno-Mytayakhinsky	Vostochno-Mytayakhinskoye
		field prospecting
110	Vostochno-Soimlorsky	Vostochno-Soimlorskoye
		Uzhno-Iturskoye
		field prospecting
111	Vostochno-Tromyegansky	Vostochno-Tromyeganskoye
112	Vostochno-Ukyaunsky	Vostochno-Ukyaunskoye
		field prospecting
113	Zhumazhanovsky	Zhumazhanovskoye
		Suryeganskoye
114	Zapadno-Vatlorsky	Zapadno-Vatlorskoye
		field prospecting
115	the Zapadno-Yuilskeye field	Zapadno-Yuilskeye

No.	License block	Field
116	Iyulsky	Iyulskoye field prospecting
117	Kamynsky	Kamynskoye Ulyanovskoye
118	Leklorsky	Leklorskoye
119	Losevoy	Losevoye field prospecting
120	Lungorsky	Lungorskoye
121	Lungorsky (KhMN 11417 NP)	field prospecting
122	Maloperevalny	Maloperevalnoye field prospecting
123	the Logachev field	the Logachev field exploration
124	Nizhne-Sortymsky	Nizhne-Sortymskoye
125	Ozernoe-I	Ozernoe-I exploration
126	Poluysky	field prospecting
127	Severo-Labatyugansky	Severo-Labatyuganskoye Zapadno-Chigorinskoye exploration
128	the Severo-Mytayakhinskoye field	Severo-Mytayakhinskoye
129	Severo-Soimlorsky	Severo-Soimlorskoye field prospecting
130	Soimlorsky	Soimlorskoye Yuzhno-Soimlorskoye field prospecting
131	Suryegansky	Suryeganskoye Yuilskoye
132	Tromyegansky	Tromyeganskoye
133	Tyansky	Muryaunskoye Lukyavinskoye Yukyaunskoye
134	Khadyyakhisnky	field prospecting
135	Khoshiplorsky	Vostochno-Mytayakhinskoye field prospecting
136	Khorlorsky	Khorlorskoye field prospecting
137	Khulymyegansky	field prospecting
138	Chanatoysky	Zhumazhanovskoye Vatlorskoye field prospecting
139	Uzhno-Vatlorsky	Uzhno-Vatlorskoye field prospecting

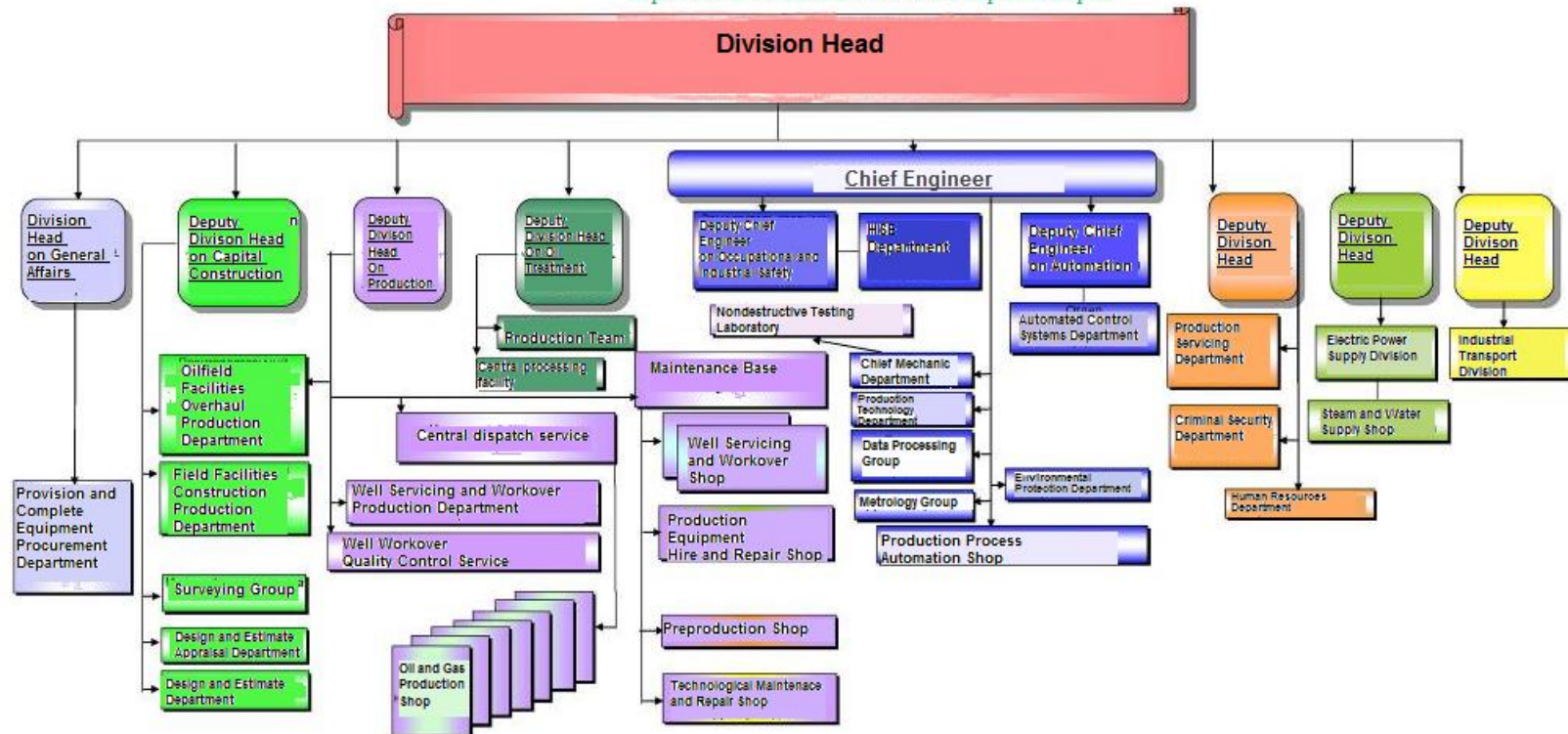
No.	License block	Field
140	the Uzhno-Zhumazhanovskoye field	Zhumazhanovskoye
141	Yuzhno-Soimlorsky	Yuzhno-Soimlorskoye
142	Uzhno-Chanatoysky	Severo-Labatyuganskoye field prospecting
143	Yuilskoye field	Yuilskoye
144	Alynsky	Alinskoye
145	Bagdynsky	field prospecting
146	Bakhchinsky	field prospecting
147	Bysakhtakhsky	Bysakhtakhskoye field prospecting
148	Verkhnepeleduysky	Verkhnepeleduyskoye Vostochno-Alinskoye exploration
149	Vilyuysko-Dzherbinsky	Vilyuysko-Dzherbinskoye field prospecting
150	Vostochno-Alinsky	Vostochno-Alinskoye exploration
151	Vostochno-Talakansky	Central Block of the Talakanskoye oil and gas condensate field East Block of the Talakanskoye oil and gas condensate field exploration
152	Gillyabkinsky	field prospecting
153	Dzhunkunsky	field prospecting
154	Kedrov	field prospecting
155	Peleduysky	Peleduyskoye Vostochno-Alinskoye exploration
156	Peleduysky (YaKU 11884 NP)	field prospecting
157	Pilyudinsky	Pilyudinskoye field prospecting
158	Rassokhinsky	field prospecting
159	Severo-Talakansky	Severo-Talakanskoye Lenskoye exploration
160	Srednevilyuchansky	field prospecting
161	Stanakhsky	Stanakhskoye field prospecting
162	Tyummyatinsky	field prospecting
163	Khoronokhsky	field prospecting
164	Central Block of the Talakanskoye oil and gas condensate field	Central Block of the Talakanskoye oil and gas condensate field

No.	License block	Field
		East Block of the Talakanskoye oil and gas condensate field
		Severo-Talakanskoye
165	Chaykinsky	field prospecting
166	Yuzhno-Talakansky	Yuzhno-Talakanskoye
		exploration
167	Yuryakhsky	field prospecting

OJSC "Surgutneftegas" operates in the territory of 135.17 thousand square kilometers.

The main production business units of OJSC "Surgutneftegas" are Oil and Gas Production Divisions (Surgutneft, Fedorovskneft, Bystrinskneft, Komsomolskneft, Lyantorneft, Nizhnesortymyskneft, Talakanneft) which are engaged in production, transportation and treatment of oil. The structure of an Oil and Gas Production Division shown in the Picture 1.2.1. is typical.

STANDARD ORGANIZATIONAL STRUCTURE OF THE OIL AND GAS PRODUCTION DIVISION
on prevention and elimination of oil and oil products spills



Picture 1.2.1. Standard organizational structure of the Oil and Gas Production Division of OJSC "Surgutneftgas"

Amount of personnel of the Company's business units involved in the measures for localization and elimination of oil and oil spills

Oil and Gas Production Division	Name of the business unit	Amount of personnel (people)	Amount of personnel of accident rescue unit (people)	
			total	including certified personnel
Surgutneft	Pipeline Maintenance and Repair Service (PMRS)	51	15	15
Fedorovskneft	Pipeline Maintenance and Repair Service (PMRS)	81	15	15
Bystrinskneft	Pipeline Maintenance Department (PMD)	60	18	18
Komsomolskneft	Pipeline Maintenance and Repair Service (PMRS)	47	16	16
Lyantorneft	Pipeline Maintenance and Repair Service (PMRS)	100	13	13
Nizhnesortymskneft	Pipeline Maintenance and Repair Service (PMRS)	78	13	13
Talakanneft	Pipeline Maintenance Department (PMD)	13	13	13
Technical Maintenance and Equipment Completing Base	Lubricants and chemical additives facility of the Vitim workshop	11	11	11
Total		441	114	114

Measures for elimination of ES(O)

The complex of measures for prevention and elimination of oil products spills in the facilities of OJSC "Surgutneftegas" includes:

- organizational measures;
- engineering and technical measures;
- special measures.

The list of organizational measures:

- training of management team, engineering and technical workers and personnel for actions under conditions of ES(O);
- maintenance of technical state of the equipment in working order;

- creation of necessary financial and material reserves for works on elimination of oil spills;

- compliance with the requirements of industrial safety.

People not younger than 18 years old having undergone medical examination and certified by qualifications commission in the established order are permitted to hazardous facilities controlled by the Federal Service for Environmental, Technological and Nuclear Supervision.

All newly employed workers of Surgutneftegas as well as students undertaking practical training complete an occupational safety briefing in compliance with state standards GOST 12.004-90 of industrial sanitation and fire safety.

The employees are permitted to unsupervised work after training, probation and assessment of safety awareness in manner as set forth by the law of the Russian Federation.

Periodical certification of equipment in the facilities of OJSC "Surgutneftegas", determination of its service life and timely replacement of worn-out equipment are carried out. Control and measurement devices are registered and undergo a checkup in the organizations of State Committee for Standardization and Metrology of Russia on a periodic basis established by regulations and requirements of producing factories.

Maintenance, supervision, inspection and repair of pipelines are carried out in compliance with "Rules of layout and safe maintenance of industrial pipelines".

All technical equipment and machinery installed in the facilities of OJSC "Surgutneftegas" are certified in compliance with the requirements of industrial safety.

According to sanitary regulations of industrial plants engineering, tank farms, central production facilities, booster compression stations, preliminary water removal units and pipelines are located in the distance from populated areas on the grounds unsuitable for using in agriculture, consequently, implementation of special measures for creation of sanitary protection zones is not necessary. Radius of standard sanitary protection zone of site facilities is not less than 1000 meters (SanPiN 2.2.1/2.1.1.1031-01).

The list of engineering and technical measures in the facilities of OJSC "Surgutneftegas":

- schedule preventive repair and technical checkup of process equipment;
- technical checkup and inspection of control and measuring devices and automatic machinery, checkup of process protection activation;
- studies and training of the personnel;
- preparing of equipment for summer and winter season;
- checkup of grounding connections and lightning protection equipment.

Engineering support for accident rescue operations adheres to GOST R 22.9.03-95.

Designing of field facilities is carried out under requirements of NTD [VSN-014-89; VSN 521-91; VNTP 01-87-04-84; PB 07-436-02; VNTP 3-85; Fire safety arrangements in the Russian Federation; SNiP 2.05.13-90]. Calculation

and installation of safety valves are performed in accordance with the requirements of "Federal industrial safety standards "Rules of installation and safe maintenance of vessels and devices working under high pressure" and "Instructions on choosing of vessels and devices working under the pressure up to 100 kgf/cm² and protection of them from overpressure". Maintenance of automatic machinery, telemechanics and control and measuring devices is carried out in accordance with RD 153-112TNP-028-97. Prevention from open flows and gas, oil and water inflows is carried out in accordance with RD 08-254-98.

Safe operation of the Company's hazardous production facilities is ensured due to standard requirements to arrangement of the industrial safety compliance control, accident-free operation of equipment and production facilities, environmental safety of production processes and technologies, strengthened labor discipline in terms of compliance the Company's employees with safety requirements, rules and regulations of safe work performance.

Security of conservation areas is defined by: **Federal laws No. 26-FZ dated 23.02.1995, No. 33-FZ dated 14.03.1995, No. 52-FZ dated 24.04.1995, No. 167-FZ dated 16.11.1995, Regulations on areas of sanitary and mountain sanitary protection of health and recreation areas and resorts of federal significance (approved by the Decree of the Government of the Russian Federation No. 1425 dated 07.12.1996), regulations of the constituent entities of the Russian Federation.** Conservation areas are the areas of land, water lots and airspace segments, where natural complexes and objects of particular environmental protection, scientific, cultural, aesthetic, recreational and health-improving significance are located, prohibited completely or partially from agricultural use by the authorities and specially protected.

Besides conservation areas, there are specially protected sites including territories and water areas inhabited by rare and protected species of mammals and birds enlisted in International Red Book and Red Books of the Russian Federation and its constituent entities in compliance with Federal laws No. 7-FZ as of 10.01.2002, No. 52-FZ dated 24.04.1995 and regulation of the constituent entities of the Russian Federation (regional Red Books). Specially protected sites in the territory of the constituent entities in compliance with the legislative requirements are the following: state natural reserves; reserved forests; natural landmarks; water protection zone; habit areas of rare and endangered species that are not considered conservation areas.

Placing of wells at water bodies of the highest and the first categories [GOST 17.1.1.01-77*], their water protection zones, within sanitary protection zones of water intake, resorts, natural reserves and other conservation areas and specially protected sites is prohibited [Regulations on state natural reserves in the Russian Federation 52-FZ (the Decree of the Government of the Russian Federation No. 48 dated 18.12.1991)]. Placing of wells at water protection zones of water bodies of other categories must be approved by the supervisory and inspecting organizations with substantiation of possible ecological consequences [GOST 17.1.3.12-86].

With the purpose of protection of the ground and waters from pollution, banking of well head pads with perimetral earth mound is provided aimed at localization of pollution in case of accident.

Waterproofing of bottom and walls of sludge pits, absence of accumulated wastes impact upon soils, vegetation, subsurface waters are monitored by means of analysis of soil and water samples from pit monitoring well [RD 51-1-96].

Building of temporary access road is carried out with maximal use of existing road network with regard to local environmental conditions and necessity of equipping them with pipe-culverts [RD 51-1-96].

Pipes for oil gathering pipelines must be frost and corrosion resistant. For the protection of pipes from internal corrosion on well pads, corrosion inhibitor can be used if necessary.

Infield pipelines are basically subsurface, minimal depth of laying is 0.8 meters. Width of allocated land for infield pipelines is 20 meters in compliance with VSN 452-73. For protection of the outer surface, reinforced insulation over prime coating is made. Corrosion and hydrogen sulfide resistant pipes are used (in water protection zones – pipes with thicker walls). Crossings of infield pipelines and highways are made using protective containment made of steel pipes

Pipelines over rivers and channels are laid underground. Watercourse crossings are made in compliance with SNiP 2.05.06-85. Pipelines at watercourse crossings are weighted with ferroconcrete annular and wrap-around weights. On the river banks and channels, tight shutoff valves with remote control are installed.

As a rule, aerial crossings with shutoff valves over narrow streams and channels are made.

Tank farms, central production facilities, final oil treatment stations and booster compressor stations are equipped with vertical stainless steel tanks (hereinafter – VST) with fixed deck. Storage facilities for oil and oil products – VSTs – are arranged in groups in the distance of 0.75D (up to 30 meters) between them in compliance with GOST 1510-84.

Around the perimeter each VST group has banking and prefabricated fence wall made of ferroconcrete slabs having trestle structure. Banking and fence walls are meant for hydrostatic pressure of spilled fluid in case of complete spillage of a storage facility.

Each VST with capacity of 20,000 cubic meters or VSTs with total capacity of 20,000 cubic meters are separated from each other by internal banking or fence walls within a group of VSTs. The fence wall is 0.2 meter higher than banking (2.5 meters). The capacity made by a fence wall is meant for one largest tank. In order to avoid ingression of fluid (oil) into the soil, the area surrounded by the wall is reinforced with soil cement with the thickness of 12 cm.

Approach inside of banking for fire-fighting and other special vehicles is provided in each group of VST arranged in 2 rows or more if supply of fire extinguishing agents and oil spill recovery cannot be provided from internal road and passages of a VST farm.

In case of immediate destruction of a VST, oil spill will not spread outside the barriers (banking) of the group of tanks. every day personnel of tank farms performs visual inspection of banking and walls of VST and registers its condition in a shift log.

Diagnostics of pipelines and storage facilities in tank farms is carried out in compliance with "Federal industrial safety standards "Safety rules in oil and gas industry".

Inspection of VST, overhaul and routine repair, anticorrosion coating are carried out in compliance with the program of overhaul and routine repair of field facilities annually approved by the order of OJSC "Surgutneftegas" "On administrative and technical measures for oil and gas production" and corresponding orders of business units.

The following complex of measures minimizing the impact upon water bodies is implemented when building well pads:

- grounds for well-servicing units are designed and fit out with hard surface (geofabric basis, ferroconcrete slabs surface, monolithic concrete) and drain box for collecting oil and surface sewage for further delivery into a drainage sewer vessel and transportation outside the grounds to a landfill;

- pitless drilling with transportation of drilling slurry (in bottomland areas) is performed;

- double banking with reinforcement of side slopes with stone is used.

For the purpose of prevention of accidents and emergencies, mitigation of their possible consequences on the main facilities of OJSC "Surgutneftegas", overhaul and routine repair of field facilities are carried out.

For the purpose of oil and oil spills detection in business units and its facilities the following measures are implemented:

- monitoring of volume balance of pumped oil in the pipeline with analysis of the balance (every two hours);

- monitoring of pressure in the pipeline using telemetry monitoring system;

- patrolling and air guarding of the pipeline according to the schedule of pipelines walk-over and fly-over.

- visual and chemicoanalytical monitoring of stream flows according to the schedule of walk-over and the schedule of laboratory control over the quality of natural waters.

Oil and oil products (motor gasoline, diesel fuel, transformer oil) belong to hazardous cargoes. Hazardous cargoes are transported by special motor vehicles constructed in compliance with technical specifications, passed probations and acceptance inspection, equipped in compliance with the Requirements of hazardous cargoes transportation and the Traffic rules for hazardous cargoes transportation.

In central dispatch services (CDS) the control systems "OKO-TSITS" based on videowalls "BARCO", which allow the Company to control the situation in every OGPD oil fields, are implemented. The level of remote control engineering of oil field facilities makes up for 99%.

All the booster compression stations and preliminary water removal units are connected to the oil field remote control systems.

Education and training of employees

Education and training of personnel include not only primary professional training, but also additional training, skills development and certification, as well as different level exercises, during which readiness of special technical devices to actions for elimination of possible ES(O) is tested and evaluated.

Providing of readiness of forces and means for elimination of ES(O)

Forces and means of oil spills elimination system of OJSC "Surgutneftegas" include forces and means of instant readiness intended for prompt response to emergencies and carrying out of works for their elimination (hereinafter – the instant readiness forces).

The basis of the instant readiness forces of OJSC "Surgutneftegas" comprises accident rescue units (workshops, pipelines maintenance and repair departments) fitted out with special technical devices, facilities, equipment, tools and appropriate materials. ARU(O) equipment was chosen with regard to the specific character of works on elimination of oil and oil products spills and it provides for recovery of damaged facilities. Such units can operate in standalone mode in the emergency zone during not less than 3 days.

Composition and structure of the instant readiness forces is determined by CES of OJSC "Surgutneftegas" with regard to assigned duties on prevention and elimination of ES(O).

Readiness of accident rescue services and accident rescue units to respond to ES(O) and work on its elimination is tested during certification, exercises and inspections performed by the State supervisory and control bodies in the field of prevention and elimination of ES(O) and corresponding business units of OJSC "Surgutneftegas".

Central and local public authorities and organizations must render every assistance for accident rescue services and units moving to emergency zones and carrying out works on emergency elimination.

The order of movement to the place of carrying out of works on elimination of emergency situations is determined by the legislative regulations of executive body of the constituent entity of the Russian Federation in order to increase agility when eliminating emergency situations. Operative transport of professional accident rescue services and units has the right of unstopped passage, first ranking supply with fuel and lubrication materials in airdromes, filling stations and the right of first ranking repair in service stations, airdromes and river ports irrespective of their incorporation form.

In order to reduce time of moving to the place of ES(O), vehicles go in column under police escort equipped with special signals.

Providing of readiness of forces and means for elimination of ES(O)

The oil spills elimination level of the Plan is determined by the volume of prognosed spill (table 1.4.1-1.4.2) (in compliance with the Order of the Ministry of natural resources No. 156 as of 03.03.2003).

Table 1.4.1.

Lower limit values of oil/oil products spill for considering the spill an emergency situation on surface water bodies (except for turf moors)

Water bodies category	Lower limit of a spill
	Mass, tonnes

	Light oil products	Oil and heavy oil products
Fishery water bodies	0.5	1
Water bodies for domestic use	0.5	1
Water bodies for cultural and general use	1	1.5

Table 1.4.2.

Lower limit value of oil/oil products spill for considering the spill an emergency situation afield including the surface of turf moors (tonnes)

Source of pollution	Type of pollution	Type of site territory					
		sites		Territory of a populated areas		Water protection zones of water bodies	Other territories
		With hard surface	Without surfacing	With hard surface	Without surfacing		
Prospecting and production wells	oil	40	20	30	15	3	7
Oil and oil products pipelines	oil	40	20	30	15	Any fact of spill	7
	Light oil products	30	15	20	5		3
Lorry and railway tanks	Oil and heavy oil products	10	5	5	3	Any fact of spill	3
	Light oil products	5	3	3	1		1
Large-capacity stationary storages	oil	30	15	20	7	3	7
	Heavy oil products	40	20	30	15	5	15
	Light oil products	20	7	10	5	1	5
Small-capacity storages, facilities of oil products retail trade and other sources	oil	10	5	6	2	Any fact of spill	2
	Heavy oil products	20	7	10	5		5
	Light oil products	10	5	6	0.5		0.5

* Mass of oil with formation and tank waters is considered

** In compliance with the Instruction about timing and forms of representation of information in the field of protection of population and territories from natural and anthropogenic emergencies approved by the Order of MES of Russia No. 382 dated 07.07.97, any fact of major pipeline break demands warning of MES bodies.

- location (area) of prognosed spill.

The level of planning of the actions directed at prevention and elimination of oil and oil products spills must be carried out in compliance with the

requirements established by Decree of the Government of the Russian Federation No. 613 dated 21.08.2000 and Order of the Ministry of Natural Resources of Russia No. 156 dated 03.03.2003 determining the lower limit of oil and oil products spills for considering oil and oil spill an emergency.

If oil and oil products spills do not fall under ES(O) classification internal regulations in organizations are developed with regard to the requirements of the Order of the Ministry of Natural Resources of Russia No. 156 dated 03.03.2003 and statements of international conventions, bilateral and multilateral interstate agreements in this field with the Russian Federation being a part of it.

Based on the requirements of mentioned regulations, the following lower limits of spills for considering them ES(O) are accepted:

- any fact of spill for wells located in water protection zone;
- 1 tonne for spills, when oil ingresses into a water body;
- 20 tonnes for spills, when oil ingresses into soil;

According to this:

The Plan of oil spills elimination is of *Federal* significance and defined in compliance with Decree of the Government of the Russian Federation No. 613 dated 21.08.2000 as amended by No. 240 dated 15.04.2002.

The period of validity of the present Plan is five years.

1.4.1 Levels of response

Level approach response strategy provides for management of cost-cutting and efficient measures for elimination of emergency oil products spills.

The principle of forces and means readiness consists in organization of staged build up of forces and means for oil and oil products spills depending on volume and dynamics of spill and hydrometeorological conditions of works on elimination of emergency oil spills.

The following levels of response are defined in OJSC "Surgutneftegas":

- zero level of response;
- first level of response;
- second level of response;
- Third level of response;

Zero level of response

Zero level of response corresponds with a spill, when the volume of spilled oil (oil product) is less than the lower limit of oil and oil products spill established by the Order of the Ministry of Natural Resources of Russia No. 156 "On the approval of the Directives on defining the lower limit of oil and oil products spills for considering spill an emergency situation" dated 03.03.2003.

On the zero response level, localization and elimination of oil spill is performed by forces and technical means of organization, at the facility of which a spill has taken place; in this case, emergency situation is not announced. If the mentioned forces and special technical means are not enough forces of accident rescue units within other OGPD are involved in oil and oil products spills elimination. Since oil spill on the zero level is not considered an ES(O), works on localization and elimination of it are not carried out around the clock, but on assumption of the situation and according to the supervisor's decision.

First level of response;

The first level of the oil spills elimination system provides for elimination of oil and oil products spills not falling under ES(O) category and is performed by instant readiness forces, which provide for prompt response to emergencies and ES(O) and carrying out of works on their elimination.

Implementation of measures for prevention and elimination of ES(O) on this level is carried out within facility department of oil spills elimination system of OJSC "Surgutneftgas". The first level of response to a spill is established for the amount of spilled oil up to 20 tonnes (for contact with soil) and up to 1 tonne (for contact with a water body) and up to 100 tonnes for any spill on the wells within water protection zone. In case of ES(O) of such level, localization and elimination of a spill is carried out by forces and means of the Company's facility (workshop). For that purpose, tools available (entranching tool kits, buckets, etc.), heavy vehicles (bulldozers, excavators, lifters, etc.), at hand material for construction of protective tranches and spill sorbing (sand, clay, snow) are used. Facility personnel is involved in works. Management team is warned about the first level ES(O).

Oil spill corresponding with the first level of response can be moved up to the higher category by the supervisor of works on oil spills elimination reasoning from spill location, hydrometeorological conditions, impact upon the environment and population. In this case, management of works on oil spills elimination is moved up to the next level involving relevant forces and means.

Second level of response

On the second level of oil spills elimination system, elimination of ES(O) of local significance is carried out by forces of accident rescue units within OGPD. Implementation of measures for prevention and elimination of ES(O) on this level is carried out within business unit department of oil spills elimination system of OJSC "Surgutneftgas".

Oil spill of local significance (from 20 to 100 tonnes): works on oil products spill elimination are carried out by forces and means of an out-of-staff ARU of a business unit. Works on immediate minimization or complete termination (if possible) of the outflow, localization, mechanical skimming and transportation of spilled oil and oily soil, absorbents rich in soil and other products appeared during works on elimination of oil spill are carried out.

Third level of response;

On the third level of oil spills elimination system elimination of possible ES(O) is carried out by forces of accident rescue units within OGPD, as well as forces and means of other OGPDs. Implementation of measures for prevention and elimination of ES(O) on this level is carried out within oil spills elimination system of OJSC "Surgutneftgas" – functional department of RSCHS subsystem.

Action coordination of forces and means taking part in elimination of ES(O) is performed by:

at the federal level (oil spill of federal significance (over 5000 tonnes)) – the Government CES, CES of the federal executive authorities and authorized bodies;

at interregional level (oil spill of territorial significance (from 500 to 1000 tonnes)) – Presidential Plenipotentiary Envoy to the Federal

District;

at the regional level (oil spill of regional significance (from 1000 to 5000 tonnes)) – CES of the executive body of the constituent entity of the Russian Federation;

at the municipal level (oil spill of local significance (up to 500 tonnes)) – CES of the local authorities;

at the facility-based level (oil spill of local significance (from 20 to 100 tonnes)) – CES of OJSC "Surgutneftegas".

Structure of forces and means of ES(O) elimination of OJSC "Surgutneftegas"

To provide prompt response to oil and oil products spills in hazardous industrial facilities of OJSC "Surgutneftegas", 3-staged structure of spills elimination system forces is established; the structure gives the opportunity to stagger (build up) forces and means when carrying out works on ES(O) elimination. For this purpose special services and centers for maintenance and repair of pipelines (pipelines maintenance department (hereinafter – the PMD), pipelines maintenance and repair service (hereinafter – the PMRS), including brigades for oil and oil spills elimination and repair and rehabilitation departments are created within OGPDs.

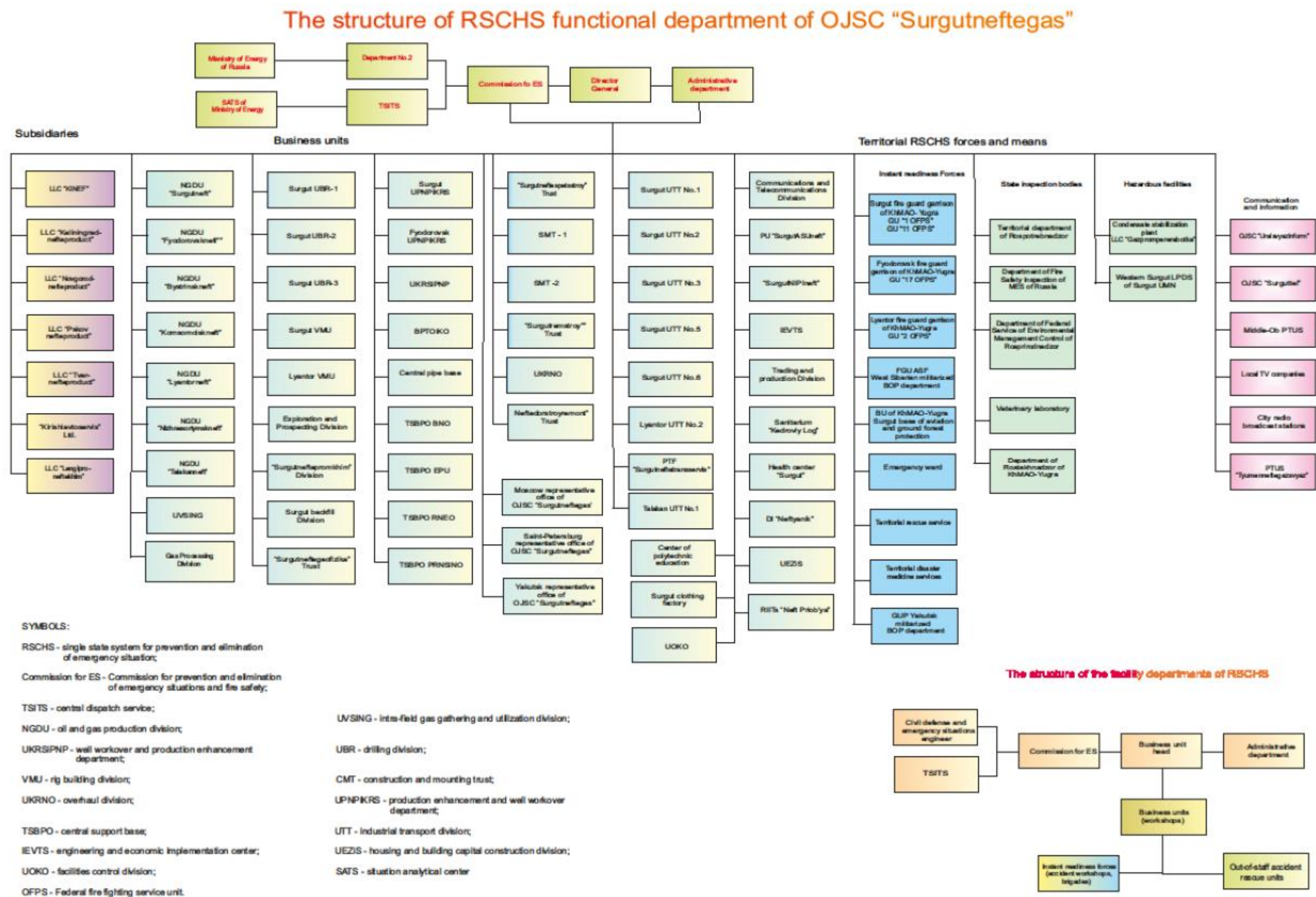
There are out-of-staff accident rescue units which are certified for execution of accident and accident-rehabilitation works on oil spills elimination in ES(O) conditions within such brigades and branches. These forces make up the first echelon of forces for elimination of ES(O) which provides immediate response to oil and oil products spills within the areas of responsibilities.

The forces of the second and third echelons are represented by the business units within which the out-of-staff accident rescue units of ARU are established to be headed towards ES(O) zone after warning and turn-out.

Assortment of equipment for elimination of ES(O) provides for the possibility of elimination of all types of oil spills, which can occur in hazardous production facilities of OJSC "Surgutneftegas", including weathered crude oil, under geographical and hydrometeorological conditions both afield and in water areas and marshes, and implementation of simultaneous measures for elimination of oil spills. Involvement of aviation to carry forces and means for elimination of oil spills is well tested.

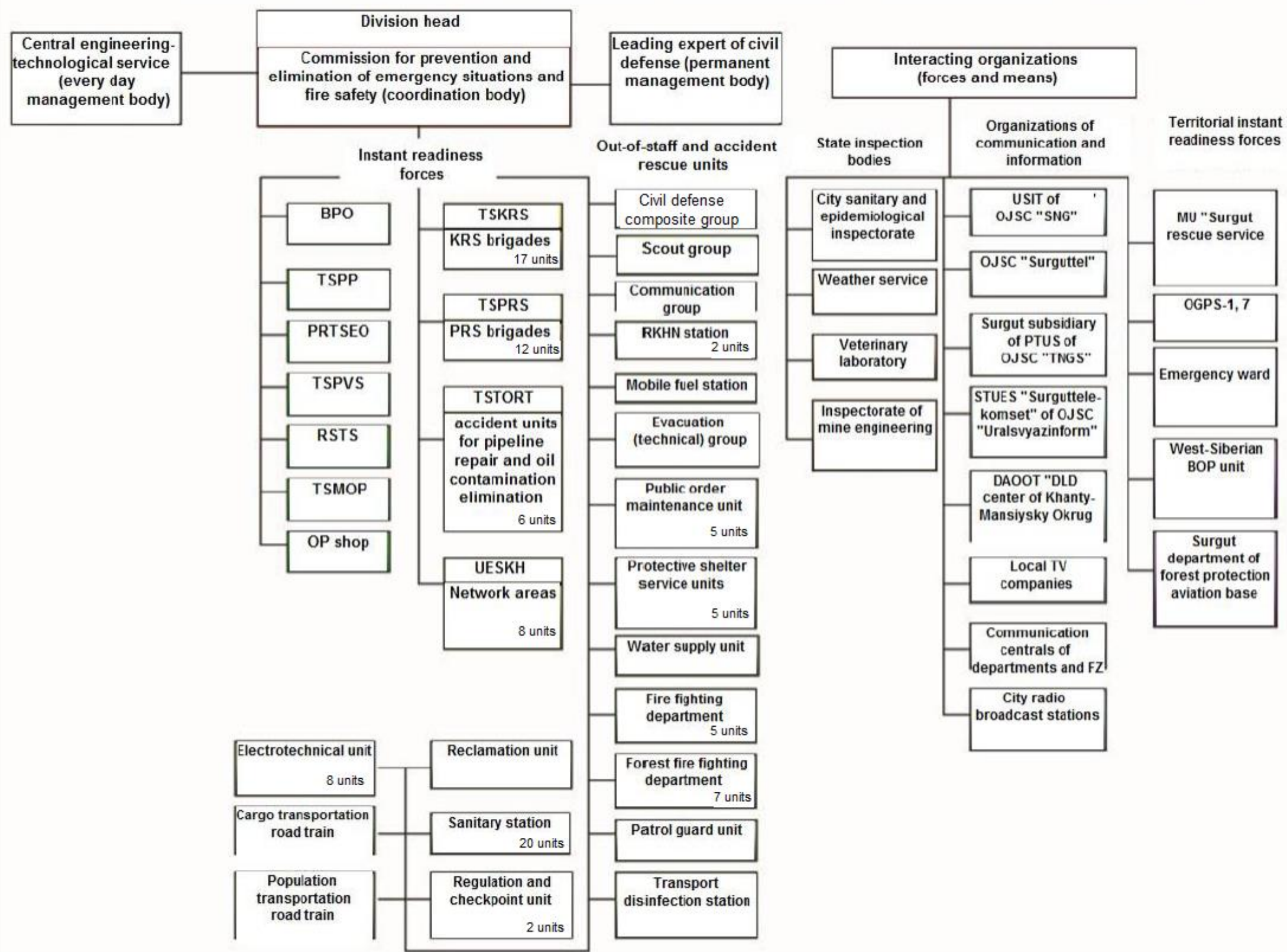
Means of oil spills elimination involve water crafts and ground vehicles for carrying people and materials to the places of oil spills elimination and back, communication tools, personal protective equipment of personnel and supporting equipment; aviation is involved on a contract basis.

Besides, oil sludge, oily soils and garbage are transported to the centers for cleaning soil and oil sludge, which are established and located in the territory of each OGPD.



Picture 1.5.1.1. Structure of functional department of RCHSN of OJSC "Surgutneftegas"

Typical functional department (OGPD) of the oil spills elimination system of OJSC "Surgutneftegas"

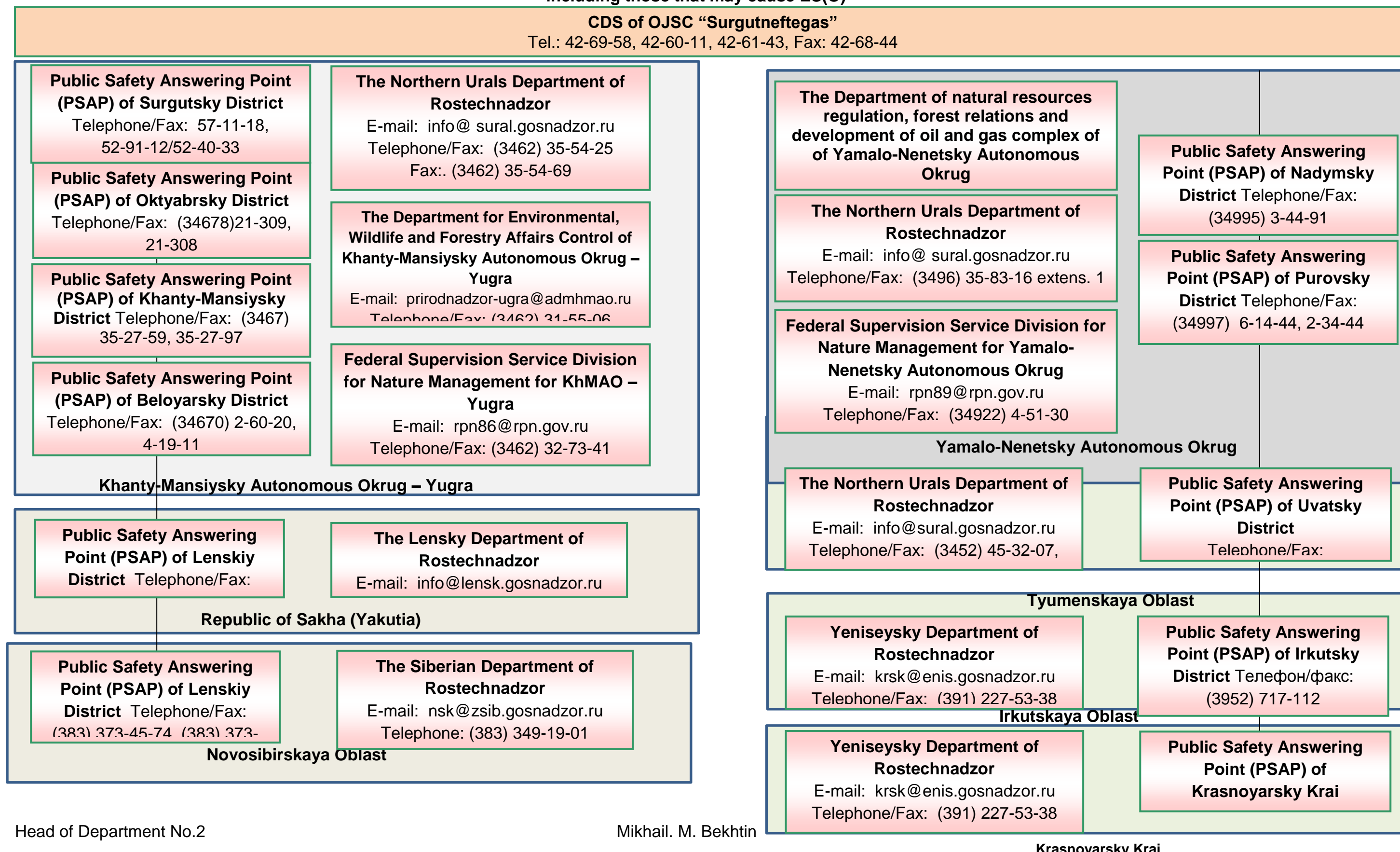


Picture 1.5.1.2. Scheme of communication, warning and interaction in case of emergency in functional department of OJSC "Surgutneftegas"



1.5.1.3. Scheme of management, warning and communication in OJSC “Surgutneftegas” in case of threat and occurrence of production accidents, disasters and natural disasters.

Scheme of warning of OJSC "Surgutneftegas" of regulatory bodies in cases of oil, oil products and formation water spills and accidents at the Company's divisions, including those that may cause ES(O)



Head of Department No.2

Mikhail. M. Bekhtin

.Picture 1.5.1.2. Scheme of warning of OJSC "Surgutneftegas" of regulatory bodies in cases of oil, oil products and formation water spills and accidents at the Company's divisions, including those that may cause ES(O).

OPERATIVE PART

Immediate actions in case of ES(O)

In case of ES(O), time factor has crucial importance, for this reason it is especially important that emergency actions of personnel were professional, well tested and synchronized.

Initial actions on deployment of oil spills elimination system in OJSC "Surgutneftegas" are the following:

- warning and assembly of corresponding management bodies, coordinating bodies, personnel of accident rescue services and units;

- establishment (if needed) of 24-hour working regime for management and coordinating bodies, personnel of accident rescue services and units, organization workers and duty of officials responsible.

- bringing of forces and means of oil spills elimination to readiness, defining procedure of their deployment;

- monitoring of the situation and the environment in ES(O) zone;

- information support of interacting management and coordinating bodies within RSCHS and other interacting organizations about the situation;

- updating and implementation of previously developed plans, including the present Plan;

- direction of CES operative groups of the business units to the zone of ES(O);

- organization of communication and management of works on ES(O) localization;

- preparation and presentation of reports for higher-level management and coordinating bodies within the time limits set;

- implementation of information exchange with interacting bodies;

- organization of control and provision of necessary assistance in carrying out of assigned tasks on localization of ES(O);

- implementation of measures for safe functioning of production facilities of business units of OJSC "Surgutneftegas";

- immediate centralized de-energizing of allied equipment (except for ESD and fire safety systems);

- process shutdown in emergency sector;

- isolation of damaged equipment with shutters near the place of damage;

- in case of fire, oil spill, the emergency firefighting equipment is used if possible; if it is not possible, feasible measures for the recovery of personnel and material assets must be implemented.

Initial actions of personnel of the Company's department (unit, workshop, etc.) are defined by:

- **Plan of measures for localization and elimination of accidents consequences** developed on the basis of:

- **"Federal industrial safety standards "Safety rules in oil and gas industry"** approved by order of Rostekhnadzor No.101 dated 12.03.2013;

- **Instructions on prevention of gas, oil and water inflows and open flows during construction and repair of wells in oil and gas industry** (RD 08-254-98, approved by Decree of State Committee for Industrial and Mining Safety Supervision No. 80 dated 31.12.98).

Instant readiness forces of OJSC "Surgutneftegas" and OGPD, other forces intended for emergency response to ES(O) move to places of works as soon as they get a signal. Other forces get ready to moving and actions after getting an order. Meanwhile, readiness to use special technical means and transport is tested, material resources supplies are filled up.

After consideration of the task, assessment of situation and necessary calculations, the chairman of the Compny's CES defines:

strategy and tactics of the Company's own and involved forces actions for ES(O) elimination;

basic interaction issues;

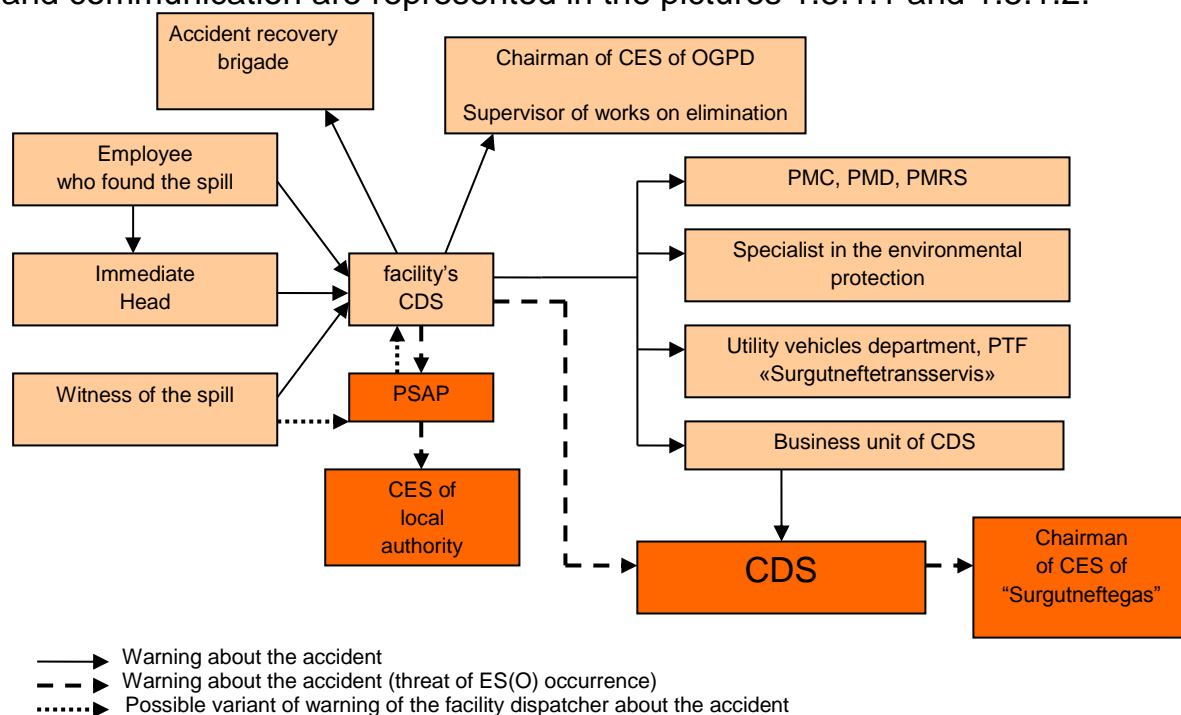
management organization;

tasks on supply types.

Consideration of task (further actions) is performed in accordance with the situation, the results of its development prognosis, consequences assessment, planned actions and recommendations of higher-level management and coordinating body.

Emergency warning

In case of occurrence of an emergency situation of any level, interaction, interchange of information between the departments of OJSC "Surgutneftegas", participants of localization and elimination of oil products spill is carried out by means of fixed, loudspeaker and mobile communication. Organization of response in case of incidents (accidents) is represented in the scheme 2.1.1.1. Schemes of warning and communication are represented in the pictures 1.5.1.1 and 1.5.1.2.



Picture 2.1.1.1. Organization of response in case of incidents (accidents) occurrence

Six standard messages are prepared for warning of management team of OJSC "Surgutneftegas", members of CES OJSC "Surgutneftegas", managers of OGPD and PMRS (PMD) and employees of production facilities of OJSC "Surgutneftegas". Corresponding standard message about ES(O) occurrence

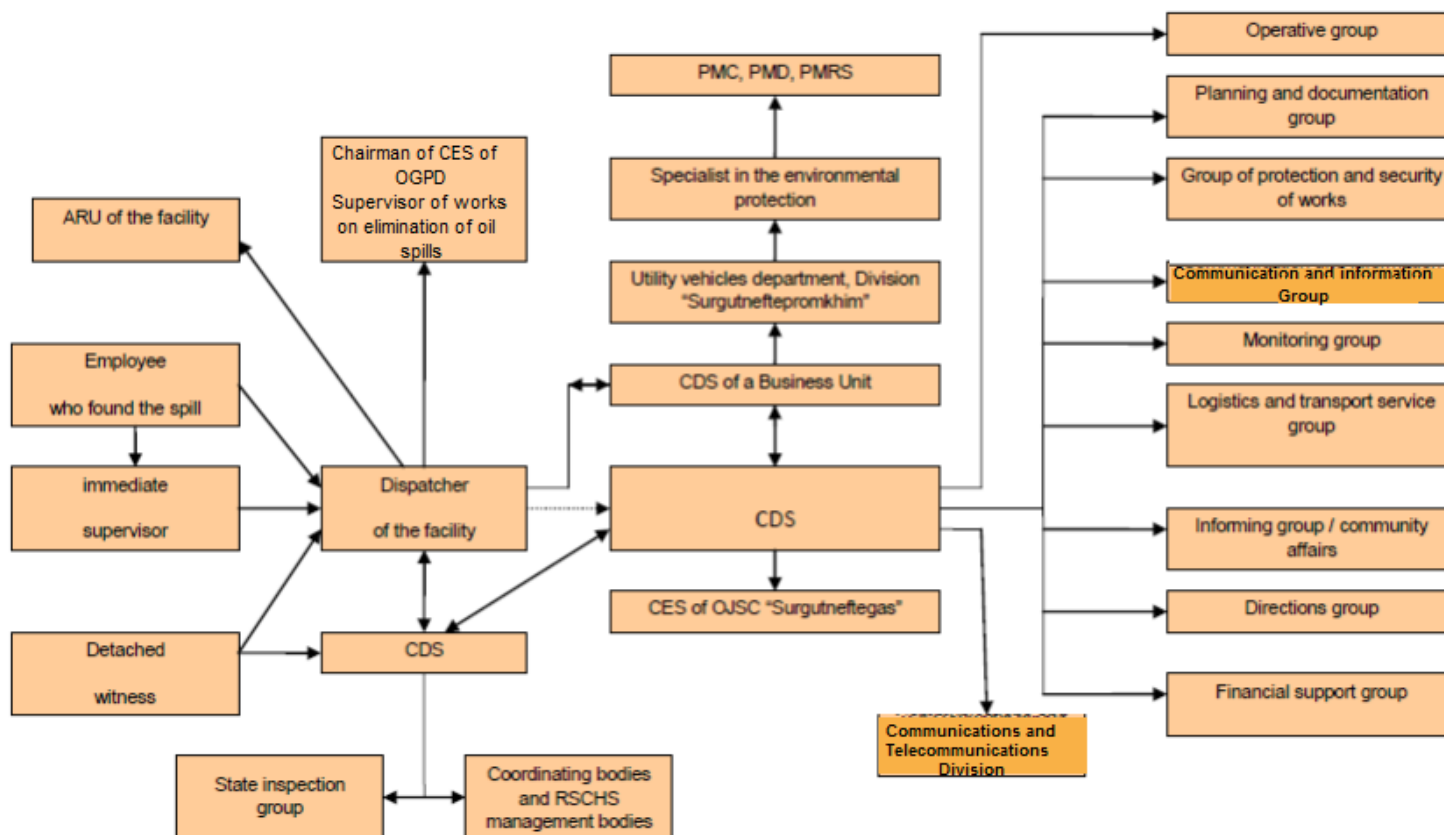
is transmitted automatically using automated warning system ASO-1 installed in Communications and Telecommunications Division. Time for warning of 100 addressees does not exceed 4 minutes.

Warning of management and coordinating bodies of territorial RSCHS subsystem and its departments, instant readiness forces of RSCHS is performed by public safety answering point (PSAP) dispatcher. Transfer of information about the occurrence of ES(O) in the facilities of OJSC "Surgutneftegas" for PSAP is organized by the head of CDS or Environmental Safety and Management Division of OJSC "Surgutneftegas" involving dispatch service of Communications and Telecommunications Division.

Readiness to use the communication and warning system is ensured by Communications and Telecommunications Division and organization of warning is ensured by CDS.

Initial information about a threat of emergency situation occurrence comes from a dispatch service of business unit workshop of OJSC "Surgutneftegas" or directly from CDS.

CDS personnel warns corresponding managers and employees of OJSC "Surgutneftegas" in compliance with typical scheme of warning represented in the picture 2.1.1.2. and corresponding central and local authorities.



Picture 2.1.1.2. Typical scheme of warning in case of oil and oil products spills in the facilities of OJSC "Surgutneftegas"

Notification procedure

Timely transfer of the information about the situation and the procedure of works on localization and elimination of ES(O) to CES of OJSC "Surgutneftegas" is ensured by CDS of OJSC "Surgutneftegas".

Notification of central and local authorities about occurrence of ES(O) and measures taken to its elimination is performed in compliance with the scheme of warning and, as a rule, includes the following information:

- location, nature and severity level of ES(O);
- situation in the ES(O) zone, actions on elimination of ES(O) and measures planned;
- procurement of resources for spills elimination units in the ES(O) zone;
- media coverage;
- time of the next information update.

Information is updated during the established period.

Implementation of readiness to use special technical means and filling up of financial and material resources supplies

Readiness to use special technical means of the out-of-staff ARU of OJSC "Surgutneftegas" is implemented in accordance with the Plan on prevention and elimination of oil and oil products spills at the facilities of OJSC "Surgutneftegas"

All special technical means that are to be used when taking measures for localization and elimination of oil and oil products spills and their consequences are kept in instant readiness by:

- regular checking of completeness, inspection of special technical means and materials by certifying their characteristics (parameters);

- timely maintenance of special technical means as well as repairs and replacement for functional ones if necessary;

- control over their use, prohibition of misuse and performance of works not related to localization and elimination of ES(O) and their consequences, and conduct of exercises and training;

- appointment of the responsible person for storage, maintenance, operation, servicing, repair and re-equipping of special technical means;

- replenishment of supplies and materials stock when their quantity is insufficient, shelf life is expired or performance capabilities (parameters) have dropped to an unacceptable level;

- planning to use special technical means in case of ES(O);

- placement of special technical means in business units in order to make the delivery to ES(O) zone more prompt and the usage more efficient.

Time necessary for readiness to use special technical means of the out-of-staff ARU used in works on elimination of ES(O) is 30 min from the moment of receiving information about the occurrence of ES(O).

Replenishment of financial and material resources is carried out following completion of works on elimination of ES(O) by OJSC "Surgutneftegas". The Company has established a reserve of financial and material resources for elimination of ES(O) (the copy of the Order is represented in Appendix 2.7. and Appendix 3.7).

Costs incurred during the land reclamation include:

- field operations examining the area, laboratory sample analyses;

- removal, transportation and storage (if necessary) of the fertile soil layer;

- application of fertile soil to reclaimed lands;

- cleaning of the reclaimed area from industrial wastes, including construction debris, with their further disposal or storage in a designated place;

Restoration of fertility of reclaimed lands which are handed over for agricultural, forestry and other uses (cost of seeds, fertilizers and ameliorants, their introduction, etc.);

The activities of the working commissions related to the examination of reclaimed lands (transportation costs, payment for experts, field studies, laboratory analyses, etc.);

Other activities, planned works on land reclamation depending on the nature of the disturbance of land and further use.

Plan of rescue of oil-contaminated animals

The present plan of rescue of oil-contaminated animals is an addition to

the plan of oil spills elimination of OJSC "Surgutneftegas" on the stage of oil spill elimination is intended to be a general instruction for hazing, capture and rehabilitation of animals in the process of elimination of oil spills affecting wild life.

Accidents with contamination of animals with oil take place not so often as accidents with oil spills for the reason that not every oil spill causes problems for wild animals.

Rescue of oil-contaminated animals can be significant for documentation of environmental impact, protection of rare and endangered species; it can satisfy expectations of community and provide for humane treatment or euthanasia of animals.

The goal of the present Plan is minimization of impact upon the environment by implementing the following measures:

1. Identification of harmed or threatened animals and determination of priorities in elimination of consequences in compliance with agreed natural protection and human values;

2. Minimization of impact upon wild animals by means of hazing and preventive capture if necessary;

3. Implementation of methods and strategies of oil spills elimination aimed at protection of ecologically vulnerable areas, such as areas of reproduction and fattening.

Potential impact of oil spills upon wild life

Wild animals may be vulnerable to oil pollution, because of the following factors:

- behavior;
- eating preferences; habitat requirements.

Wild animals may be exposed to oil pollution in the following areas:

- in the internal territories near pipeline crossings;
- near watersides.

The amount of bions and species suffered from oil spill depends on the following factors:

- oil spill scale;
- chemical make-up of spilled oil product;
- meteorological conditions;
- season (spring/autumn migration, ice);
- location of oil spill.

Impact of oil spill upon animals

Animal may be exposed to oil impact being in the place of oil spill. Animal can swallow oil trying to clean its contaminated feathers or fur.

Another way of contamination is consuming of oil-contaminated water or food.

General impact of oil upon animals can be divided into the following types:

1. Physical impact:

- loss of water-repellency after oil-contamination;
 - loss of thermal insulation capacity, because of oil contamination, resulting in hypothermy;

2. Toxic effect:

- inflammation of eyes, skin, mucous membrane;

- vital organs injury;
- suppression of the immune system;
- decrease of chances for reproduction (for birds) and youngsters survival rate.

Animals injured by oil spill can be found in the process of monitoring of situation and the environment during actions on oil spill elimination.

Each employee must immediately notify the supervisor of works in the facility in case of detection of animals injured by oil spill; the supervisor in his turn notifies the authorities (Department of Rosprirodnadzor for KhMAO-Yugra).

Volunteers among local citizens can be involved in works on animals rescue if it does not require special knowledge and skills.

Response in field conditions.

In the process of elimination of oil spills affecting wild animals, it is necessary to implement measures for prevention of birds and animals from oil contamination. It can be reached using the following methods:

containment of oil spill

- cleaning of spill zone
- preventive capture or removal of wild animals from the territories that can be polluted with oil;
- prevention of animals from approaching polluted territory (hazing).

Containment of oil spill

The main strategy of wild animals protection is the control of spreading of spilled oil aimed at prevention or minimization of oil contamination of endangered species and their habitat. Operations of oil spill containment will be carried out by forces and means of oil spills elimination.

Cleaning of spill zone

Measures for removal of oil-contaminated garbage and food sources are also necessary for prevention of wild animals from contamination.

Prevention of animals from approaching polluted territory (hazing)

Hazing is a term used for description of different means of prevention of wild animals from getting into zones already polluted with oil or areas within prognosed path of oil movement. Hazing must be carefully planned in order to prevent hazed animals from going to other oil-contaminated zones.

Capture and transportation of oil-contaminated wild animals

The faster oil-contaminated animals are captured, the earlier they are rendered first aid and the more their chances to survive are. For searching and capturing of animals, the following information is needed:

- amount of oil-contaminated wild animals;
- animals species;
- location;
- possibility to save oil-contaminated wild animals.

In case capturing of oil-contaminated animals is possible and weather conditions are favourable, the following measures must be implemented:

- provision with transport and personal protective equipment for specialists of animals rescue;
- mobilization of personnel and equipment for stabilizing the condition of injured animals;

- deployment of a field stabilization ward.

Capture of oil-contaminated wild animals

Capturing brigade consists of two or more experienced rescuers equipped for wild animals capturing in a proper manner.

Before entering the zone, capturing zone must be estimated and the strategy must be developed. In case the first strategy turns unsuccessful, there must be a fallback plan and corresponding equipment.

Oil-contaminated birds lose their ability to stay afloat and they will try to get ashore. One should approach to oil-contaminated birds water-side in order not to force them back into water. For capturing the bird, hoop net with long handle can be used.

If the attempt to capture the bird is unsuccessful, it is better not to chase it. Continuous attempts cause additional stress, which can be fatal.

Handle with oil-contaminated wild animals

When handling with oil-contaminated wild animals, it is necessary to do the following:

- minimize stress by using relevant methods of handling;
- prevent an animal from self-injuring;
- avoid injuries that can be made by wild animals (scratching, pecking, biting). Handling with wild animals requires relevant personal protective equipment:
 - nitrile gloves (oil-proof);
 - if necessary – thick leather gloves (when handling with large birds);
 - eye-shield or mask.

Using of towels and nitrile gloves

One should not take oil-contaminated animals with bare hands; One should handle with animals carefully using sheets or towels. Wrap the towel around the body of the animal, take it carefully and put into the transportation container. Gloves, sheets and towels prevent skin from contacting with oil and protect from pecking, biting and scratches.

Washing and rinsing

Oil-contaminated animals are washed manually in warm water (38 degrees Celsius) mixed with household detergent. In order to remove oil from sensitive parts, e.g around eyes or nib, such instruments as waterpick and tooth brush can be used. Basin is cleaned out and filled with warm water. Animals are washed until all oil containing materials are removed from their bodies.

Animals are rinsed with water with the temperature of 38 degrees Celsius. During rinsing all the detergent must be removed. For this, small washer nozzles are used.

After washing and rinsing animals are kept in special cages. For fast drying of animals so called "hairdryers for animals" are used. These devices produce a stream of warm air used for drying animals. In the process of drying feathers and fur are smoothed down.

Transportation of animals to the pet hospital

The faster oil-contaminated animals are captured, the earlier they are rendered first aid and the more their chances to survive are. Intelligence gives the following information to the brigades of searching and capturing:

- amount of oil-contaminated wild animals;
- animals species;
- location;
- possibility to save oil-contaminated wild animals.

In case capturing of oil-contaminated animals is possible and weather conditions are favourable, the following measures must be implemented:

- provision with transport and personal protective equipment for specialists of animals rescue;
- mobilization of personnel and equipment for stabilizing the condition of injured animals;
- deployment of a field stabilization ward.

Captured oil-contaminated wild animals must be immediately transported to the field stabilization area and prepared to transportation to the pet hospital.

Containers

Captured wild animals must be kept in containers. Brigades of capturing and field stabilization are provided with containers of different types:

Waxed cartons with vent holes are good for small and middle-sized birds (seagulls, ducks).

Plastic baskets for pets transportation (skippers) of different sizes provide enough space for keeping larger birds (e.g. geese, swans and carnivorous birds).

One should not use sacks made of coarse fabric or wire cages. They can cause eye injuries or damage feathering.

Cessation of works in zone of oil spill

Works on animals rescue in the zone of oil spill are considered finished in the following cases:

- all oil-contaminated animals are captured;
- all captured animals are stabilized and set free;
- all animal corpses are gathered and removed from the place of works for further utilization.

Typical situational calendar chart of actions for recovery of damaged facilities

Accident-rehabilitation works after localization and elimination of ES(O) at Main product pipelines consist of repair operations aimed at recovery of damaged facilities of Main product pipelines.

Accident-rehabilitation works and repair operations are carried out in compliance with RD 153-112-014-97 [26].

Repair and rehabilitation works which are carried out only after obtaining a work permit include:

- determination of the place and nature of damage;
- opening and emptying of the damaged pipeline section into tanks (other containers) or reserve pipeline string;
- replacement of the damaged element (in case of damage to the fittings or equipment fixed to the pipeline by means of detachable connections);
- cutting out of technological holes and sealing the inner surface of the pipe (installation of pneumatic mufflers);
- marking and cutting out of the damaged section;
- execution of work permit for fire works;
- assembling and welding of installed section;
- repair of welds (if necessary);
- pigging of welds;
- blowdown of the repaired section ,
- pumping of clean oil products from reservoirs back to the pipeline;
- welding of technological holes;
- welding quality control and elimination of defects (if any);
- pipeline coating;
- backfilling of the repaired section;
- removal of technical means to a safe distance;
- filling of the section and pressure testing of it within 2 hours;
- commissioning of the section.

No.	Contents of measures taken	Implementation time	Time of measures implementation after elimination of ES(O);														Responsible persons (position, last name, initials)		
			Hours								Days								
			0	4	8	12	16	20	24	2	3	4	5	6	7	8			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
I. After elimination of oil products spills within the facilities of OJSC “Surgutneftegas”																			
1	Examination of undamaged reservoirs, pipeline sections, piping of process equipment, wellheads, assessment of the state of oil stored in them as well as the integrity of process equipment and premises. Indication of core equipment and tanks parameters	4 hrs															Executives of OJSC “Surgutnefte gas”		
2	Elimination of the defects of undestroyed facilities revealed during examination. If it is necessary to carry out fire and welding operations on undamaged oil storage tanks, process equipment and pipelines or in close proximity to them, transfer oil from these tanks, pipelines, elements of the process equipment to undamaged tanks, and clean them observing safety rules.	24 hrs															Executives of OJSC “Surgutnefte gas”		

3	Restoration of damaged elements of asphalt-concrete and earth surface, damaged elements of tank farm, well-pad, other buildings and constructions.	24 – 48 hrs															Executives of OJSC "Surgutnefte gas"
4	Decision on the need for additional involvement of construction and service companies to rehabilitation works.	24 – 48 hrs															Executives of OJSC "Surgutnefte gas"
II. After spill elimination on the territory of OJSC "Surgutneftegas" accompanied with destruction of process equipment, buildings and constructions near the facility under emergency																	
1	Examination of undamaged reservoirs, pipeline sections, process equipment; assessment of the state of oil stored in them as well as the integrity of piping equipment and pumping rooms. Measurement of oil temperature, completeness of the filling of tanks, inspection of constructions. Determination of the volume of rehabilitation works	4 hrs															Executives of OJSC "Surgutnefte gas"

2	Elimination of the defects of undestroyed facilities revealed during inspection. If it is necessary to carry out fire and welding operations on undamaged oil/oil products storage tanks, process equipment and pipelines or in close proximity to them, transfer oil/oil products from these tanks, process equipment, pipelines to undamaged tanks, and clean them observing safety rules.	24 hrs															Executives of OJSC “Surgutnefte gas”
3	Recovery of damaged unit, process units, checkpoint; restoration of safety fence, banking. In case the damage is slight and no additional forces and means are required	as per work schedule															Executives of OJSC “Surgutnefte gas”
4	Restoration of damaged asphalt and concrete surface, asphaltting and concreting of cracks and hollows; bedding of rubble, sand, clay.	24 - 48 hrs															Executives of OJSC “Surgutnefte gas”

5	<p>Perform a complete inventory of the property of the unit where the Company's facility under emergency is located to determine the extent of destruction and damage and material damage caused by ES(O).</p> <p>Carry out technical inspections of damaged reservoirs, process equipment, piping, buildings and constructions, oil products pipelines and other structures, communications at the facilities of OJSC "Surgutneftegas" and, if necessary, beyond this area.</p> <p>Determination of the volume of rehabilitation works.</p>	24 - 48 hrs															Executives of OJSC "Surgutnefte gas"
6	<p>Decision on the need for construction companies, other forces and means involvement to eliminate damages and destructions on the territory of the facility under emergency and, if necessary, beyond its territory.</p> <p>Based on the inventory results and technical inspection of buildings and constructions.</p>	24 - 48 hrs															Executives of OJSC "Surgutnefte gas"

7	Removal from the territory and utilization of the remaining oil contaminated soil, snow, sorbent and collected oil to specially designated storage areas. For the entire duration of repair and rehabilitation works at the facility.	For the entire duration of rehabilitation																Executives of OJSC "Surgutneftegas"
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