## MANAGEMENT SYSTEM

### 2018 RESULTS

| • 178 training sessions were conducted in LUKOIL Group entities in order to practice actions related to localization and to elimination of the consequences of spills of oil and oil products. |
| • Work with contractors related to “well servicing” was intensified. |
| • Over 60,000 employees underwent training, as well as chairmen and members of commissions, for the prevention and elimination of emergency situations and for ensuring the fire safety of LUKOIL Group organizations. |

We believe that ensuring the industrial safety of our enterprises is an essential task, whose successful performance promotes not only the financial well-being of the Company, but also enhances the living standards and socio-economic potential of the regions where we operate.

We strive to comply with best international practices and have set the following permanent (not time limited) goals:

- Reducing risks of accidents, incidents, fires, and emergencies at LUKOIL Group entity facilities
- Reducing the level of occupational injuries and occupational illness
- Ensuring the sustainable operation of the HSE Management System

Main areas of work in the field of safety comprise:

- Preparedness for emergencies and disasters. Given the increasing number of adverse weather events in various regions of Russia, this area is important not only for the Company, but also for local communities.
- Fire safety. In addition to protecting our own facilities, our rescue teams help local authorities deal with frequent fires in the forests of Siberia and in areas with large concentrations of people in urban locations (such as large shopping centers).
- Preparedness for rapid response to oil spills and the elimination of their consequences. Particular attention is paid to developing the requisite skills for eliminating potential spills in the ice conditions of the Arctic.

Our approaches are based on the following principles:

- Using a risk-based approach
- Regular leadership visits and Safety Days
- Continuous improvements to the HSE management system, taking into account changes in the external environment and industry trends
- System planning: creating target programs aimed at improving the preparedness of LUKOIL Group entities for emergencies and oil and oil product spills

- Promoting safe methods of operation in contracting organizations
- Introducing state-of-the-art technologies and the digitalization of production and control processes

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1 Hazard identification, risk assessment, and the adoption of management measures to eliminate hazards and minimize risks in the field of health, safety, and environment in LUKOIL Group are performed in accordance with the standards STO LUKOIL 1.6.6-2016 “HSE Management System. Management of Risks and Environmental Aspects,” and in terms of planning management measures, STO LUKOIL 1.6.8-2016 “HSE Management System. Event Planning.”
The main methods for improving safety comprise:
- Equipping facilities with modern equipment and security features, and maintaining a high level of preparedness on the part of Company rescue teams.
- Conducting comprehensive training, including with the participation of rescue teams from the Ministry of Emergency Situations and other companies operating in territories where LUKOIL operates.
- Training Company employees and contractors’ employees at advanced LUKOIL Group training centers.

Assessments of the effectiveness of the management system are conducted during internal audits\(^2\) and in annual reports on HSE in LUKOIL Group, which are submitted to the Management Committee of PJSC LUKOIL.

### INDUSTRIAL SAFETY PROGRAM

LUKOIL spends significant funds on the adoption of industrial safety and health protection measures. In 2016–2018, over RUB 30 billion was allocated in this area.

In 2018, Russian and foreign LUKOIL Group entities participated in the Industrial Safety, Better Working Environment, Emergency Prevention, and Responses Program of LUKOIL Group Entities. The program for 2019–2021 encompasses over 2,000 events, with a total funding of around RUB 40 billion.

#### Expenses on measures related to the Industrial Safety, Better Working Environment, Emergency Prevention, and Responses program of LUKOIL Group entities, RUB million

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td><strong>Total expenses</strong></td>
<td>8,610</td>
<td>12,307</td>
<td>10,093</td>
</tr>
<tr>
<td><strong>including:</strong></td>
<td></td>
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<tr>
<td><strong>1. Occupational health</strong>, including: the adoption of preventative measures, assessing working conditions, training and information support, introducing modern technologies and products, and electrical safety</td>
<td>2,715</td>
<td>5,091</td>
<td>4,372</td>
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<tr>
<td><strong>2. Emergency prevention and response</strong>, including:</td>
<td>4,052</td>
<td>3,909</td>
<td>3,894</td>
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<tr>
<td>- expenses related to uncontrolled flows and radiation safety</td>
<td>106</td>
<td>110</td>
<td>138</td>
</tr>
<tr>
<td>- expenses related to fire safety</td>
<td>1,753</td>
<td>2,692</td>
<td>2,635</td>
</tr>
<tr>
<td>- other measures</td>
<td>2,193</td>
<td>1,107</td>
<td>1,121</td>
</tr>
<tr>
<td><strong>3. Expenses on measures aimed at improving the management system and ensuring regulatory compliance</strong></td>
<td>1,843</td>
<td>3,037</td>
<td>1,827</td>
</tr>
</tbody>
</table>

#### PREPAREDNESS FOR EMERGENCIES AND ACCIDENTS

For all facilities that are potential sources of oil and oil product spills, plans have been developed to prevent and eliminate oil and oil product spills. The main program measures in 2018 enabled us to achieve the following results.
- Trainings on the localization and elimination of the consequences of oil and oil product spills were held at LUKOIL Group entity facilities; particular attention was paid to verifying oil spill response plans and how prepared teams were to eliminate spills.
- A project to broadcast live video images from hazardous production facilities in the Central Control Room of PJSC LUKOIL was prepared for implementation.
- The Open Flow Elimination Headquarters was organized in order to increase how prepared LUKOIL Group’s Russian oil and gas producing entities are to eliminate oil flows.

\(^2\) Audits are carried out in accordance with STO LUKOIL 1.6.12-2016 “HSE Management System. Procedure for Organizing and Conducting Audits”.