

The Company has switched to a sumpleless well-drilling concept, according to which generated drilling waste is not stored/landfilled at the drill sites, but is sent for use or neutralization, which ensures that the key performance indicator for waste-handling is met.

We pay careful attention to the quality of waste disposal works carried out by contractors, and monitor their operations as part of concluded contracts: waste-handling methods, the state of the in-process control system, and the availability of the

necessary resources to fulfill contractual obligations are verified. LUKOIL Group entities are continuously expanding their level of interaction with contractors in order to improve the quality of their work.

## Land rehabilitation

Land rehabilitation works are performed at sites that have become contaminated with oil due to failures in the oil-production infrastructure, or due to other incidents. The rehabilitation of contaminated land is carried out in all

territories where the Company operates. In view of the climatic conditions of operations in Russia (chiefly the northern latitudes), the necessary rehabilitation cycle of a contaminated site takes at least two years. In 2018,

50.3 hectares of land were transferred to the state commission. As a result of completing all rehabilitation stages, including the microbiological stage, the content of oil products on this land was reduced to safe levels.

## Pre-privatization damage management



As of December 31, 2018, in the previous six years the volume of "old" waste decreased by **575,000 tons** (compared to data at the beginning of 2013, when the last stocktaking was performed).

The balance sheets of a number of oil production and processing entities accumulated large volumes of mainly oil-containing waste during the period before privatization and/or the acquisition of respective enterprises by LUKOIL Group (pre-privatization ["old"] damage). At its own initiative the Company disposes of such waste at its own expense (except for LUKOIL Neftochim Burgas AD, where

respective activities are financed by the state). The volume of pre-privatization waste is declining each year. In 2018, the volume of "old" waste fell in comparison to 2017:

- **at Russian entities, by 16% (to 268,9 thousand tons)**
- **at LUKOIL Neftochim Burgas AD, by 13% (by 396,5 thousand tons)**

The pre-privatization waste of PETROTEL-LUKOIL S.A. (Romania), LLC LUKOIL-West Siberia, and LLC RITEK was processed in full.

## BIODIVERSITY CONSERVATION



The conservation of natural ecosystems and biodiversity is of significant economic, environmental, and social importance. It helps create productive habitats and has an **important impact on people's health.**



**Our goal** is to preserve the diversity of natural biosystems in the regions where the Company operates and to ensure that they are treated carefully, so that their ability to self-repair is not threatened.

### Operating principles and methods

We act to preserve biodiversity based on the "prevention - reduction - restoration - compensation" principle.

At an early stage, an assessment of the impact of proposed environmental

projects (an environmental impact assessment) is performed, during which background information about the state of ecosystems on the territory of proposed operations is collected (including the condition of valuable

and specially protected species of flora and fauna). The data received are taken into account when selecting the site for production facilities; if necessary, alternative project implementation options are considered. The risk of