

OPEN JOINT STOCK COMPANY  
"SURGUTNEFTGAS"

# ENVIRONMENTAL REPORT



2013

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*OJSC “Surgutneftegas”, Company, Surgutneftegas, we, our, us and joint stock company used in the text of the Environmental Report are interchangeable terms that relate to the oil and gas production sector of OJSC “Surgutneftegas”.*



The year 2013 was announced an Environment Protection Year in the Russian Federation. Taken at the state level, this solution emphasized the significant influence of the environment condition on the life quality of the population and drew extra attention to the ecological issues that led to organizing a panel discussion and encouraging people to take solutions urgent for the industry.

The key federal-level events in the environmental safety sector showed that

the long-term strategy of OJSC "Surgutneftegas" concerning environmental activities was correctly determined from the very start. Production organization and the choice of techniques are done on the principle of rational environmental management that reduces to a minimum the negative ecological influence of oil and gas production concerning the present and the future days.

By the results of 2012, OJSC "Surgutneftegas" received the award in the competition "100 Best Companies of Russia. Ecology and Environmental

Management”, thus giving a striking illustration of the Company’s recognized achievements of the last year. Director General of Surgutneftegas, V.L.Bogdanov, was honored a decoration “Ecologist of the year”.

In 2013, the Company itself became an initiator and co-organizer of important events of industrial and regional significance. Having reached a record level of associated petroleum gas utilization (99.2%), OJSC “Surgutneftegas” hosted the Regional Conference for Europe and Central Asia on the topic “The experience of oil companies in efficient utilization of associated petroleum gas”. The conference was organized on the initiative of Federal Supervision Service for Nature Management and Global Gas Flaring Reduction partnership (GGFR) under the auspices of the administration of KhMAO-Yugra.

In the city of Surgut, Khanty-Mansiysky Autonomous Okrug – Yugra, where the headquarters of the Company is located, Surgutneftegas did the cleaning of Kedrov Log Park, so much liked by the citizens, including a firstly performed integrated treatment of water bodies with a total area of 0.4 hectares.

The Company continued technical and technological upgrading for the sake of the environment. In 2013, Surgutneftegas started building its own facilities to produce internal corrosion resistant coating for pipes and pipeline fittings. The commissioning of the production will allow performing timely furnishing of construction facilities and improve the quality of pipes with internal coating.

Moreover, last year, the Company mounted and commissioned one thermal sludge processing unit, and four of seven purchased sets of equipment for phase separation of

sludge. New facilities will help to provide more effective separation of oil sludges and additional involvement of oil products in the production process.

To develop monitoring, OJSC “Surgutneftegas” started preparations for using miniature unmanned aerial vehicles to control the state of the environment and linear objects.

In 2013, as a part of emergency preparedness test, the Company for the first time organized comprehensive emergency training exercises for the personnel within the territory of the Lyantorskoye and Rodnikovskoye fields. In the course of training, the Company perfected collaboration mechanisms between Surgutneftegas departments of oil and gas production divisions and the functional subsystem of the Ministry of Energy of Russia – a single state emergency prevention and response system used at the threat and in case of accidents caused by oil spills.

In 2014, on the basis of the system of ecological monitoring, OJSC “Surgutneftegas” intends to continue the implementation of the program of environmental actions and facilities construction in all the areas of the Company’s operations. In the reporting year, total costs for the Ecology corporate program in the production sector will reach RUB 19.6 billion.

Anatoly S. Nuryaev  
First Deputy Director General  
of OJSC “Surgutneftegas”



# ENVIRONMENTAL SAFETY: INTEGRATED APPROACH



## Production and transportation of hydrocarbons are inevitably associated with some impact on the environment. Introduction of an effective environmental management system, environmentally-friendly and resource-saving technologies, as well as production control and environment monitoring help the Company mitigate the influence on the environment.

The environmental management practices performed by OJSC “Surgutneftegas” are based on the Company’s environmental policy which is a system component of planning and organizing its activities in accordance with the sustainable development concept.

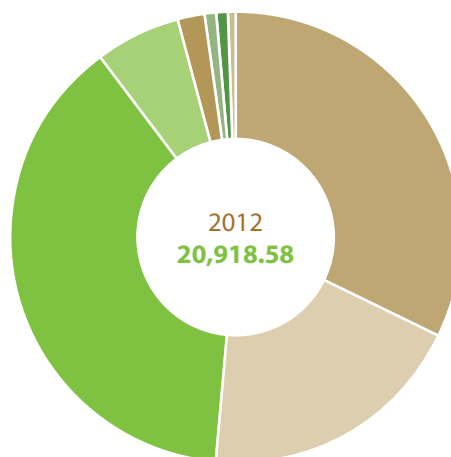
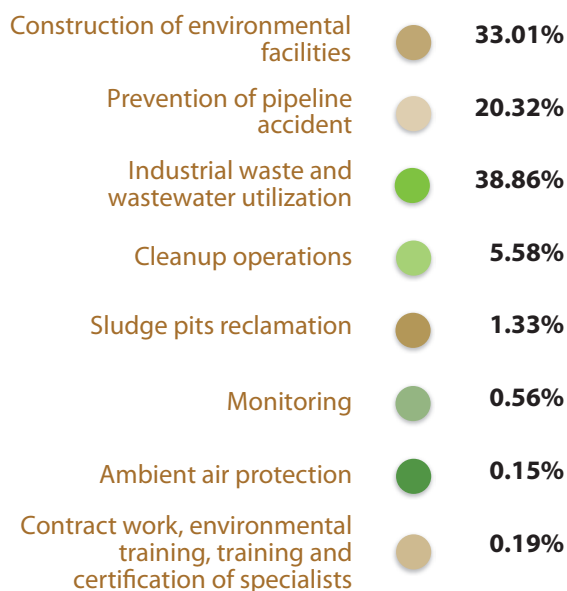
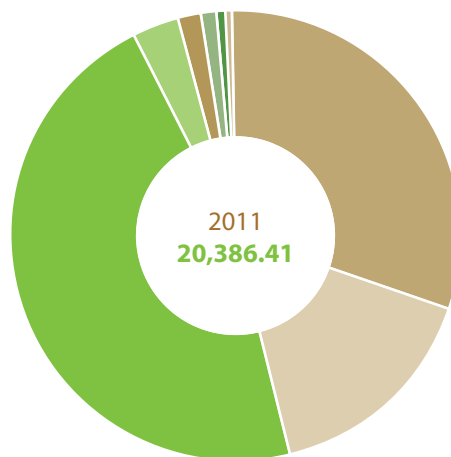
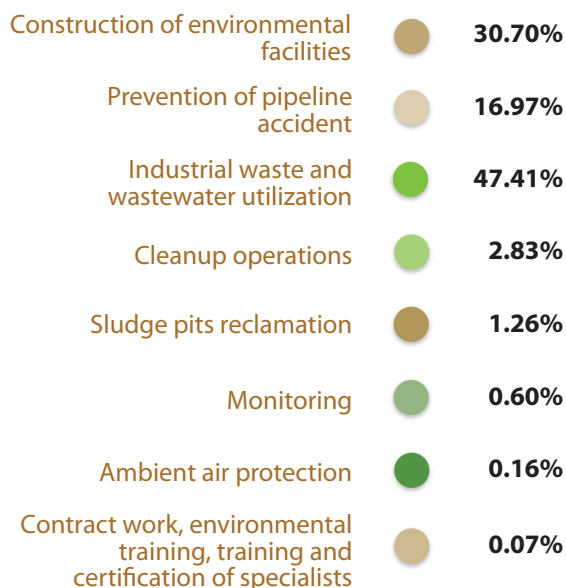
The Company’s environmental policy is primarily focused on ensuring full compliance with the environmental legislation of the Russian Federation, enhancing environmental safety of all production units, and reducing the negative impact of oil production on the environment. It provides for development, search and introduction of new up-to-date technologies which minimize or completely eliminate the negative impact of oil production on the environment, reduce the resource intensity of production, maintain a high level of associated petroleum gas (APG) utilization, and maximize the amount of production and consumption waste involved in production processes.

The goals are achieved through the development and implementation of the annual environmental program. The key issues of the corporate Ecology Program are:

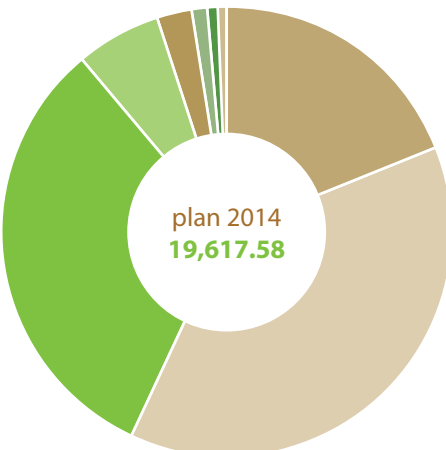
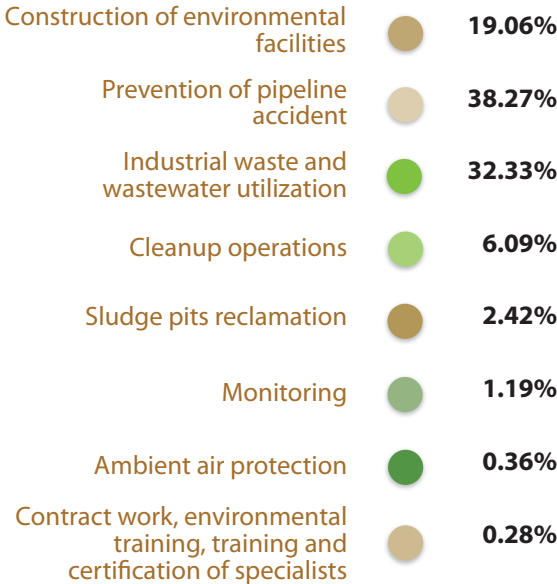
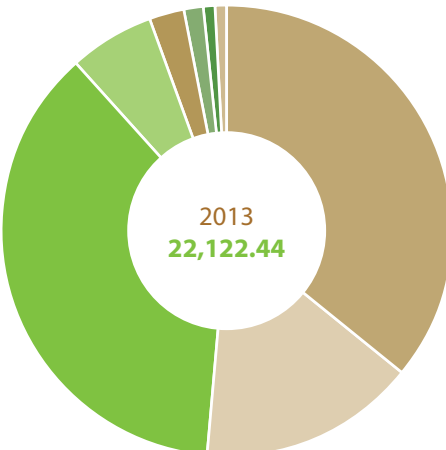
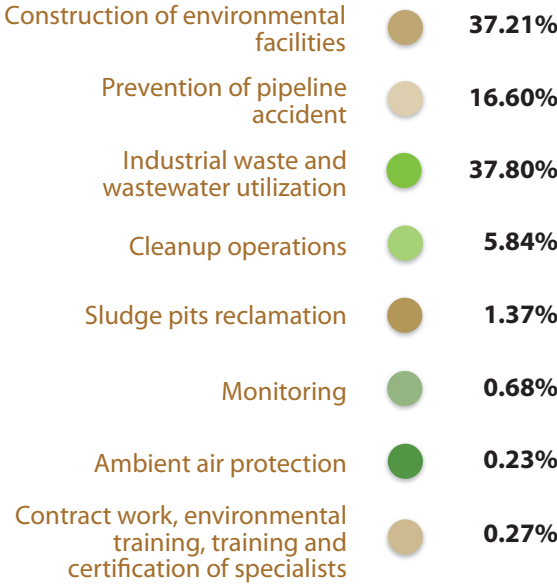
- construction of new environmental facilities, and reconstruction and upgrading of the existing ones;
- on-schedule pipeline overhauling, prevention of equipment failure and oil spill clean-up;
- protection and rehabilitation of land;
- air protection;
- rational use of water resources, utilization of industrial wastes;
- safe waste management, neutralization and recycling of production waste;
- continuous environmental monitoring in the area of the Company’s presence;
- research works;
- environmental training of the personnel.

The Company makes heavy environmental investments: over the last five years, it has been giving annual funding of more than RUB 20 billion for Ecology Program. In 2013, in upstream it spent RUB 22.1 billion on environmental protection.

Environmental investments in 2011–2013  
and the plan for 2014  
RUB mn









## IN 2013, OJSC "SURGUTNEFTEGAS" SPENT ABOUT RUB 8.2 BILLION ON CONSTRUCTION OF NEW ENVIRONMENTAL FACILITIES AND RECONSTRUCTION OF THE OPERATING ONES.

The Company has built and successfully operates many facilities for air and water conservation, waste disposal, treatment and utilization. Including:

- gas processing plant;
- 21 gas turbine and 7 gas piston power plants, 26 compressor stations, 2 gas processing units for associated petroleum gas utilization;
- 108 initial water separation units;
- 6 centers for oily soil decontamination, including equipment for processing solid and liquid phases, a sludge collector and a field laboratory;
- industrial waste site for accumulation and thermal treatment of oil sludge with a capacity of 13.1 thousand tonnes;
- 3 centers for sludge decantation with sludge tanks, units for oily fluid recovery and thermal oil sludge decontamination;
- 6 Szhigatel incineration units for thermal oil sludge decontamination with a total capacity of 42 thousand cubic meters per year;
- 4 mobile units for tank cleaning and initial sludge treatment, including a prototype equipment set which contains a three-phase separator and a steam generator;
- 12 sludge collectors with a total capacity of 30.4 thousand tonnes;
- 4 landfills for disposal of solid municipal and industrial waste with a total capacity of 494 thousand cubic meters;
- 8 Forsazh incinerators for thermal decontamination of solid oily waste with a total capacity of 1.05 tonnes per hour;
- unit for shredding waste paper and non-returnable plastic containers with a capacity of 1,150 kilograms per hour and 50 kilograms per hour, respectively;
- tire processing equipment for recycling worn-out tires and inner tubes with a capacity of 5 thousand tonnes per year.

## THE ONGOING COSTS OF THE COMPANY'S ENVIRONMENTAL MANAGEMENT TOTALED RUB 13.9 BILLION IN 2013.

The annual ongoing costs of OJSC "Surgutneftegas" for environmental protection are made up of a number of different costs, including those of repairing and replacing pipes, protecting oil-field equipment and facilities

against corrosion, preventing equipment failures and oil spills and clean-up, air protection, industrial wastewater treatment, waste management, land reclamation, environmental monitoring and research work.

# RESEARCH WORKS ON ENVIRONMENTAL PROTECTION



## In order to improve the effectiveness of environmental measures and enhance the environmental safety system, the Company collaborates with scientific institutions and public partner organizations, conducts its own research and appraisal works.

In 2013, by request of OJSC "Surgutneftegas", to implement the recommendations of the expert committee of the state environmental expert commission on project documentation for the construction of sludge pits at well pads and single exploration well sites of OJSC "Surgutneftegas", for the first time Russia performed investigation of soil formation processes that occur in the drill cuttings of sludge pits remediated without backfilling on the basis of the "forest reclamation technique".

To perform this, the Company involved St. Petersburg Scientific Research Center for Ecological Safety, RAS (SRCES RAS) and Vasily V. Dokuchaev Soil Science Institute of Russian Academy of Agricultural Sciences. These Russian leading scientific organizations in soil science and environmental safety found that the drill cuttings of OJSC "Surgutneftegas" represent the parent rocks with the initial content of polymers. Such organic substances of starch type being easily mineralized are the nutrient medium for various soil microorganisms and plants actively populating the sludges.

During a short period of being present in the sludge pits, the drill cuttings cause

intensive soil-forming processes and lead to formation of humified embrozems. Humic acids which are indicators of fertility, that makes soil differ from rock, have been detected in embrozems. Soil changes its porosity and gets structured due to the influence of root systems of the vegetables planted when performing forestry reclamation and vegetation populating in the sludge pits.

Obtained results again proved the correctness of the chosen strategy of green drilling on the basis of natural characteristics of the region. This made it possible for OJSC "Surgutneftegas" to be the first company in the Russian Federation which brought into practice the requirements concerning the environmental safety of drilling cuttings and to ensure full compliance with the hazard class of natural soil of Western Siberia (sand and peat). Strict adherence to the established requirements gives an opportunity to place sludge in sludge pits at the well pads not damaging the environment. The forestry reclamation method used for sludge pits after drilling works at wetlands allowed to rehabilitate disturbed lands by their natural restoration.

**IN ORDER TO COMPLY WITH THE ENVIRONMENTAL LEGISLATION, IMPLEMENT AN ADVANCED TECHNOLOGY WHEN DESIGNING FACILITIES AND IMPROVE THE QUALITY OF PROJECT DOCUMENTS WHICH ARE SUBJECT TO EXAMINATION, IN 2013, OJSC “SURGUTNEFTEGAS” INTRODUCED A CONTROLLING SYSTEM TO MONITOR ITS DEVELOPMENT.**

All project documents, terms of reference for design and assessment of environmental impacts are considered by the specialists of Environmental Management and Safety Division.

In 2013, the Company’s ecologists preliminarily examined:

- 20 capital construction and exploratory drilling projects,
- 6 projects for construction of sludge pits on well sites at fields and license areas,
- 47 operating procedures,
- 35 design briefs,

- 35 terms of reference for environmental impact assessment,
- 9 corporate standards and other regulatory documents of the Company,
- 38 draft standards for maximum permissible emissions and 64 draft standards for waste generation and disposal limits.

These measures let the Company significantly improve the quality of project documents and reduce the number of objections regarding environmental protection.



# PIPELINE ACCIDENT PREVENTION

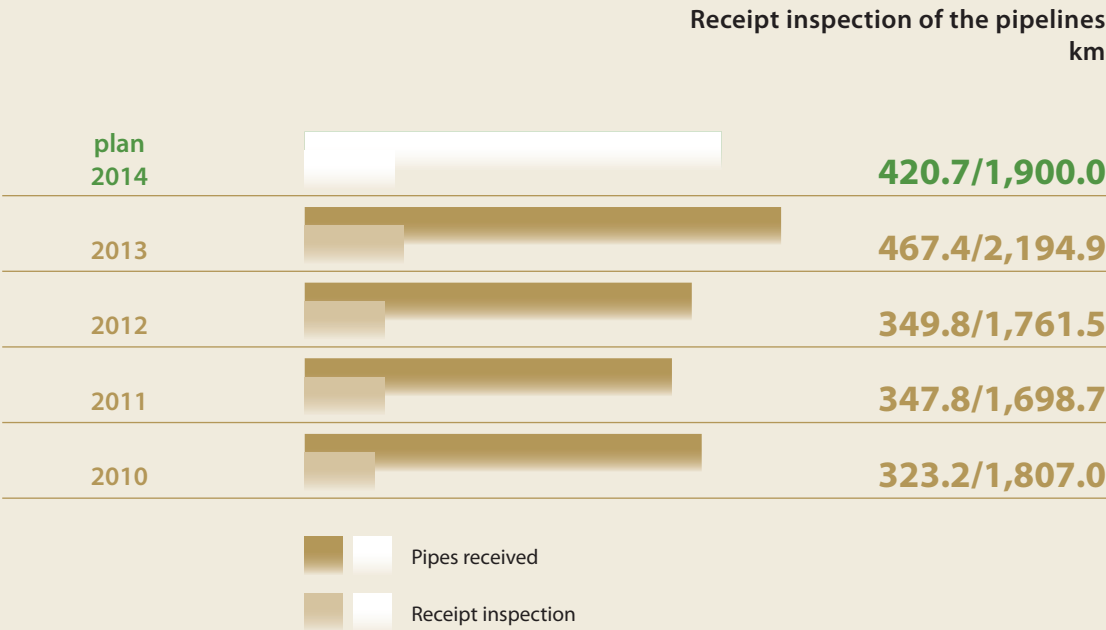


# The level of environmental safety at the production facilities of an oil and gas company is largely determined by its accident rate. Reliable field pipelines and accident risk management are of top priority for Surgutneftegas specialists.

Risk management covers various aspects of activities: from identifying and analyzing risks to finding how to reduce them by choosing, implementing and monitoring the corresponding set of measures.

The measures to extend the life of the Company’s field facilities are:

- receipt inspection of pipe steel;
- complete technical diagnostics of running equipment and facilities;
- in-line inspection and diagnostics of the pipelines;
- corrosion monitoring;
- pipeline inhibitor protection;
- use of corrosion protected pipelines;
- dehydration of oil by initial water separation units (IWSUs);
- pipelines overhaul;
- maintenance of field pipelines database in corporate information systems.



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**TO ENSURE GOOD QUALITY OF PIPES USED FOR CONSTRUCTION OF PIPELINES, THE COMPANY PERFORMS RECEIPT INSPECTION AND COMPLIANCE VERIFICATION OF THE PIPES USING DESTRUCTIVE AND NON-DESTRUCTIVE METHODS.**

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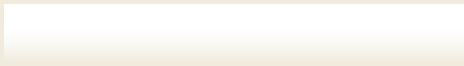




In 2013, we performed destructive testing of 21.3% of all pipes received (467.4 kilometers, including 77 kilometers of pipes to be used in the Republic of Sakha (Yakutia)). As a result, 3.58 kilometers of pipes (0.76% of all pipes tested) were rejected.

Pigging helps obtain the most accurate data on the pipeline condition. Regular descaling of pipe inner surface reduces the risk of corrosion damage. The Company's pressure oil pipelines and oil and gas pipelines are fitted with launchers and receivers used for pipe pigging, dewatering and descaling.

Moreover, in order to determine the technical condition of the pipelines and detect damaged sections, the Company

performs routine (planned) examination. The pipe condition data allow the Company to permit further running and effectively organize their routine repairs and overhaul. In 2013, 386.7 kilometers of pipelines underwent overhauls.

To assess pipeline integrity and choose efficient anticorrosion methods, the Company takes into account the corrosion monitoring data at 761 control points that cover about 5 thousand kilometers. On the basis of monitoring data, the Company estimates the corrosivity of pumped liquids, and further plans and implements corrosion protection measures.

		Protected pipe range km
plan 2014		<b>3,439</b>
2013		<b>3,454</b>
2012		<b>2,877</b>
2011		<b>2,702</b>
2010		<b>2,177</b>



**APPLICATION OF CORROSION INHIBITORS IS ONE OF THE MEANS TO ENSURE SAFE OPERATION AND MITIGATE CORROSION DAMAGE TO PIPES.**

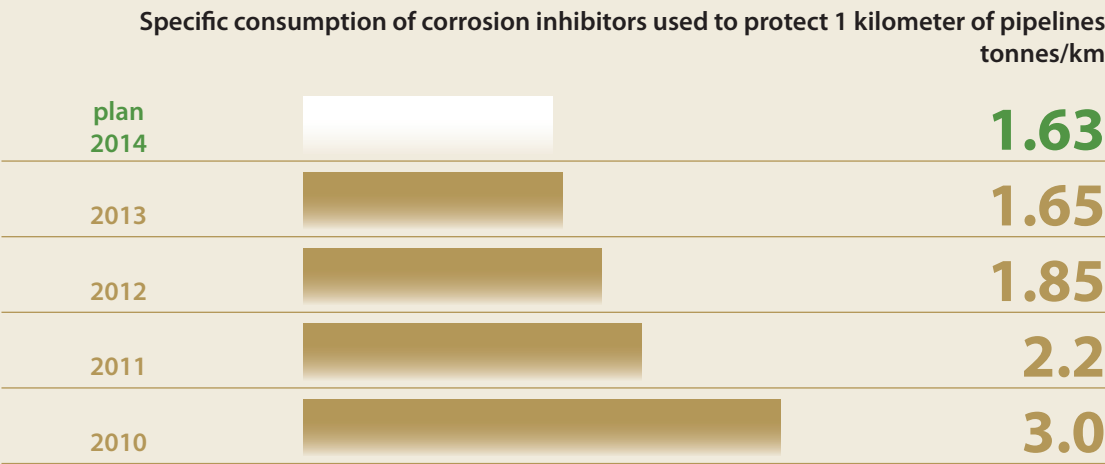
In 2013, the Company treated 3,453.7 kilometers of pipelines with corrosion inhibitors. To this end, the Company used 5,712.6 tonnes of corrosion inhibitors with the effect of 80–100%. OJSC “Surgutneftegas” inspected all the received consignments of inhibitors (over 100 consignments).

After three years of research, the Company’s specialists developed and employed a new method for receipt inspection of corrosion inhibitors – spectral analysis. It provided more in-depth and effective control of incoming

commercial reagents. At present, the results of spectral analysis are of crucial importance in determining the quality of reagents.

The programs of pipeline inhibitor protection are developed on the basis of technical and economic performance indicators. Step-by-step optimization of pipeline inhibitor protection let the Company reduce the specific consumption of corrosion inhibitors used to protect 1 kilometer of pipelines from 3 tonnes per kilometer in 2010 to 1.65 tonnes per kilometer in 2013.

**THE USE OF INTERNAL ANTICORROSION COATING IS A SIGNIFICANT ASPECT OF THE COMPANY’S PROGRAM AIMED AT PREVENTION OF PIPELINE ACCIDENTS. THIS INCREASES THE OVERHAUL INTERVAL BY ISOLATING THE PIPELINE FROM CORROSIVE FORMATION WATERS, REDUCING SEDIMENTS IN THE PIPES AND PROTECTING THEM FROM ABRASION AS WELL AS BY IMPROVING HYDRAULIC PERFORMANCE.**





Applying the corrosion resistant coating, the Company reduces its costs for pipeline operation and minimizes the technological and environmental risks.

In 2013, Surgutneftegas introduced 389.7 kilometers of pipelines with an internal anticorrosive coating, including 279.75 kilometers – according to the capital construction plan, and 109.9 kilometers – as a part of the overhaul program.

In the reporting year, the Company started construction of its own complex for applying corrosion resistant coatings to the inner surface of pipes. In 4Q2014, the Company plans to

commission the complex with a throughput of 684 kilometers of pipes and 15 thousand of fittings a year. The investments in building of the facility amounted to RUB 2.2 billion.

To protect welded pipe joints having an internal anticorrosive coating, OJSC “Surgutneftegas” uses protective sleeves of its own production. The amount of their production equals 60 thousand pieces per year. The start of its own production made it possible to timely provide the facilities of capital construction and pipelines overhaul with protective sleeves.






#### OJSC “SURGUTNEFTEGAS” OPERATES 108 INITIAL WATER SEPARATION UNITS DESIGNED TO TRANSPORT OIL WITH LOW WATER CONTENT VIA PRESSURE PIPELINES (OVER 3 THOUSAND KILOMETERS).

Initial water separation by IWSU units also helps to reduce the length of tank water pipeline, cut accident risks and diminish a threat of pollution of gathering grounds and water bodies. This is of special importance in the areas of the Company’s operations where water

protection zones and swamplands cover 40–90% of Surgutneftegas oil fields.

In 2013, due to preventive measures, the Company managed to perform accident-free operation of in-field pipelines and significantly minimized the number of incidents and accidents occurred at oil gathering pipelines.

#### Introduced pipelines with an internal anticorrosion coating km

plan 2014		876.6
2013		389.7
2012		218
2011		65.5
2010		8.2

# LAND RECLAMATION





## The reduction of negative environmental impacts is contributed to a great extent by the restoration of lands disturbed in the course of construction and contaminated in the result of oil and oily fluids spills.

To ensure protection and rational use of land resources, OJSC "Surgutneftegas" pays much attention to industrial environment and land control that enables to recognize the necessity of further use of the land, estimate its condition and make a decision to return land lots to a lessor.

Reclamation efforts of OJSC "Surgutneftegas" help to reclaim lands disturbed by the Company's activities and return them to their applicable use. In 2013, the Company reclaimed and leased

4,165 hectares of lands used in the construction of industrial facilities.

In 2010–2012, the Company annually carries out reclamation of about 100 hectares of oil polluted lands, including those registered in the previous years. By the end of 2012, all oil contaminated soils of OJSC "Surgutneftegas" were rehabilitated and excluded from the disturbed lands register.

In the reporting year, the Company reclaimed 3.2 hectares of soils polluted at the end of 2012 and in 2013.

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### OJSC "SURGUTNEFTEGAS" POSSESSES ALL NECESSARY FACILITIES TO RESPOND TO OIL SPILLS AND REHABILITATE OIL CONTAMINATED LANDS WITH THE COMPANY'S OWN CAPACITIES.

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The Company has seven emergency response teams certified by the territorial certification commission which were formed as a part of the Company's oil and gas production divisions. The emergency response personnel undergo spill response trainings on a regular basis employing all the equipment in use. Surgutneftegas prevention and response system is always ready for immediate actions.

The Company operates the latest oil-gathering equipment, including oil-skimmers, clean-up boats, vacuum tank cars, Truxor amphibious machines, oilfield and other engineering equipment. Mobistek road mats are used to minimize the damage to soils appeared in the result of making way to the equipment when responding to pipeline failures and oil spills, testing pipes and remediating soil.

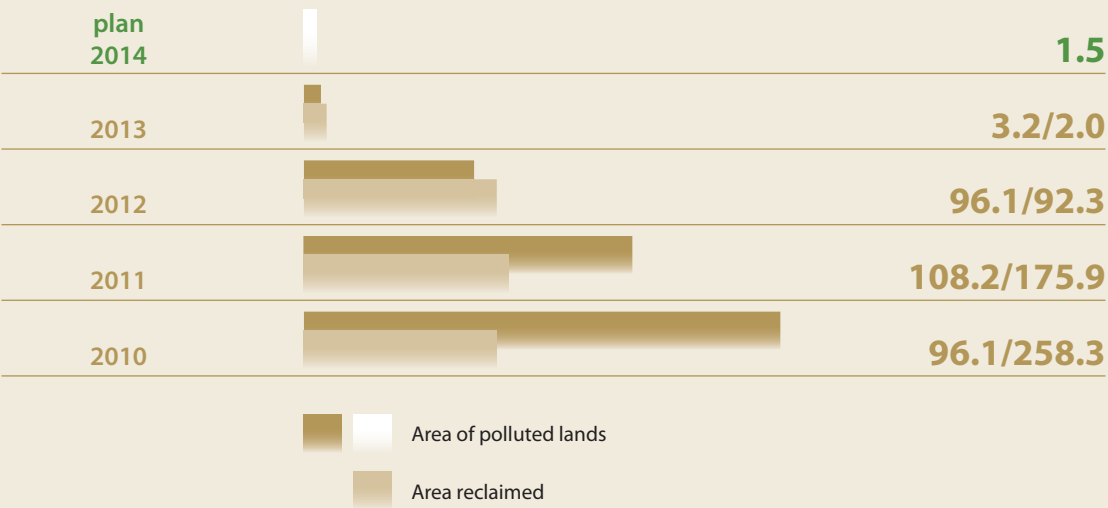
THE MOST IMPORTANT ENVIRONMENTAL TASK SET TO MINIMIZE THE NEGATIVE IMPACT OF DRILLING WASTES IS THE RECLAMATION OF SLUDGE PITS INTENDED FOR DISPOSAL OF DRILL CUTTINGS OF NOT EXCEEDING HAZARD CLASS IV.

For many years, OJSC “Surgutneftegas” has been employing a non-landfill reforestation technology to reclaim its sludge pits in the territory of Khanty-Mansiysky Autonomous Okrug – Yugra. This technology is a part of the Company’s resource saving policy as it allows us to avoid extraction and delivery of large quantities of organic soil for pit landfilling, and as a result to reduce lands allocated for

disposal of water pits and sand piles, and preserve environment of wetlands and water protection zones.

In the reporting year, the Company reclaimed and excluded from the register 463 sludge pits. We reclaimed 217 sludge pits using a forestry reclamation method which implies planting of herbaceous and woody species.

Reclamation of oil polluted lands by OJSC “Surgutneftegas” in 2010–2014





# AIR PROTECTION





## Air protection actions of the Company are intended to provide rational use of associated petroleum gas (APG), reduce gas flaring and diminish air pollutants emission.

To a great extent this is achieved due to processing of associated gas by the capacities of its own plant and further transfer of it to consumers. Moreover, associated petroleum gas is used for power generation by gas turbine power plants (GTPP) and gas piston power plants (GPPP); it is injected in oil-bearing horizon to maintain formation pressure and is used as fuel in various types of equipment.

At present, the Company operates the gas processing plant, 28 small-scale power generation sites (21 gas turbine and 7 gas piston power plants), 26 compressor stations, two gas processing units and over 3 thousand kilometers of gas pipelines.

The Company's integrated approach to air protection activities and solid investment in construction and upgrading of APG utilization units make it possible to keep leading positions in the industry in terms of associated gas utilization (over 99.2%) coupled with advanced hydrocarbon production.

Due to a resource-saving approach, OJSC "Surgutneftegas" shows the best results

with respect to associated petroleum gas utilization, gradually reduces the amount of air pollutants and seeks to avoid excessive emissions payments.

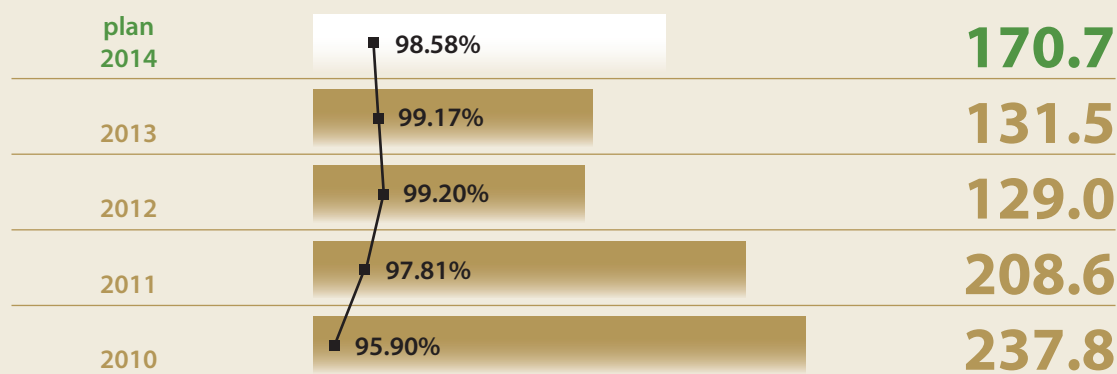
In 2013, the amount of air pollutant emissions was reduced by 45% compared with the level of 2010. Annually, the Company lowers air polluting emissions by more than 2.8 million tonnes (including 210 thousand tonnes of greenhouse gas methane which amounted to 4.4 million tonnes per year in CO<sub>2</sub> equivalent).

To diminish air pollutants emission, the Company regularly performs operating setup of boiler houses, furnaces and other fuel-fired equipment.

To mitigate the emissions, the Company also operates dust and gas catchers installed on processing facilities. The Company constantly carries out monitoring and inspection of dust and gas catchers and conducts regular current and planned preventive repairs.

The Company provides total control of air pollutant emissions at all stationary and mobile units.

Level of air pollutant emissions  
and associated petroleum gas utilization in OJSC "Surgutneftegas"  
'000 tonnes/year



# WATER RESOURCES PROTECTION





## An important aspect of the Company's environmental policy is protection of water bodies and rational use of water resources.

The Company performs surface and ground water abstraction in accordance with the standards and requirements of the regulatory documents, and implements projects aimed at reducing the consumption of fresh water in engineering processes.

In the reporting year, Surgutneftegas provided 32 well sites with drain tanks. There were approach ramps reconstructed and tollgates built at 282 sites. The Company kept on building initial water separation units, and treated wastewater pump stations and sewage facilities.

To estimate the impact of the well construction process on water resources and take timely measures for the reduction of negative environmental impact, the ecologists of Surgutneftegas perform monitoring of environment components around drilling well pads.

The Company's actions to protect and restore water assets are primarily focused on prevention of water bodies' pollution with sewage, industrial wastewaters, and also with production and consumption wastes.

All treated wastewater in Khanty-Mansiysky Autonomous Okrug – Yugra is injected into a reservoir pressure maintenance system, which reduces surface and ground water abstraction.

As for the village of Vitim in the Republic of Sakha (Yakutia), the use of effluents in RPM system is complicated because of considerable remoteness of the settlement from the operating fields of the Company, so treated household sewage from the industrial zone of the village is discharged into the stream Romanovsky Klyuch upon its processing.

Rational use of water resources lowers the level of specific water consumption by an average of 2% per year.

The significant lessening of fresh water consumption is achieved by reuse of the treated household water in the production process.

In 2013, about 545 million cubic meters of sewage, including 2.24 million cubic meters of treated household waters, served as the injectant for a reservoir pressure maintenance system. This helped the Company to decrease freshwater intake from water bodies by 2.24 million cubic meters.

The Company performs evaluation of groundwater reserves at all water supply points, on the basis of which it makes appropriate additions to the license agreements for subsoil use.

There are sanitary protection zones developed for all drinking water supply points and having a positive sanitary-epidemiological conclusion.

Injection of treated household sewage in the territory of  
OJSC "Surgutneftegas"  
'000 cub m

plan 2014		2,195
2013		2,239.8
2012		1,346.993
2011		1,170.58
2010		1,266.668



# WASTE MANAGEMENT



# While managing production and consumption residuals, Surgutneftegas seeks to minimize their number and environmental threat. This is achieved through implementation of innovative technologies in recycling and neutralization of wastes.

Annually, the operation activity of OJSC “Surgutneftegas” results in about 800 thousand tonnes of production wastes, the greater part of which (about 66%) consists of drilling sludge.

The annual increase of well drilling scope is accompanied by the growing amount of production wastes produced by the Company. At the same time, the amount of specific waste generation per tonne of oil produced by Surgutneftegas remains at the same level, within the bounds of 0.01–0.016 tonnes.

The treat of drilling sludge to the natural environment depends on the drilling cuttings as well as chemical agents applied in drilling procedures.

OJSC “Surgutneftegas” performs systematic greening of drilling operations. The Company made its drilling fluids free of toxic and

hazardous substances and replaced them with water-soluble biodegradable polymers.

The drilling rig fleet of the Company is equipped with four-stage treatment systems for drilling mud and sludge enabling to reduce drilling wastes and to use them for construction of well pads. Due to taken measures, OJSC “Surgutneftegas” uses 89% of drilling sludge as fill material for well pad construction in accordance with the innovative technology. The project of specification for this technology underwent the state environmental appraisal and was approved by the order of Rostekhnadzor.

Drilling sludge classified as environmental hazard class III and sludge obtained on the basis of saline biopolymer solution (2% of total amount of drilling wastes) are neutralized by special equipment.

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**ALTOGETHER, IN 2013, 9% OF DRILLING SLUDGE CLASSIFIED AS HAZARD CLASS IV WAS BACKFILLED IN SLUDGE PITS.**

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**OIL SLUDGE THAT FORMS 1.75 % OF THE TOTAL AMOUNT OF PRODUCED WASTES IS COMPLETELY NEUTRALIZED BY THE COMPANY'S SPECIAL EQUIPMENT.**

In the reporting year, centers' equipment for oil sludge and oily soil clean-up decontaminated 16.11 thousand tonnes of oil sludge, while Szhigatel incineration units for thermal decontamination of waste – 16.69 thousand tonnes.

In 2013, to improve the efficiency of these centers presented in every oil and gas production division, the Company purchased seven phase separation plants for oil sludge. Four plants have already been constructed at the Lyantorskoye, Fedorovskoye and Bystrinskoye fields in KhMAO-Yugra and at the Talakanskoye oil and gas condensate field in the Republic of Sakha (Yakutia).

The plants are intended for more effective phase separation of oil sludge and oily soil decontamination accumulated in sludge collectors at oil fields; and they significantly increase the functional capacity of the centers.

Szhigatel incineration unit for thermal oil sludge decontamination has been constructed at the Bystrinskoye field.

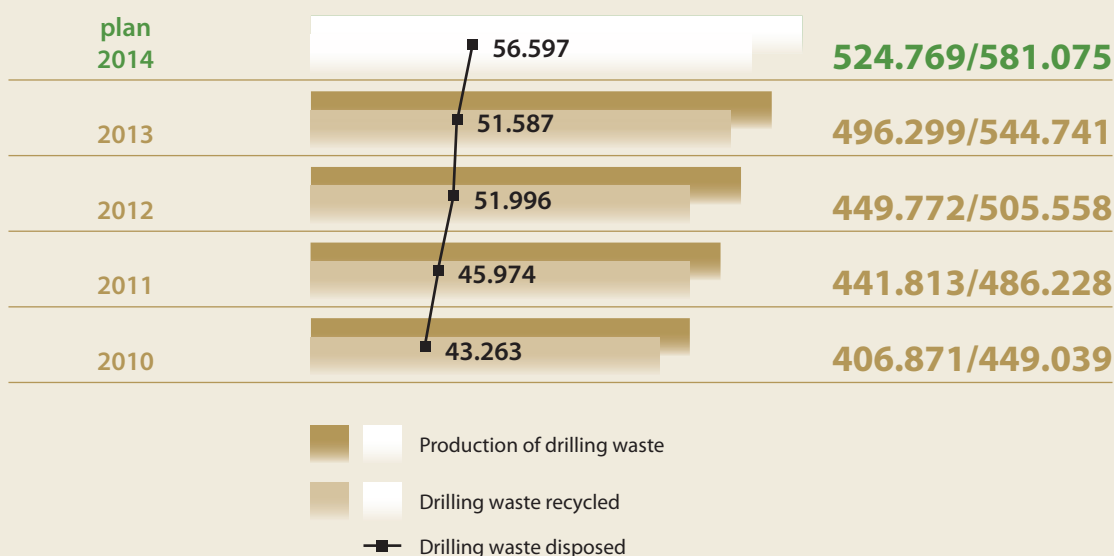
Moreover, in the reporting year, the prototype equipment set which contains a three-phase separator and a steam generator has been commissioned.

New facilities will help to provide maximal separation plants for oil sludge and additional involvement of oil in production process.

In 2013, the Company applied Forsazh units for solid oily wastes to decontaminate 0.369 thousand tonnes of oily wastes.

The Company employs technologies and equipment to provide total utilization of oil sludge and oil-contaminated soil gathered in the areas of accidental oil spill, as well as solid oily wastes.

**Information on production, recycling, neutralization and disposal of drilling waste of OJSC "Surgutneftegas" '000 tonnes**



**REPEATED INVOLVEMENT OF WASTES IN THE PRODUCTION PROCESS IS PERFORMED DUE TO THE COMPANY’S UNIQUE PROCESSING FACILITIES.**

The Company recycles worn-out tires and inner tubes with metal and fabric cords at its own plant, and the rubber crumbs obtained in the result of recycling are used in producing asphalt concrete for bitumen modification.

All waste oils are entirely used in production: after treatment they are injected in pipelines for commercial oil (in 2013 – 2.83 thousand tonnes). Scrap metal, batteries and other production wastes are transferred for processing to specialized enterprises.

In 2014, in order to involve waste paper and plastic in production process and to reduce the level of wastes being backfilled in the specialized facilities,

OJSC “Surgutneftegas” plans to commission the equipment for shredding waste paper and non-returnable plastic containers. The sales of shredded wastes to consumers will make it possible not only to reduce payments for their backfilling, but also to get revenue.

**DUE TO THE COMPANY’S WASTE MANAGEMENT PROGRAM, OJSC “SURGUTNEFTEGAS” IS ABLE TO KEEP THE SPECIFIC LEVEL OF NEUTRALIZATION AND INVOLVEMENT OF PRODUCTION AND CONSUMPTION RESIDUALS IN REPEATED USE AT THE LEVEL OF 71.74%.**

The Company exploits four landfills for disposal of municipal solid and industrial waste. In the reporting year, Surgutneftegas completed construction

of the landfill for municipal solid waste at the Fyodorovskoye field (KhMAO-Yugra). This facility fully complies with the current requirements of the environmental legislation.



# IN-HOUSE ENVIRONMENTAL MONITORING



# OJSC “Surgutneftegas” puts special emphasis on the environmental monitoring over the entire territory of the Company’s production operations. The established environmental quality monitoring system and the assessment of environmental condition allow us to control and detect negative changes arising from anthropogenic factors and to improve the management of environmental activity.

Environmental monitoring within license areas as well as estimation of the background pollution level of the territory are important conditions of subsoil use.

The Company performs environmental monitoring in two directions:

1. The quality monitoring of natural environment components (surface and ground waters, bottom sediments, soils, ambient air and snow).
2. Environmental monitoring of industrial facilities, including monitoring of emission sources’ state and emissions of air pollutants, well pads and oil sludge pits, domestic and industrial waste landfills.

When analyzing the initial level of contamination, the ecologists determine the indicators of the quality of natural components before the subsoil user’s activity in the license area. On the basis of this analysis, the network for local environmental monitoring is being designed.

Local monitoring is a comprehensive system organizing routine observations, information gathering, assessment and forecasting of spatial and temporal variations in the state of environmental health due to anthropogenic factors.

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**IN 2013, OJSC “SURGUTNEFTEGAS” CARRIED OUT THE ENVIRONMENTAL QUALITY CONTROL IN 109 LICENSE AREAS AT 3,690 POINTS.**

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**THE SAMPLES TAKEN DURING THE MONITORING ARE TESTED IN 11 LABORATORIES WITH MODERN INSTRUMENTS AND EQUIPMENT WHICH DETERMINE THE LOWEST LEVEL OF ENVIRONMENTAL POLLUTION.**

The Company’s Central Base Laboratory for Ecoanalytical and Process Studies of Engineering and Economics Implementation Center, that is accredited to perform the analysis and radiation survey of 781 parameters, including 398 ecological ones, is responsible for general environmental monitoring. Most of the samples taken from the Company’s fields are analyzed in this laboratory.

The Company’s six oil and gas production divisions that operate in Khanty-Mansiysky Autonomous Okrug – Yugra also have accredited laboratories. Each of them is accredited for more than 30 parameters.

Since 2008, there is an analytical complex in the Republic of Sakha (Yakutia) having no parallels in the region by technological equipment. The accreditation area of

production and research laboratory of Oil and Gas Production Division “Talakanneft” includes 371 parameters, with 24 radiological ones among them.

OJSC “Surgutneftegas” organized remote monitoring of its fields using aerial surveillance, large-scale aerial photography and HD satellite imagery. Earth remote sensing data are used to make inventories of disturbed lands, develop and update projects for local environmental monitoring and sampling schemes, perform landscape monitoring, assess current environmental situation in licensed areas, and to solve other ecological problems.

In 2013, the Company obtained the license to operate in the sphere of hydrometeorology and related areas, including determination of the pollution level of ambient air, water and soil.

**THE RESULTS OF IN-HOUSE MONITORING PROVE THAT THE GENERAL ENVIRONMENTAL SITUATION IN THE AREA WHERE OJSC “SURGUTNEFTEGAS” OPERATES IS SATISFACTORY. THE IMPACT OF THE PRODUCTION FACILITIES IS DESCRIBED AS ACCEPTABLE, I.E. IT MAINTAINS THE PROPER QUALITY OF THE ENVIRONMENT.**



# ENVIRONMENTAL TRAINING OF THE PERSONNEL





**The environmental management system used in OJSC “Surgutneftegas” comprises the whole production chain and involves all the structural units of the Company. Every year, hundreds of specialists of OJSC “Surgutneftegas” take environmental safety training and skills upgrade.**

In 2013, the Company continued its work in environmental awareness training and skills development for the specialists of environmental divisions.

The Company organized training for 772 employees responsible for waste treatment and waste production management.

The employees, who had completed training, received the corresponding certificates enabling to work with wastes of I-IV hazard classes.

Moreover, 12 specialists of Surgutneftegas engaged in ambient air protection underwent skill upgrade training and received state-recognized certificates.