

ENVIRONMENT PROTECTION

OAO IDGC of Urals has 191 facilities with an adverse impact on environment, incl. 120 III category facilities and 71 IV category facilities. III and IV category facilities are facilities with an insignificant impact on environment. OAO IDGC of Urals has a license for collection, transportation, processing, utilization, deactivation, dumping of hazard Class I-IV waste (in terms of transportation of hazard Class I-IV waste)⁹⁶. The Company has all permission documentation – draft standards of maximum allowable emissions (MAE), permissions for air emissions, draft standards of waste production and disposal limits, limits on waste disposal. Due to the expiry we prepared 13 draft standards of maximum allowable emissions with obtained emission permissions and 21 draft standards of waste production and disposal limits with obtained limits, 10 drafts of sanitary protection zones.

OAO IDGC of Urals extracts groundwater at the wells under the extraction licenses listed below:

- PEM 81099 VE – water well No.3, drinking and production needs of Nyrob substation. License expires on 16.03.2020.
- SVE 02724 VE – water wells No.8493, 8487, production needs of Talitsa Electric Grids PD. License expires on 31.05.2028.
- SVE 02697 VE – water well used for fire prevention at “Yuzhnaya” substation (Western Electric Grids PD). License expires on 31.12.2027.
- SVE 02698 VE – water well No.1, production needs of Krasnoufimsk DZ (Western Electric Grids PD). License expires on 31.12.2027.
- SVE 02695 VE – water well No.2513, production needs of Arti DZ. License expires on 31.03.2034.
- SVE 02679 VE - water well No.3, production needs of “Belorechka” substation. License expires on 28.02.2034.
- SVE 07836 VE – water well No.17333, production needs of Verkhnyaya Salda DZ. License expires on 15.12.2042.
- SVE 07894 VE - water well No.3 (production needs of “Polevskaya” substation). License expires on 11.05.2043.
- CHEL 01993 VE - water well No.14208 production needs of Dolgoderevsky unit (Sosnovsky DZ of Central Electric Grids PD). License expires on 01.10.2036.
- CHEL 01992 VE - water well No.515-yu production needs of Klenovka unit (Emanzhelinsk DZ of Central Electric Grids PD). License expires on 01.10.2036.

The Company has filed with the watchdogs technical reports on permanency of production process, material used and waste disposal that served as a basis for prolongation of waste disposal limits.

AIR PROTECTION ACTIVITIES

The primary air contamination sources are motor vehicles (motor vehicle storage shed, open air or indoor car parks), machine tool use area, welding stations and workshops. All contamination sources have a minor negative impact on the environment.

The Company conducts laboratory and instrumental surveys in line with the MAE oversight action plan at its production sites and prepares survey protocols every year. The surveys of air quality showed that ultimate surface concentration of all contaminating substances at the nearest residential zone is within MAC limits. As the Company’s air pollution contribution at the boundaries of sanitary protection zones and residential area is within MAC limits, no additional activities related to reduction of pollutant emissions are required. Our production sites do not produce over-the-limits noise.



PROTECTION AND SUSTAINABLE USE OF WATER RESOURCES

All facilities are furnished with water meters that undergo regular calibration tests. The Company concludes contracts on water supply and disposal on time, conducts administrative procedures, improves performance discipline in terms of energy saving, conducts laboratory surveys of quality of ground water, oversees compliance with license agreements. A 7.2% reduction of water supply and disposal in 2018, as compared to 2017, is due to installation of water meters, enhanced water saving discipline and placement of energy efficiency memos on stands.

WASTE DISPOSAL

Wastes from the Company's operations are stored at specially equipped waste accumulation locations (containers, reservoirs, sites located on impervious surface), easily accessible for lifting devices and motor vehicles. Waste accumulation sites are marked and located in line with the draft standards of waste generation and disposal limits. Memos on waste accumulation sites and their marking are placed on stands.

Wastes are timely handled for utilization, decontamination, allocation under relevant contracts to reduce adverse impact on the environment from accumulated waste. Soil near waste accumulation locations undergoes laboratory inspections, excessive concentration of harmful substances was not registered. As a part of production environmental control, the Company also conducts a visual checking of waste accumulation sites. In 2018, with a view to reduce an adverse impact of accumulated waste on the environment, the Company has arranged 2 accumulation sites for ferrous and non-ferrous steel scrap, 4 accumulation sites for Class III wastes, 1 accumulation site for waste insulators. The Company has also acquired 3 containers for mercury-vapor lamps, 22 containers for municipal solid waste, 6 trash cans, 13 boxes for rags, 14 canvas covers to protect wastes from precipitation, 2,630.38 kg absorbent to liquidate possible oil product splashes, 37 demercurization sets.

CONSERVATION OF BIODIVERSITY AND LAND

In 2018, the Company has conducted a technical and biological recultivation of disturbed soils (1.02 ha) following the end of the construction of "Yurman" substation for Ilyichevsky oil field in the Kungur district. Recultivated soils were conveyed to the Perm-Sergi Forestry Division of State Public Institution Kungur Forest Department to be used as forest earth. Our specialists conducted mechanical planning of disturbed soils (95.51m²), delivered top soil (1,470 tons) and conducted its mechanical planning as well as sowed meadow seeds (1.2251 ha).

Our specialists also constructed/reconstructed aerial power lines using self-carrying insulated wires (1.269 thousand km), replaced oil-filled circuit-breakers for vacuum and gas-insulated ones (139 pcs), oil-filled bushing for bushing with solid insulation (81 pcs), repaired (refurbished) emergency oil drainage systems and transformer oil receivers (12 pcs).

In 2018, the Company performed activities to protect and foster reproduction of animal and vegetal life. Our specialists installed 1,335 bird protection devices. Bird protection devices are mounted on power lines near water reservoirs, on bird migration paths and in conservation areas. 2018 activities covered such conservation areas as Uyisky State Natural Biological Reserve in the Chelyabinsk region ("Western Electric Grids" production department), Chernoborsky State Biological Reserve, Kocherdyksky Natural Biological Reserve. The territories of the reserves are inhabited by rare red-listed birds. In 2018, Company's employees participated in volunteer environmental activities in the Taganay national park (removal of paint signs left by tourists, clearing of trails).

OA O IDGC of Urals also performed activities on sanitary purification and improvement of territories near buildings of our production departments and distribution zones, transformer and distribution substations, other engineer structures, power line poles. In 2018, our employees planted 246 plants of cornelian cherry, pine, birch, maple, oak, apple tree, lilac, poplar and rowan. We also arranged a social and environmental activity (titled "Let's preserve the energy of the forest") during which we planted trees on avenues of Chusovoy.

As for decommissioning of PCB-bearing equipment, we passed over for disposal 1,850 static capacitors (52.2 tons) in line with the 2018-2024 decommissioning schedule



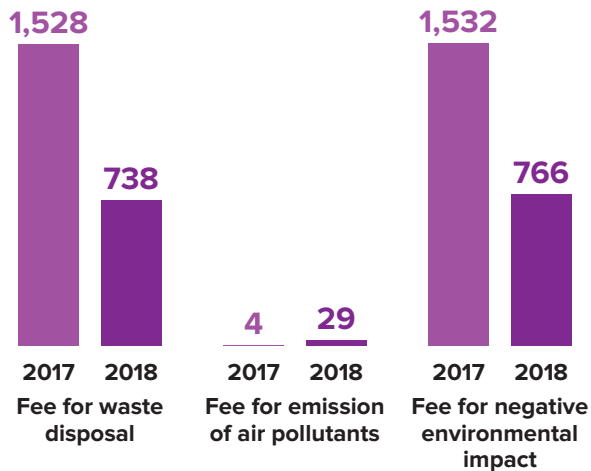


Decommissioning of PCB-bearing equipment

Branch	PCB-bearing equipment as of 01.01.2018		Passed over for disposal in 2018		PCB-bearing equipment as of 31.12.2018	Target volume of PCB-bearing equipment, subject to disposal in 2018
	pcs	tons	pcs	tons	pcs	pcs
Sverdlovenergo: Serov Electric Grids production department, "Cheremukhovo" substation	2,578	74.762	1,800	52.2	778	778
Sverdlovenergo: Western Electric Grids production department, "Mikhailovskaya" substation	2,436	70.644	10	0.29	2,426	0
Chelyabenergo: Central Electric Grids production department, Ufaley distribution zone, "Ufaley" substation	2,524	70.672	40	1.12	2,484	2,484
TOTAL	7,538	216.08	1,850	53.61	5,688	3,262

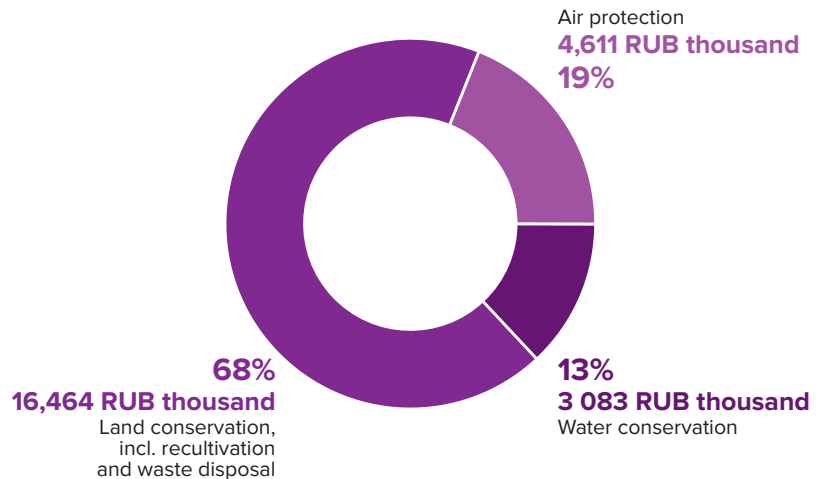
"Polluter-pays" charges in 2018 were reduced due to changes in the Russian laws regarding fees for disposal of waste and inclusion of the fee into the waste dumping tariff.

"Polluter-pays" charges, RUB thousand



Fee	2017	2018
For emission of air pollutants	3.8	28.7
For pollutant emissions to water objects	0	0
Waste disposal	1,527.9	738
TOTAL	1,531.7	766.7

Environmental costs



Total environmental costs in 2018 reached RUB 24,158 thousand

In 2018, the Company arranged a set of trainings for the employees: 85 directors and specialists underwent training on environment protection and ecological security, 111 employees were trained to process hazard Class I-IV waste.