

First in Russia

Russian Railways became the first company in Russia to safely dispose of electrical equipment containing oils with polychlorinated biphenyls (PCBs). In 2023, the first batch of such waste was neutralised using an environmentally safe method. The project was implemented by the Company together with the Federal Environmental Operator.

Russia made a commitment to neutralise the most hazardous organic compounds (with PCBs among them) upon signing the Stockholm Convention on Persistent Organic Pollutants in 2002. The provisions of the Convention were ratified by the respective federal law in 2011.



Project stages:

1

Pursuant to the guidance of the Stockholm Convention Secretariat, Russian Railways assessed its electrical equipment and identified capacitors using PCB-containing oils as a liquid dielectric. Such devices are mainly used across the Company's substations.

2

Russian Railways and the Federal Environmental Operator, an entity designated by the Russian Government, entered into a cooperation agreement to neutralise and dispose of classes 1–2 waste, including that containing persistent organic pollutants.

3

The parties worked jointly to select the best proven neutralisation method from among those included in the best available techniques reference document.

Neutralisation method:

- PCB-containing liquids are disposed of in a plasma arc furnace at a temperature of 1,250–1,300 °C with further neutralisation of waste gases in a four-stage treatment system;
- Continuous environmental monitoring of emissions is a must for such systems, with the findings submitted to and overseen by a dedicated government authority.

4

Russian Railways was the first in the country to neutralise a batch of PCB-containing waste capacitors at the site of the State Research Institute of Organic Chemistry and Technology in Shikhany, Saratov Region. The disposal of the first capacitors was observed by representatives of Russian Railways, the Federal Supervisory Natural Resource Management Service, Rosatom State Corporation and Federal Environmental Operator.

Environmental training

Russian Railways attaches particular importance to the professional development of its managers and employees responsible for environmental safety. Over 3,000 people are trained in environmental programmes every year.

Key topics of the training programmes:

- environmental safety;
- environmental safety of facilities;
- environmental safety in treating classes 1–4 waste.

In addition, the Company provides its employees with supplementary environmental safety training related to GHG emissions reduction and implementation of the environmental management system. Further internal communication on environmental issues is provided through posters, leaflets, and booklets.

A major contribution to the training is made by the Research and Production Centre for the Environmental Protection.

The training courses it provides contain the most up-to-date and complete information on the requirements of sanitation and environmental laws and are offered at the level of all structural units of Russian Railways' branches. The content includes relevant matters associated with environmental risk management at the Company, environmental responsibility and environmental priorities for sustainable development, and climate projects.

