

# EXPERIMENTAL-INDUSTRIAL COMPLEX OF WASTE AND RESIDUES NEUTRALIZATION OF NATURAL GAS ODORANT



**Dmitry E. BYKOV**, Doctor of Technical Sciences, Director of Industrial Ecology Scientific and Analytical Center

**Andrey A. PIMENOV**, Candidate of Chemical Sciences, Head of Department "Chemistry and Technology of Organic Nitrogen Compounds"



## OBJECTIVES

Neutralization (reduction of hazard class) of decommissioned odorant storage tanks and prevention of contamination with odorant waste from soil, water and air basins.



## AREAS OF USE

Oil and Gas Industry, Industrial Ecology

## LEGAL PROTECTION

Patent of the Russian Federation N° 2537593 - Method of tanks cleaning

## IMPLEMENTATION

The project has undergone comprehensive industrial tests at "Gazprom Transgaz Samara" venues.

This project involves the installation of a mobile pilot industrial complex for waste and residues neutralization of natural gas odorant. The equipment is installed on the basis of a standard sea container with transportation possibility. The impact of the complex on the environment at all stages of the life cycle was assessed. The approval of the State Ecological Expertise was received. The conducted studies of the residual toxicity of neutralized odorant storage tanks have proved their attribution to the V class of hazard for the environment. This project allows to solve the problem of accumulation of odorant waste and to prevent contamination of soil, water and air basins. The economic effect of this development is evaluated as than 35 000 rubles per year.



## PECULIARITIES

The complex has no analogues in the world.



## CONTACTS

8-927-706-19-43  
andpimenov@yandex.com



## CORE COMPETENCIES

#NATURAL GAS ODORANT, #INDUSTRIAL ECOLOGY, #TANKS AND CONTAINERS, #ENVIRONMENTAL CONTAMINATION