

# Monitoring of landfills

- MONITORING OF THE LANDFILL IMPACT ON THE ENVIRONMENT
- MODELLING OF LANDFILLS AND ASSESSMENT OF THEIR VARIABILITY OVER TIME
- DEVELOPMENT OF ENVIRONMENTAL REPORTS FOR WASTE MANAGEMENT FACILITIES



www.ietu.pl

**Institute for Ecology of Industrial Areas** 

### Monitoring of the landfill impact on the environment

The service includes: determination of substance and energy emissions, determination of environmental quality indicators, as well as material stream analyses and operational guidelines for operational and post-operational phases.

### Scope of research

- measurements of atmospheric precipitation, groundwater level in observation wells, surface water flow rate, and leachate volume
- sampling and determination of indicative parameters and substances in surface water, groundwater, sewage and leachate
- analysis of landfill gas composition
- noise measurements

- examining the structure and composition of landfill mass in terms of their compliance with building permit and operational instructions
- analysis of the composition and structure of deposited waste
- analysis of landfill subsidence
- analysis for detection of potential leaks or other abnormalities that might pose threat to human health, life or the environment

#### **Contact**



The scope of landfill monitoring services is compliant with the Regulation of the Minister of the Environment of 30 April 2013 on landfills (Journal of Laws 2013, item 523) and is addressed to managers of landfills in the operational and closure phases as well as to local governments on the territory of which there are old, abandoned sites of a questionable legal status.

The landfill manager is obliged to pass the monitoring results for a given year to the Voivodeship Inspector for Environmental Protection by the end of the first quarter of the next year.

# Modelling of landfills and assessment of their variability over time

Services rendered by IETU in the field of measurements and visualisation of landfills:

- 3D modelling and visualisation of facilities projections, cross-sections),
- capacity utilisation efficiency indicators,
- operating guidelines.

# Development of reports for waste management facilities

Services rendered for waste management facilities (depending on the customer's needs):

- reports and studies for administration,
- guidelines for activity programming and designing,
- environmental reports basic (initial), ecoaudits, environmental parts of due diligence reports and feasibility studies - according to national and foreign standards.

Analysis and sampling are included in the quality system. IETU's Central Laboratory holds an accreditation certificate for testing laboratory No. AB 325 issued by the PCA.





We have many years of experience and use professional equipment

### **Our customers**

Municipal Cleaning Company in Cracow Waste Management Plant in Gdańsk Production-Trade-Service Company KOMART in Knurów Municipal Waste Recovery and Storage Facility in Leśno Górne

More information: ietu.pl/en/services/

#### Contact

Institute for Ecology of Industrial Areas—6 Kossutha Str., 40-844 Katowice, Poland, ietu@ietu.pl ph. +48 32 254 60 31, secretariat +48 32 254 01 64, fax +48 32 254 17 17