

Water

Water Resources Investigation and Management

- regional hydrogeological investigations and groundwater resources assessments for water master plans, river basin studies, regional and local development plans
- groundwater resource investigations and supervision of wells for potable, mineral and thermal water supplies
- surface water hydrometry, including construction of river gauging stations and river basin hydrological balancing
- hydrogeological conceptual models, mathematical modelling and water resource monitoring
- water management applications of remote sensing and GIS analysis (water well siting)

Water Works Design

- design of water supply systems, supervision of their construction and proposals for water resources resource protection zones and sanitation
- design and supervision of construction of small dams and ponds, flood protection structures, irrigation, water supply and remedial structures

Sanitation, Hygiene and Flood Protection

- urban and rural sanitation
- construction, modernization of wastewater collection and treatment systems
- regional and local flood prevention models and plans
- revitalization of watercourses, lakes and reservoirs and biomonitoring

Irrigation

- study (groundwater surface water availability) and design for irrigation projects
- construction of canals, diversion weirs, various distribution systems for irrigation
- tailoring small and medium scale irrigation systems (solar energy, wind, generator) based on the requirements of the client and the available resources

Geology

Geological and Engineering Geology Investigation

- geology, engineering geology and hydrogeology investigation for design of landfills and landfill monitoring,
- geological investigation for quarries for construction materials for housing and infrastructure (calculation of construction material resources)
- management of quarries

Geophysical Measurements / Geophysical Well Logging

- surface measurements for well siting using VES and other techniques
- measurements and interpretation of well logging and TV inspection

Waste

Waste Recycling and Solid Waste Management

- solid waste and wastewater management planning and consulting
- design and supply of recycling lines (WEEE, TV and PC monitors and screens, tires and rubber, fossil fuel residues)

Wastewater Treatment Technologies Design and Operation

- design and development of technology for waste treatment, and industrial and mine wastewater treatment and drinking water treatment plant
- planning for minimization and reuse of wastewater

Remediation

Remedial Investigation and Supervision of Remedial Projects

- feasibility studies for contaminated soil and/or groundwater remediation and reclamation of devastated areas
- supervision of remedial, reclamation and rehabilitation projects

Remediation of Contaminated Water and Soil

- physical, chemical and biological technologies of remediation of soil and groundwater
- forest and agricultural rehabilitation and reclamation of catchments, river courses and dam habitats
- monitoring of contamination spreading and attenuation processes and contaminant transport and degradation modelling

Environment

Environmental Consultancy

- pre-acquisition environmental audits and environmental compliance (Phase I) audits and contaminant investigation (Phase II)
- environmental impact assessment (EIA) and environmental management systems implementation (EMAS, ISO 14 000)
- geobotanical and biological assessment of industrial and transport emission impacts
- emergency plans and response programmes design for companies and district authorities (IPPC)

Social Economic Consultancy and Risk Assessment

- feasibility, socio-economic and financial studies of water and environmental projects
- human and environmental risk analysis
- expert opinion and assistance in preparation of environmental and water management legislation and guidelines

Research and Training

Research and Development (R&D)

- remedial and wastewater treatment technologies (modular) using nano-technologies, bio-active materials, chemical agents, steam enhanced remediation and supported natural attenuation methods
- development of information systems in water management (regional hydrogeology) and remedial systems

Training and Transfer of Know-how

- transfer of know-how in water management, remediation of contaminated sites, information technologies and geophysical exploration
- Training in remote sensing, regional hydrogeology, contaminant, GIS and well logging methods