

Out of hazards. Recycling and disposal services without borders



**> Industrie Service**

Modern services for hazardous waste – area-wide collection, professional treatment and systematic recycling

[remondis-industrie-service.de](http://remondis-industrie-service.de)



One part of our plant network: the REMONDIS Lippe Plant in Lünen – the largest recycling centre in Europe

> INDUSTRIE SERVICE

## Area-wide collection, professional treatment and systematic recycling of hazardous waste

If you want to know the exact figures, then why not visit our website: go to [remondis-industrie-service.de](http://remondis-industrie-service.de) and click on About us

REMONDIS Industrie Service provides state-of-the-art services for dealing with hazardous waste – services which have been setting standards in the branch for many years and which will continue to do so in the future, too. Thanks to our network of wide-ranging facilities and plants, we are able to safely dispose of practically all kinds of waste and, where possible, to recycle it, too. As our customer, you benefit from greater levels of efficiency, higher quality and lower costs.

### Service, water, raw materials and energy for millions: the REMONDIS Group

Since its foundation in 1934, REMONDIS has developed into a leading international water and environmental services company – built up on the solid foundations of a family-run business full of tradition. Today, REMONDIS is a global service partner providing a wide range of convenient service systems, high quality raw materials, innovative products, alternative fuels and regenerative energy around the world. The Group employs more than 19,700 people at around 500 locations in 29 countries across Europe, Asia and Oceania.

### Hazardous waste specialists: REMONDIS Industrie Service

REMONDIS Industrie Service has been a fully owned subsidiary of REMONDIS AG & Co. KG for many years. We are the Group's specialists for treating hazardous waste – at international level, too. With our full range of services, we can provide the correct solution for any waste management task. Furthermore, we use the material streams we receive as a source of raw materials and energy.

REMONDIS Industrie Service is not only active on its home market but also beyond the German borders



# Benefit from our decades of experience

Our highly qualified employees are there to provide you with expert advice no matter what the task. With our comprehensive range of consultancy services, we support both other waste management businesses and industrial customers.

## Comprehensive advice and support

REMONDIS provides you with maximum levels of quality, service and safety:

- A comprehensive analysis of the material streams to find the best recycling and/or disposal options across the whole of the group
- Support from highly qualified technicians and engineers
- Guaranteed legal compliance for all relevant approval procedures as well as documentation obligations
- Professional support provided to draw up the necessary notification documents or for all matters involving the ADR regulations

## Active around the world for the World Bank, FAO and the EU

We have many years' experience of salvaging, collecting, packaging, transporting and importing obsolete pesticides, chemicals and PCB waste from all around the globe – as well as ensuring the materials are disposed of safely. Such projects have, for example, been carried out successfully in Albania, Africa (Mauritania, Senegal, Cape Verde Islands, Togo) and Romania. We have a specially trained team which is deployed for projects carried out for the World Bank, FAO, and the EU as well as for other lead partners.

One of our specialist areas is carrying out waste management projects for military units (also in areas of conflict) – e.g. in Kosovo, on the Azores or in Afghanistan



Special know-how is needed to handle hazardous waste – our experts are highly trained and always know what has to be done



The hazardous waste incineration plant owned by SAVA GmbH & Co. KG – one of the many internationally active companies belonging to the REMONDIS Industrie Service Group

## > Monitoring and control

For years now, every single business location and facility within REMONDIS Industrie Service's network in Germany has been accredited in accordance with the "EfbV" (Ordinance on Specialised Waste Management Companies). And we regularly check our plants abroad to ensure they fulfil these standards. You can be sure, therefore, that our facilities are run according to the highest safety standards so you do not need to carry out checks yourself. Europe-wide.



We return the aluminium and tinplate from aerosol cans to the production cycle. The contents and propellants are either recycled or disposed of in an eco-friendly way. Special containers are used for collecting these cans

## > WASTE

# We are in control of every situation no matter what the risk and accept all kinds of material

We manage the disposal of all kinds of solid, liquid and pasty waste as well as all kinds of waste packed in barrels or IBCs. There are practically no restrictions to the type of waste we accept – we have a solution for everything including the most suitable kind of disposal or treatment facility. Even the most hazardous kinds of waste such as aerosol cans, special chemicals, gases and metal-organic compounds or highly toxic and explosive materials are not a problem for us and are treated in the best possible way.

Metal alkyls must not come into contact with water or air. They are collected in special pressurized containers and linked up directly to the incineration process with nitrogen flushing



### A selection of the materials we accept

We recycle and dispose of, among others:

- contents of oil and petrol separators, grit chamber residue
- emulsions and other oil/water mixtures
- acids and alkalis
- sedimentation sludge and sludge from tank-cleaning work
- solvent mixtures
- metal & plastic packaging

- paint and varnish sludge
- mercury and waste containing mercury
- aerosol cans and gases
- pickling baths and electrolytes
- ion exchange resins
- printed circuit boards and electronic components
- cleaning and polishing cloths
- waste paints and varnishes, glues
- distillation residue
- tar
- medicines
- chemicals, pesticides and metal-organic compounds
- PCB waste
- contaminated earth and construction waste
- sludge from wastewater treatment
- stabilised and premixed waste



# Safety thanks to technology

REMONDIS runs a network of around 500 company-owned recycling and production facilities. A large part of the technology being used has been developed through practical experience – by our experienced engineers and technicians who have been working within the environmental service branch and the hazardous waste disposal sector for decades.

## Safe and reliable

When processing dangerous materials, top priority is always given to minimizing the risks involved – especially if the exact composition of the waste has to be determined first or conditioning and homogenization processes have to be carried out in order to be able to treat the material efficiently. All stages are subject to the strictest of safety precautions with all materials being monitored and weighed when they arrive, samples taken and analyses undertaken to identify the exact contents.



Special chemicals need to be handled with extra special care and attention. Our specially trained experts collect and treat these materials according to the highest safety standards to protect both humans and the environment

## Economically efficient and environmentally sound

There are a large number of different kinds of facilities within the REMONDIS network which professionally treat and recycle or dispose of hazardous waste:

- sorting, shredding and conditioning facilities
- chemical-physical treatment facilities for all types of liquid waste
- facilities for treating aerosol cans and gas bottles
- facilities for treating hazardous chemicals
- mercury recycling facilities
- hazardous waste incineration plants
- municipal and commercial waste incineration plants
- fluidised-bed power plants for incinerating liquid waste and industrial sludge
- facilities for recycling residual mineral materials
- timber incineration plants
- production of fuels from hazardous and non-hazardous waste
- underground backfilling and underground disposal sites
- above-ground landfills (categories I, II, III)
- distillation facilities for treating solvents



REMONDIS operates a large number of company-owned facilities where it professionally treats and recycles or disposes of hazardous waste – such as here in Bramsche, Germany

# Recognizing and developing sources of raw materials

Our primary target is closing life-cycles – and this is true for hazardous waste, too! Thus, materials recycling is given utmost priority. We only choose energy recovery or the safe disposal of the material in incineration plants or in landfills if it is technically impossible or makes absolutely no economic sense to recover and recycle the material itself.

Today's waste is tomorrow's source of raw materials

## From hazardous material to valuable material

Turning hazardous waste into raw materials that no longer pose a threat to people and the environment and can be used again in production processes sometimes involves very complex procedures: but it is worth it – for you, too. Because systematic recycling plays a major role in helping to reduce waste disposal costs.

## Resource management for both small and large volumes of material

We recycle a large amount of hazardous waste in our network of facilities, which we have built up over the years, which also includes many production plants manufacturing high quality secondary raw materials, industrial goods and special products. Many of the materials we collect contain valuable raw materials such as chemicals, solvents, metals and plastics. We recover them for you – so that they can be used once again in production cycles. Our treatment processes produce high quality raw materials and products such as:

- ALUMIN® – a sodium aluminate for a very wide range of applications, from processing drinking water to producing washing detergents
- CASUL® – white pigments for paints and plaster
- ILLUMIN® – bio-ethanol, fireplace gel fuel, lighting gel and charcoal lighters
- PLANOLEN® and PLANOMID® – recycled plastics
- RADDIBIN® – an additive and binding agent for liquid screed and for other construction materials and products made from plaster
- RENOMETALL® – cleaned aluminium and iron from processing packaging
- RENOXAL® – a reducing agent to reduce nitrogen oxide levels in industrial furnaces
- RESOLVE® and RE-COLOR – solvents and diluents

Furthermore, we also use different processes to recover large volumes of mercury, silver, gold and other precious metals.

Each year, we recycle, for example, 30,000kg of mercury which is then fed back into production cycles around the world





## Clean energy from high calorific waste

REMONDIS has been increasing its commitment on the energy market for several years now and has been using the energy content of waste to generate electricity and district heat. In addition to this, we supply high calorific fuels for use in industrial power plants.



The high quality RENOTHERM® substitute fuels help to conserve natural resources and prevent climate change

### Producing and marketing substitute fuels

REMONDIS Industrie Service produces large volumes of substitute fuels from high calorific waste fractions for cement works and other large industrial combustion plants as well as for power stations. By doing so we help to preserve natural resources such as the fossil fuels, oil, gas and coal.

### Economical energy from waste

The processes used by the chemical industry generate considerable volumes of hazardous waste. We take this waste, remove the hazardous materials using a complex multi-stage procedure and then process it into a quality-assured substitute fuel. The product at the end of this process is RENOTHERM® – a free-flowing product consisting of homogenous particles and an exactly defined calorific value.

REMONDIS Industrie Service supplies energy plants with substitute fuels

### High energy input for a high calorific output

We recycle high calorific fractions to produce substitute fuels:

- contaminated plastic waste
- paint and varnish sludge as well as paints and varnishes in tins and printing inks
- reaction and distillation residue
- waxes and fats
- industrial carbon black and spent activated carbon

Clean energy from high calorific waste



At its different facilities, REMONDIS systematically processes solid, liquid and pasty waste into high quality substitute fuel sold under the brand name, RENOTHERM®. This high calorific fuel is primarily used by the cement industry

**Water, raw materials and energy –  
for now and for the future**

REMONDIS Industrie Service belongs to REMONDIS AG & Co. KG, a leading international water and environmental service company. With more than 500 branches and associated companies in 29 countries across Europe, Asia and Australia, the REMONDIS Group provides professional services for more than 20 million inhabitants as well as many thousands of businesses. The highest levels of quality, worldwide. For a secure future.

German Qualität.