The company newsletter for REMONDIS AG & Co. KG www.remondis.com



2/2007

## MUNICIPALITIES ARE BLOCKING FAIR COMPETITION

News: Expanding in the east with a PPP in the Ukraine

Water management: Well equipped for the future – new waterworks in Tettau

Environmental Services: Waste paper – a valuable raw material

People: A new record: number of trainees exceeds 1,000

# contents



EXPANSION IN THE EAST WITH A PPP IN THE UKRAINE

REMONDIS has founded its largest ever PPP in the industrial Ukrainian city of Saporoshje together with the city council and the company, OLF Ltd. An important step smoothing the way towards further expansion in Eastern Europe. **Page 10** 



#### CRITICISM DIRECTED AT THE GERMAN WATER RESOURCES SECTOR

The quality is excellent, the structure terrible: the ifo Institute for Economic Research has criticised the patchwork structure of the German water resources sector. Around 7,000 companies across the country are involved in supplying drinking water. They do not stand a chance when facing international competition. **Page 22** 



#### WASTE PAPER - AN IMPORTANT RAW MATERIAL

Last year German citizens collected 15.5 million tonnes of waste paper. The old newspapers, exercise books and shoe boxes are used as raw material to make new paper or cardboard products. REMONDIS aktuell shows how this life cycle works. **Page 30** 

#### NEWS \_

- 4 Fair competition between municipalities and the private sector A guest commentary by the president of the BDI, Jürgen R. Thumann
- 6 Unfair competitive conditions prevent fair price comparisons
- 10 Foundation of a PPP in Saporoshje
- 14 Moving into a new era: REMONDIS in Hungary
- 16 A successful model in Poland
- 18 Environment Minister, Sigmar Gabriel, visits the Lippe Plant
- 20 Dramatic overcapacities within the thermal treatment sector

#### **REMONDIS | WATER RESOURCES MANAGEMENT**

- 22 The German water resources sector: excellent quality, terrible structure
- 24 The same competition for tap water as with mineral water a commentary by Andreas Bankamp
- 26 The purest of water from Tettau
- 28 Gemünden cuts costs with REMONDIS
- 29 REMONDIS Aqua founds a partnership in Poland

#### **REMONDIS | ENVIRONMENTAL SERVICES**

- 30 Waste paper an important raw material for the industry
- 33 Major inspection at the refinery
- 34 Environmental protection needs intercontinental cooperation work
- 37 Opel and REMONDIS: driving forward together
- 38 Testing boiler pressure: first trials successfully completed
- 38 Accredited fuel protecting the climate
- 38 MUEG cleans up tar pit in Slovenia
- 39 Plastics recycling conserves oil reserves
- 39 TSR growing in the east

#### PEOPLE

40 Number of trainees exceeds 1,000 for the first time

42 Site portrait: REMONDIS in Nordharz

#### Flag

Editor: REMONDIS AG & Co. KG, Brunnenstraße 138, D-44536 Lünen Tel.: +49 (0) 23 06/106-515, Telefax: +49 (0) 23 06/106-530, www.remondis.com, info@remondis.com Editorial office: Katja Dartsch Layout: www.atelier-14.de Print: Lonnemann, Selm



Egbert Tölle, member of the REMONDIS board

#### **EDITORIAL**

#### Dear Readers!

Our company is striding towards the future. Being a provider of innovative services, we head in new directions every day – by diversifying our fields of business on the markets where we are already active and by starting successful expansion projects in our target regions.

Our commitment in these new markets involves a mixture of our experience and our courage to do something new, to work in accordance with the regulations of these markets and together with the people who put together these rules. Wherever we are, we always orientate ourselves towards our customers' needs.

To be able to be a success, we need – above all – fair and just competition rules, a strong international leaning, well trained employees hungry for success and a premium service portfolio that satisfies our customers. You can read all about these important cornerstones in this edition of "REMONDIS aktuell": BDI President R. Thumann (p. 4) and a wide variety of experts give their opinion on the distorted competition which is threatening the sector as a result of the trend towards nationalization. They all share our opinion that in the long-term it will be to everyone's benefit if competition involves the same risk conditions (p. 6). Public private partnerships (PPP) continue to be the successful model for solving large infrastructural tasks. According to the latest study published by Ernst & Young, every one in three German cities is planning to privatize their businesses. We have taken action in the Ukraine together with our municipal partners and founded our largest ever PPP in Saporoshje, a city with over 900,000 inhabitants. This is the next logical move in our strategy towards sustained growth and you will find many more examples of such steps in this magazine in our articles about Poland, Hungary and as mentioned in the Ukraine.

This growth is achieved together with young people who have been trained at our company – here they learn about their field of expertise but also, and perhaps most importantly, about they way they should think and act on the market! We have taken on many more trainees again this year and the company group is currently training more than 1,300 young people. I would like to give them all a warm welcome and to wish us all "much success"! (p. 40). They will ensure that people will continue to call us "a top-class company" when they talk about REMONDIS in the future. Just as the German Federal Minister of the Environment did when he visited the Lippe Plant (p. 18).

Your

fut him

\_\_\_\_\_\_ Egbert Tölle

#### Guest commentary

# Fair competition between municipalities and the private sector

A GUEST COMMENTARY BY BDI PRESIDENT, JÜRGEN R. THUMANN

Bundesverband der Deutschen Industrie e.V. The way the state provides services for its citizens has undergone a distinct change. The services, which are grouped together under the somewhat obscure term "services of general economic interest", were, in the past, provided exclusively by the state, districts or municipalities; now, more and more, they are being provided by the private sector, too. And this is good because carrying out economic activities was not one of the original tasks of public authorities – making it all the more important, however, that fair competition rules are drawn up between municipal and private suppliers.



Jürgen R. Thumann, president of the BDI (Federal Association of German Industry)

In many areas, the private sector has shown in an impressive way that it is able to provide services far more efficiently than public authorities. Privately-run companies provide high quality services at attractive prices as – unlike public authorities – they face ongoing pressure from competitors forcing them to improve and optimize their range of services all the time. With this in mind, it is worrying to see how competition in, for example, the water and environmental service sectors, is being greatly distorted as projects are being awarded by municipalities among each other without them being put out to tender first. Private service providers are being excluded from this process right from the start. This leads to a weakening of regional economic structures which has, in the end, to be paid for by the public.

In principle, municipalities are free to cooperate and provide services for one another. However, if this involves marketable services such as water supply and treatment or waste collection and recycling then it is advisable to use the competitive invitation to tender procedure: for, if inter-municipal cooperation work is carried out without a tender procedure, i.e. without any competition, then this has a great effect on the competition and means the market is in danger of being constricted or even closed off completely. Competitive offers from private companies are not considered at all. There is



no incentive whatsoever to carry out the tasks in a cost efficient manner.

In particular, distorted competition must be prevented where special purpose associations being run by local authorities are being expanded. Such associations are moving away more and more from their traditional roles and are being used instead to secure market shares. Thus, the associations are being misused as an instrument to block private commitment. This situation must be changed. I am calling for municipal special purpose associations to face the same competition rules as private businesses. For the following is, in principle, true: wherever there is a functioning market for a service and there is no compelling reason justifying nationalization, then the state must take a back seat!

Competition is further distorted as public and private companies are treated differently when it comes to valueadded tax. If private businesses wish to come out on top then they have to put in an offer which provides the same service but which has been reduced by the rate of VAT, i.e. by 19 percent. The fact that public and private companies are taxed differently is against European law! Private businesses, especially those active in the environmental

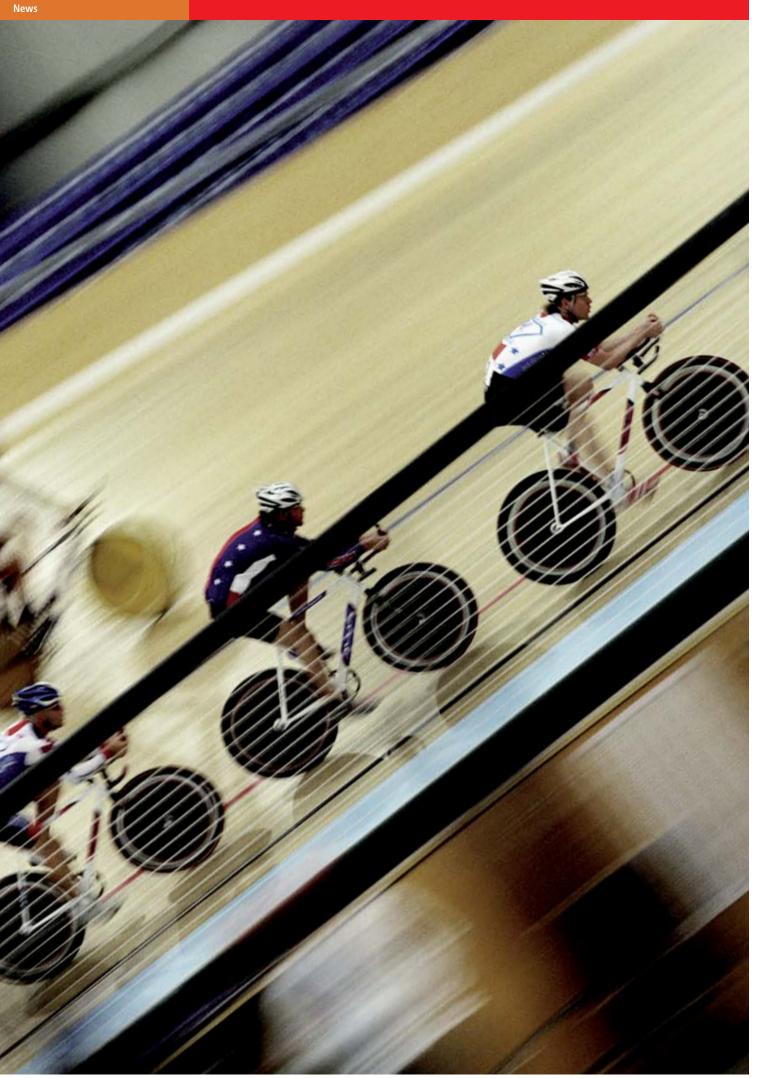
service branch, find themselves having to face huge hurdles when they try and enter a market, hurdles which cannot be justified. The same tax treatment for all is unavoidable! The privileges currently being enjoyed by municipal companies as far as tender procedures and tax are concerned must be stopped as quickly as possible to create fair competition on the market. It is up to the politicians to introduce suitable measures to remove the disadvantages faced by the private sector and to ensure all businesses face fair and transparent competition from which, in the end, everyone will benefit.

Economists are expecting the European Union to end the unequal treatment of private and municipal companies soon.

#### Short profile .

- born in Schwelm/Westphalia in 1941
- trained to become a management assistant in wholesale and foreign trade
- took over and expanded the family business, Thumann Stahl-Service Center in 1960
- joined the Hille & Müller Group (cold rolling mill) in 1966; later became a shareholder and chairman of the management
- in 1978, founded Heitkamp & Thumann KG, Düsseldorf
- member of the BDI's executive committee since 1991
- 2000–2005: chairman of the BDI committee for competition law
- President of the Federal Association of German Industry, the BDI, since January 2005

#### "Wherever there is a functioning market for a service, then the state must take a back seat." Jürgen R. Thumann, president of the BDI



#### "The freer an economy is, the more social it becomes."

Ludwig Erhard (\*04.02.1887–†05.05.1977), former chancellor of the Federal Republic of Germany

#### Competition

# Unfair competitive conditions prevent fair price comparisons

#### **10 EXPERTS CALL FOR FAIR COMPETITION RULES**

Who does it better: the state or the private sector? This question is currently being discussed in detail in the water and environmental service sector. It is an ideological question and one that causes great emotions. Slogans such as "water is not a commodity" often mean that factual arguments are pushed into the background. REMONDIS aktuell has asked 10 experts, who are in favour of fair competition, to comment on the subject.

#### 

### The NRW state government has recognized the advantages of private providers

The NRW state government continues to follow its course towards privatization. Its planned amendment to the Municipal Ordinance (municipal economic law, paragraph 107) will make it much more difficult for municipal waste management companies to work outside their own district. They will only be allowed to do this, if a tender proves that the municipality can carry out the task better than a private business. The cabinet and state parliament have already voted in favour of the amendment in its first reading. The statement from the FDP committee: "Municipal companies should concentrate on their main task of providing public services of general economic interest instead of poaching business from the private sector using money from fee payers and the liability risks of taxpayers."

"The unequal tax treatment of public authorities is putting the functioning waste management market at risk." Dr Herbert Ferger, managing director of the Cologne Chamber of Commerce

02 Dr Herbert Ferger, managing director of the Cologne Chamber of Commerce: tax advantages for public authorities lead to loss of efficiency

Dr Ferger argues that the waste management market is a workable market, in which private businesses, faced with both price and performance competition, can provide efficient and innovative solutions. He continues: "The tax advantages enjoyed by public authorities in this area lead to loss of efficiency, as the providers, exempt from paying tax, have less incentive to run the company in a competitive and economical way as they have such cost advantages." Nationalizing these tasks, therefore, would be "a bitter blow to the market economy".



"I am assuming that the European 🔸 Union will also use its powers sooner or later to ensure there is equal tax treatment throughout the EU." Christa Thoben, Minister of the Economy in North Rhine-Westphalia

#### Christa Thoben, Minister of the Economy in North Rhine-Westphalia: calling for equal tax treatment in the EU

Christa Thoben is campaigning for fair competition in the water and environmental service sector. "This includes having municipal and private waste management services face the same taxes. I will, therefore, be supporting any attempts that are undertaken to try and achieve equal tax treatment in this sector," the minister promised at the chamber of commerce in May. Furthermore, she is assuming, Ms Thoben said, that "the European Union will also use its powers sooner or later to ensure there is equal tax treatment throughout the EU."

#### 

Consumer advice centre: cross-subsidizing lossmaking areas leads to a big difference in fees In a nationwide survey, the consumer advice centre noted that waste collection fees differed from district to district by up to 500 percent without there being any objective reason for this. According to experts, the reason for these great differences can often be put down to councils using the money to cross-subsidize loss-making sectors such as public transport or public swimming pools.

#### 05

Dr Wolfram Birkenfeld, a former judge at the Federal Finance Court and lawyer: the VAT rules breach EU law Private water and environmental service companies have to pay VAT, municipal companies do not. This is not in keeping with EU law, says the lawyer Dr Birkenfeld: "Competition is greatly distorted, if the state provides private individuals with the same service as a private company whereby customers must pay the fee in one case with and in the other case without VAT. As final consumers do not have the right to pre-tax deductions, the services provided by private companies are more expensive, namely by the full amount of the VAT."

#### 

Association of Municipal Waste Management and City Cleaning (VKS): the VAT tax advantages for municipal businesses cannot be sustained over the long term Even the VKS is assuming that the tax advantages enjoyed by municipal businesses cannot be sustained. Karin Opphard, managing director of the Association, admitted this to the press at an environmental service management symposium in June. If the tax advantages are removed then municipal companies will have to face the same competitive conditions.

#### "Water in Germany is too expensive compared with the rest of Europe. Competition must be introduced into this area and then prices will fall."

Harald Schledorn, Association of Taxpayers NRW

#### 

## Association of Taxpayers: privatization lowers fees, consumers save money

The Association of Taxpayers in NRW is criticizing the fact that more and more local authorities are once again collecting waste themselves – often at the expense of the consumer. A comparison of the annual fees charged by the approx. 400 towns and districts in the state of North Rhine-Westphalia shows that fees could be reduced if invitations to tender were used for the services. The examples used by Harald Schledorn from the Association of Taxpayers to illustrate this are the city of Telgte where fees have fallen by 35 percent since the services were privatized, Nord-kirchen (20 percent) and Wenden (23 percent). REMONDIS was commissioned with the task of collecting the waste in all three districts. Mr Schledorn's conclusion: "Tenders mean savings".

#### 08-----

#### Federal Association of the German Waste Management Industry (BDE): complaint lodged against tax advantages

In June, the BDE lodged a complaint at the European Commission against municipal waste management companies being given tax advantages. According to the BDE, this unequal treatment breaches the European Value-Added Tax Directive. Public and private companies must – in accordance with European law – be treated the same. "We want our services to be compared objectively with the services provided by municipal businesses," the Association says.

#### 09-----

### Jürgen R. Thumann, president of the BDI: competitive pressure leads to better services

Private companies are not necessarily better businesses. Experience has shown, however, that the private sector is able to provide high quality services at attractive prices far more efficiently than municipal companies. "Unlike municipal businesses, the private sector has to face permanent competitive pressure which leads to a constant optimization of the range of services," the president of the BDI believes.

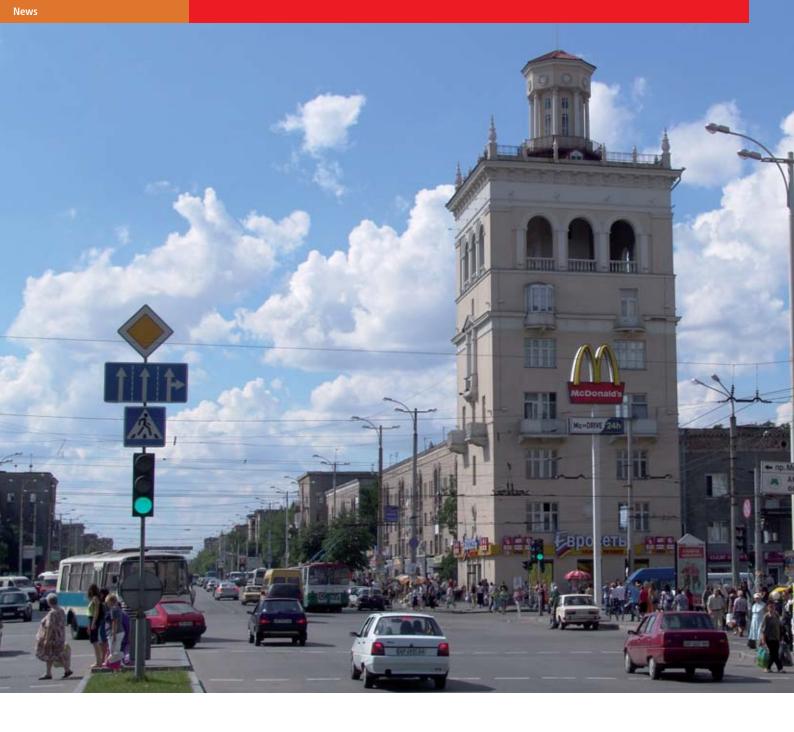
#### Norbert Rethmann, chairman of the supervisory board at RETHMANN AG & Co. KG: private service providers are the better alternative

Why are water and environmental services considered to be services of general economic interest? "This is economically wrong," says Mr Rethmann, "Medical treatment, food supply and the drinks industry are not seen as being services of general economic interest." Wherever a third party can carry out a service at the same level of quality, then it really should be carried out by a third party: "Local authorities such as the city of Bergkamen and the Rhine-Sieg district have chosen the path of in-house business: they are shying away from invitations to tender so their competitors have not got a chance. Private providers were not able to prove their competitiveness even though they have shown in other places that costs can be reduced through using stateof-the-art technology and modern logistics which, in the end, benefits the public."

(Put together by Katja Dartsch)



"Wherever a third party can carry out a service at the same level of quality, then municipalities should make way for fair competition." Norbert Rethmann, chairman of the supervisory board at RETHMANN AG & Co. KG



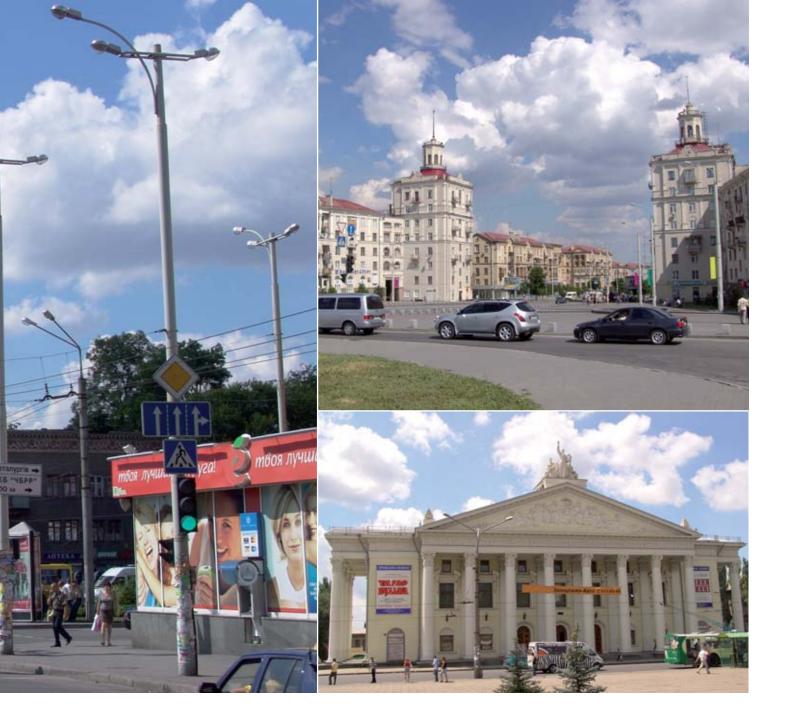
#### Ukraine



# PPP founded with Saporoshje. Full range of services for 900,000 inhabitants

REMONDIS CONTINUES ITS EXPANSION INTO EASTERN EUROPE WITH A NEW COMPANY IN THE UKRAINE

REMONDIS is continuing to expand towards the east and is now active in the Ukraine: it entered the market on 15 August 2007 with its biggest ever public private partnership (PPP). Together with the City of Saporoshje and the firm, OLF Ltd, REMONDIS has founded "REMONDIS Saporoshje GmbH", in which REMONDIS is the majority shareholder.



The new company in the Ukraine – the country with the largest surface area in Europe – employs more than 300 people. It has over 180 vehicles and pieces of machinery to collect residual and industrial waste, recyclable waste and faecal matter as well as for the city's green areas, for cleaning the streets and for providing a road-clearing service during the winter.

#### An economic area with great potential

The City of Saporoshje is located about 500km away from the capital, Kiev. With around 900,000 inhabitants, it is the sixth-largest city in the Ukraine. It has good logistic connections and is home to many companies from the heavy industry as well as the aluminium and chemical industries. Furthermore, automobile and engine construction busi"PPPs have proven to be extremely successful in achieving sustainable growth, especially in the up-and-coming Eastern European countries!" Egbert Tölle, board member at REMONDIS AG & Co. KG

nesses can also be found here. The Ukraine's largest central hydroelectric power plant is also located near Saporoshje on the river Dnjepr.

Affluence is growing in Saporoshje – as it is in most of the Ukraine. According to a report in the Frankfurter Allgemeine newspaper, the disposable income of Ukrainians rose by 10.5 percent during the first four months of this year. This

As the cities of Hamburg, Munich and Berlin have not yet allowed private partners to participate in such projects, Saporoshje is the largest PPP involving REMONDIS, ahead of cities such as Frankfurt, Stettin, Posen, Düsseldorf and Oberhausen. has spurred a change in consumer behaviour – but as more products are bought so the volume of waste increases. Experts estimate that municipal waste across the country will increase by 10 million tonnes each year. The idea of separating waste, however, has not yet taken off in the country. The aim is to change this situation so that waste is separated as a matter of course.

Public private partnership as the ideal model

Increasing prices for raw materials and a rise in environmental pollution problems had forced this industrial city to change their way of thinking. More and more voices were being raised against waste being dumped in the Ukrainian landfills - most of which are not sufficiently lined and sealed - and were demanding that valuable materials be recycled. With this in mind, the Government has already passed a "programme for dealing with solid household waste" which plans for this waste to be treated in a more environmentally friendly manner. Local councils, however, lack the necessary logistics as well as modern sorting and composting plants, safe landfills and the operating know-how. Using the Government's new programme as its basis, the company OLF Ltd introduced the idea of collecting separated waste into Saporoshje last year. Together with its new partner, REMONDIS, the City of Saporoshje is intending its environmentally friendly waste management system to become a role model for the whole of the Ukraine. REMONDIS is expecting this to lead to further

#### **REMONDIS in Eastern Europe**

Only just recently, REMONDIS took over the activities of the OTTO Group in Hungary with its PPP companies with the result that it has become one of the largest companies active within the field of environmental services in Hungary (see page 14). In Poland, REMONDIS is already the market leader (see page 16). REMONDIS is also active in other Eastern European countries such as Slovakia and the Czech Republic.

PPP companies being founded around the country. Before signing the joint venture contract, the mayor of Saporoshje, Yevgen G. Kartashov, and the owner of the firm OLF, Sergej Olschansky, had travelled to Germany to learn more about the public private partnership model where public authorities cooperate with the private sector: together they visited the successful REMONDIS PPPs in the cities of Frankfurt and Oberhausen.

#### Considerable investments planned

Future tasks for the joint-venture business include modernizing the logistics systems and building two sorting plants, a composting plant and a landfill in accordance with Western European standards. The company already has numerous waste collection contracts with companies, residential property management firms and public institutions.

#### Interview \_

REMONDIS aktuell spoke to Friedrich Buchholz, managing director of REMONDIS Saporoshje GmbH, about the new public private partnership:

**REMONDIS aktuell:** What was the background to the City of Saporoshje starting a public private partnership with REMONDIS?

Friedrich Buchholz: Saporoshje and Oberhausen have been twinned for many years. They know REMONDIS very well. Over the last few years, the partners visited our facilities several times and so were able to appreciate our level of expertise. The mayor of Saporoshje, Yevgen G. Kartashov, and the owner of the firm Olf Ltd, Sergej Olschansky, also visited Germany several times during which they travelled to Lünen. In return, we were invited to visit the company Olf to learn more about the situation in the city.

**REMONDIS aktuell:** What are the PPP's medium-term targets?

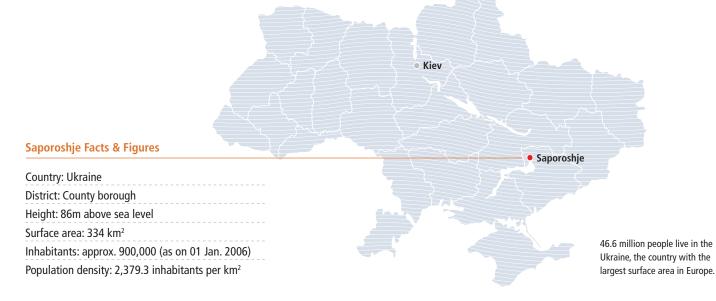
Friedrich Buchholz: First of all, we intend to build up a service company together with the municipal company, Kommun Santrans, and Olf Ltd which corresponds with European standards. Once this has been achieved, we will be using the results to extend our experience to other Ukrainian cities and set up similar partnerships.

**REMONDIS aktuell:** To what extent will the joint venture be able to push forward environmental protection in Saporoshje?





Saporoshje not only has a great number of historical buildings for people to visit; it also has many parks, green areas and wide avenues lined with trees.



Friedrich Buchholz: We will improve the level of cleanliness in the city and so improve the quality of life there. This also means investing in modern waste separation systems and treatment plants. It goes without saying that there is an opportunity here for us to support the local businesses in the city with our know-how.

**REMONDIS aktuell:** What are the advantages of the cooperation work between the municipal business, REMONDIS and Olf Ltd?

Friedrich Buchholz: The PPP makes it possible for the municipal company to work with our experience. It also means that share capital is injected into the business with which the necessary investments can be carried out.



Taking a decisive step towards a successful future: signing the contract in the Ukrainian city of Saporoshje. From left to right: Sergiy Ol'shans'ky (Olf Ltd), Egbert Tölle (REMONDIS board), Viktoriya Seabra das Neves (interpreter), Ansgar Frieling (corporate development REMONDIS), Friedrich Buchholz (REMONDIS management), Andriy Kozak (Head of the municipal company).

International

## Moving into a new era

**REMONDIS EXTENDS ITS COMMITMENT IN HUNGARY** 

REMONDIS' takeover of the Hungarian activities of the OTTO Group this summer means that it is now the third-largest environmental company in the country. Every twentieth Hungarian is now a REMONDIS customer.

When Hungary became a member of the European Union, it also agreed to fulfil the high standards it had been set concerning the environment. Many things have to be modernized or replaced, if it is to achieve the EU targets and prevent the environment from being further polluted. Most of the local Hungarian authorities are working together with international companies from the water and environmental service sector that are able to prove they have many years of experience and high environmental standards. The result has been that the Hungarian waste management sector has been able to close more and more product life cycles over the last few years with raw materials being recovered from waste and natural resources being conserved. This development has also resulted in Hungarian citizens becoming far more environmentally aware. REMONDIS has been active in Hungary since 1995. It was at that time that one of the first public private partnerships (PPP) was founded in Szolnok. Since then, REMONDIS has been steadily growing in Hungary, using modern collection vehicles, supporting the movement to separate waste, and investing money in sorting plants, composting plants and environmentally friendly landfills. In the past, however, its activities had mostly been in the eastern half of the country. This has now changed. At the end of June, REMONDIS took over the Hungarian disposal and recycling activities of the OTTO Group. OTTO is also a German company and is market leader in the production of waste containers. This takeover has above all meant that REMONDIS has been able to extend its market position in the west of the country and acquire new customers and locations. Szabolcs Deres: "Children and young adults are especially aware of environmental issues – in many regions separating waste has become a normal part of their lives." Szabolcs Deres, managing director at REMONDIS Hungary

"The merger of the activities has given us the opportunity to bundle together our recycling volumes and so develop a system which is even more economical."

Over the last few months, REMONDIS has been strengthening its commitment on the Hungarian market, for example, by putting modern environmental service centres into operation in the cities of Képtó, Tiszafüred, Dabas, Kunszentmárton and Gyomaendröd. REMONDIS also runs a modern landfill in each of the towns mentioned above, all of which fulfil EU guidelines. (dartsch)

"Thanks to the support given by international companies such as REMONDIS, Hungary has succeeded in implementing EU environmental standards within a very short space of time thus making an important contribution towards protecting the environment and the climate." Dr Sándor Peisch, ambassador extraordinary and plenipotentiary of Hungary

• Tiszafüred

**REMONDIS** location

new REMONDIS location

Képtó

Gyomaendrod

Szécsény

Szolnok

• Vác Magyarország • Budapest

Oroszlány

Tapolca

Sümed

Dabas

Szelevény •

REMONDIS AKTUELL | 15



"15 years ago, we took the plunge and entered the liberalized Polish market and this step, which we took together with our Polish partners, has proven to be a great success. This is a development to be proud of."

Norbert Rethmann, chairman of the supervisory board at RETHMANN AG & Co. KG

#### Public Private Partnership

## A successful model in Poland

#### **REMONDIS HAS BECOME MARKET LEADER IN POLAND IN JUST 15 YEARS**

The success of the PPPs in Poland has created the basis for REMONDIS' further expansion throughout the whole of Eastern Europe. REMONDIS took the plunge and entered this new market exactly 15 years ago – in Poznań, the capital of Greater Poland Voivodeship. Today, REMONDIS is the leading water and environmental service company in Poland.

15 years ago, the Polish city of Poznań and REMONDIS decided to work together and founded a joint company, REMONDIS Sanitech. This was the first public private partnership (PPP) within the environmental service sector in Poland. It was not an easy decision for either parties to make considering the political and economic situation at the time.

Today, the PPP is a textbook example of successful cooperation work between public authorities and the private sector. PPPs are found all over the country now and are much appreciated as both parties profit from this kind of partnership. The local authorities profit from the knowhow of the private partner and can concentrate more on their core tasks. Together they show their customers that they can perform their tasks well helping to keep the fees down. Nowadays, REMONDIS Sanitech runs its own fleet of vehicles, has two new sorting plants and has invested in new technology. The local council would not have been able to invest such sums of money had they been on their own. Together they have succeeded in implementing many EU guidelines earlier than required making an active contribution towards protecting the climate and the environment in Poland. REMONDIS has gradually developed its activities



REMONDIS Sanitech was founded in Poznań in 1992, Poland's first ever public private partnership

from Poznań, its first location, and is now market leader in Poland with 35 branches and companies across the whole of the country. Services are provided for more than 3.5 million citizens as well as for commercial and industrial customers. Today, REMONDIS runs the country's largest recycling centre in Warsaw. There is a diverse range of services: REMONDIS provides data destruction and archiving services, produces fuel for the industry and is also active in the area of packaging waste via its subsidiary, EKO-Punkt. Furthermore, two years ago, REMONDIS Aqua began its first water management project in the country - and this summer, REMONDIS Electrorecycling put its WEEE dismantling centre into operation in Łodź, the most modern of its kind in Poland. On the PPP's 15th anniversary, one can only wish them the same success in the future as they have enjoyed in the past. (dartsch)





#### Environmental politics \_

## Environment Minister, Sigmar Gabriel, impressed by Europe's largest recycling site

ENVIRONMENT MINISTER PRAISES REMONDIS' CONTRIBUTION TOWARDS CLIMATE PROTECTION

The Federal Minister of the Environment, Sigmar Gabriel, visited the largest industrial environmental service centre in Europe: REMONDIS' Lippe Plant in Lünen.

REMONDIS board member Egbert Tölle, Environment Minister Sigmar Gabriel and Chairman of the Supervisory Board Dr Hermann Niehues (from left to right) viewed, among other buildings, the plastics production facilities at the REMONDIS Lippe Plant.



During his tour of the Plant, Mr Gabriel, who was accompanied by Dr Helge Wendenburg, head of the department responsible for water and waste matters and a leading official at the Ministry of the Environment, viewed many of the site's facilities including the dismantling centre for waste electrical and electronic equipment, the plastics processing facilities, the biodiesel production plant, the metal slag processing facilities and the composting plant. Mr Gabriel also showed great interest in the site's own power plant which supplies the Lippe Plant with energy and is run almost exclusively using substitute fuels.

Mr Gabriel was particularly impressed by the wide variety of processing and production facilities at the site in Lünen. Each



year, around 1.5 million tonnes of waste is sorted and processed at the Lippe Plant and then fed back into the economic cycle either as raw materials or as a source of energy. The minister stressed just how important environmental services are for protecting the environment and climate: "Thanks to the increase in waste treatment processes and especially to the fact that untreated waste is no longer deposited in landfills, methane emissions, a landfill gas that is particularly damaging to the environment, have been reduced by more than two-thirds since 1990. This means that companies such as REMONDIS are playing a decisive role towards fulfilling the targets set out in the Kyoto Protocol for Germany."

He also discussed current topics affecting the water and environmental service branches with the Chairman of the Supervisory Board, Dr Hermann Niehues, and Board Member, Egbert Tölle. During their discussion with the Environment Minister, they brought up the subject of distorted competition resulting from the fact that private and municipal suppliers are treated differently when it comes to taxes and awarding contracts. At the moment, private water and environmental service companies have to charge value-added tax whereas municipal suppliers, being special purpose associations, municipal-owned businesses or public institutions, do not. An official complaint about this unfair treatment has already been lodged at the EU Commission. At the same time, REMONDIS is calling for a transparent and non-discriminatory competitive contract award procedure oriented towards the EU Public Procurement Directive. The fact, Mr Tölle explained, that municipalities can award contracts as they wish means competition is ruled out and encourages uneconomical municipal structures: "There has been innovative competition

wherever private companies have been awarded contracts. As a result the water and environmental service branch is able to contribute towards the political targets of protecting the environment and creating a sustainable raw material economy. We cannot support a move towards nationalizing the services as this means the end of free competition." (dartsch) "REMONDIS is a first-class company in a first-class branch," Environment Minister Sigmar Gabriel said to the local press.

EMONDIS AKTUELL | 19

#### Environmental protection \_

## Dramatic overcapacities within the thermal treatment sector will prevent materials recycling!

AN INTERVIEW WITH MICHAEL BRAUNGART, PROFESSOR OF PROCESS ENGINEERING

When asked what his profession is, Professor Michael Braungart answers: a visionary. The former head of Greenpeace's Chemistry Section is pushing for a perpetual life-cycle economy. He promotes products such as compostable T-shirts and recyclable office chairs – and has founded the Environmental Research Institute, the EPEA, to implement his ideas.

The cradle-to-cradle design is supported by many wellknown people in the USA. The film director, Steven Spielberg, is currently filming a documentary about the work carried out by the Environmental Research Institute, the EPEA. **REMONDIS aktuell:** Around 340 million tonnes of waste is generated in Germany each year. Way over half of this, namely 220 million tonnes, is used for materials or thermal recycling by companies such as REMONDIS and so is fed back into the economic cycle as a raw material or as a source of energy. This is a great success, isn't it?!

Michael Braungart: Yes and no. You're right – the greater the amount of waste that can be used for materials recycling, the better. Emphasis must be put on materials recycling especially if you consider how raw materials are becoming more and more scarce on the global market. I am, however, critical of thermal recycling – i.e. incineration. Waste should only be used as a substitute fuel for fossil fuels as a temporary solution.

**REMONDIS aktuell:** Why is that? This way waste can be used to generate energy.

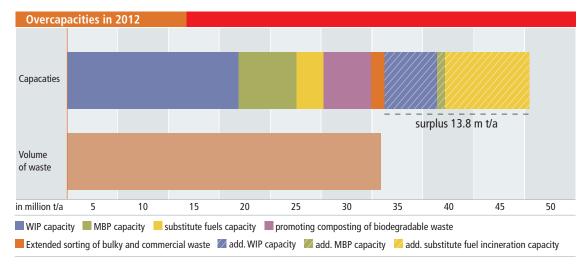
"Nature produces an abundance of everything without it being harmful in any way. We must learn to produce intelligently and use nature as our role model." Prof. Michael Braungart

> Michael Braungart: The problem of materials is much more pressing than the problem we have with energy. Mankind's energy needs can be covered thousandfold by the sun, if this form of energy were to be optimized. The aim must, therefore, be to genuinely recycle waste with the

materials being preserved and not destroyed. Biological and technical nutrients, such as biologically degradable waste, plastics, metals or crude oil, are sent to be incinerated rather than being allowed to become part of a closed-loop life-cycle. 19,000 tonnes of copper alone are lost each year in waste incineration plants. This also means an economic loss: looking at current prices for raw materials, this annual volume is worth 100 million euros.

**REMONDIS aktuell:** The current trend though is clearly towards thermal treatment – many new waste incineration plants (WIP) and waste-to-energy plants (WEP) are currently being built or planned.

Michael Braungart: After it became illegal to take untreated waste to landfill – a move which is in principle to be applauded in view of climate protection –, the demand for incineration capacities has increased. This is the reason why around 25 new WIPs and more than 50 new WEPs are currently being or will be built. This will mean that the current capacities will have doubled within just a few years – which in turn will mean that there will be dramatic overcapacities. Ludger Rethmann, board spokesman at REMONDIS, warned about this danger not so long ago. And, in a recent study, the Prognos research institute calculated that, by 2015 at the latest, there will be annual capacities of 35 million tonnes but only 24 million tonnes of waste. If this difference is to be made up then greater volumes of waste must be imported.



Estimated future development of capacities in Germany based on all projects currently planned. Volume of waste from private households and commerce.

#### REMONDIS aktuell: What is your solution to this problem?

Michael Braungart: The problem people seem to have is with material-flow management. No other creature on Earth produces waste: nutrients are fed back into natural life-cycles. Let's take the cherry tree as an example: thousands of blossoms produce fruit for birds, humans and other animals so that its stone can fall to the ground, take root and grow again. Who's going to complain about a lack of efficiency or waste when they see the mass of blossom on the ground under the tree? Whilst the tree produces a huge amount of blossom and fruit, it does not pollute the environment. Indeed the opposite is true: as soon as the material falls to the ground, it begins to rot producing essential nutrients for micro-organisms, insects, plants, mammals and the soil.

### **REMONDIS aktuell:** And what can humans learn from the cherry tree?

Michael Braungart: It is not a question of avoidance or renunciation but of embracing life. We must learn from the cherry tree and ensure that all the objects we use in our consumer society can be used as a "nutrient" for biological or technical life-cycles. If products are created according to the cradle-to-cradle design, then there won't be any more waste. During the production process, the cradle-to-cradle design takes the whole of the supply chain into consideration from the raw material to the product's destination and only uses non-hazardous substances. EPEA has developed products along this principle together with companies such as Nike, BASF, Volkswagen, Trigema, Ford, Shaw and Steelcase – for example compostable T-shirts and recyclable office chairs. *This interview was held by Katja Dartsch* 

#### SHORT PROFILE



Professor Michael Braungart, head of the Environmental Research Institute, the EPEA



Book tip: Michael Braungart, William McDonough: "Cradle to Cradle: Remaking the way we make things." Publishers: Rodale Books

International competition \_

# All hands to the pump!

THE IFO INSTITUTE IS CALLING FOR GREATER COMPETITIVENESS ON THE WATER RESOURCES MARKE

Even though the German water resources sector is ahead of most other countries when it comes to technology and processes, it is generally at the back of the queue when having to face international competition. Johann Wackerbauer, an employee at the ifo Institute for Economic Research, explains why this is the case.

**REMONDIS aktuell:** Mr Wackerbauer, what is the German water resources sector like?

Johann Wackerbauer: The German water resources sector is very well positioned on the market as far as its level of technology is concerned, its processes are very sophisticated. If you look at international tender procedures, however, it becomes clear very quickly that the German water resources sector has not developed far enough. Compared with international competitors it is way down on the list – especially because of its patchwork nature.

In Germany, one cubic metre of drinking water costs 1.83 euros. In the USA, it is 0.49 euros, in France 1.15 euros.

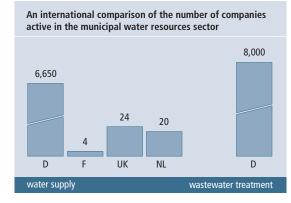
Institut für Wirtschaftsforschung

day Universität Mün-

**REMONDIS aktuell:** What exactly do you mean by "patch-work"?

Johann Wackerbauer: The German water resources sector is – apart from the few large privately run businesses such as REMONDIS – still characterized by small municipal companies which are organized decentrally. Take the supply of drinking water as an example: across the country there are around 7,000 companies responsible for water supply in self-contained regional monopolies. Whilst they are all able to supply their own regions, they are not in a position to be active at an international level. Municipal businesses are not even allowed to take part in international tenders. We are not, therefore, able to stand up to the global market leaders. This situation will not change if we do not have greater competition on the national market – and this has a negative effect on suppliers. The global market leaders come from France and Great Britain: countries in which a certain amount of competition has been introduced. The French model, where water system operations are put out to tender, particularly seems to promote international success.

**REMONDIS aktuell:** Why is the global water resources market of any significance to the German economy?





#### What the press is saying

"Expensive drinking water: consumers are paying far too much": this was a headline in one of the latest editions of the magazine, Der Spiegel, in which it reports how the price of drinking water differs across the country by up to 300 euros. According to a branch expert, most of the local authorities are using the lack of competition to make money.

And it continues: "This monopolistic position of the waterworks makes this possible. For, they are the undisputed top dog in their region; consumers are not able to change to another supplier." There is a great potential there to increase efficiency.

Johann Wackerbauer: Whilst demand is stagnating on the domestic market, potential demand is growing abroad especially in the new EU member states and the East Asian-Pacific region. Countries like China and India realize that they need to improve their infrastructures and they also have the money to do this. There is a huge amount of work to be done in the developing and threshold countries, if the UN Millennium development goal of halving the number of people who do not have access to clean drinking water is to be achieved. The German water resources sector has the necessary technical solutions and the know-how but it does not have the necessary economic clout because of its patchwork nature.

**REMONDIS aktuell:** How must the German water resources sector change to become more competitive?

Johann Wackerbauer: The patchwork structure must be improved. We need flexible company structures to make it possible to provide comprehensive packages in the form of public private partnership models abroad, too – like RE-MONDIS Aqua is already doing in Poland and Hungary. We do not have a unified front with water suppliers, wastewater treatment businesses, construction companies, engineering offices, water laboratories and research institutes all working together. We need more comprehensive solutions being offered by one group. **REMONDIS aktuell:** What political changes need to be made to make the German water resources sector stronger internationally?

Johann Wackerbauer: Privately run wastewater treatment businesses have to pay 19 percent tax, whilst municipal companies pay 0 percent. In contrast, both private and municipal businesses active in the drinking water sector both pay a reduced tax rate of 7 percent. Those in favour of such tax advantages for municipal wastewater treatment businesses are preventing the sector becoming internationally more competitive as well as the recognizable trend towards shielding municipal structures. Furthermore, politicians should be doing more to promote the foreign activities of German water management businesses. In France, it goes without saying that politicians will help to open new doors and take representatives from the French water resources sector with them on their business trips abroad.

This interview was held by Katja Dartsch



Johann Wackerbauer, ifo Institute for Economic Research

#### Water supply

# The same competition for tap water as with mineral water

OVER 90 PERCENT OF TAP WATER IS USED FOR CLEANING OR TRANSPORT. IT SHOULD, THEREFORE, BE PART OF A FUNCTIONING COMPETITIVE MARKET. A COMMENTARY BY ANDREAS BANKAMP, MANAGING DIRECTOR OF REMONDIS AQUA

Ninety percent of tap water is used for cleaning and transport. Why, therefore, should the system used for mineral water – which has never been put into question – not work here, too: the private sector supplying water with no compromises, shortages or monopolistic price structures. A further privatization of the market, which has so far been monopolized by local authorities, would at last lead to more competition and greater advantages for the public.

Just imagine you went to your supermarket and found that there was only one kind of mineral water available from a single supplier and sold under their conditions. Unthinkable? Of course it is because customers would never accept such a monopoly. However, what is unthinkable on the mineral water market is reality on the German tap water market: no matter where you look, there is absolutely no sign of an intact, flexible and consumer-friendly competitive environment where standards are determined by tenders. Instead, regional monopolies are firmly in place with their municipal areas of responsibility fixed by law.



"A privatized water resources market creates advantages for consumers and taxpayers."

Andreas Bankamp, managing director of REMONDIS Aqua

However, water supply has little to do with the state's task of providing so-called "services of general economic interest" for its citizens. For, a mere four percent of tap water is used as a foodstuff which is subject to the stipulations in the law covering foodstuffs - and the same is true if it comes from private suppliers. In contrast, 96 percent of the water flowing through taps is used for other purposes, namely as a logistics carrier for flushing toilets or for cleaning purposes such as washing dishes or clothes. If municipalities, despite this fact, still work within this field, then the reasons for doing so are, besides guaranteeing jobs, primarily financial ones. Whilst it is a well-known fact that jobs can be guaranteed by contract if a business is privatized, the financial situation remains a subject of much debate. The Institute of the German Economy (IW) describes the situation in its latest study "IW Trends 3/2007 - The Economic Activities of Local Authorities". In its summary, this well-known and respected Cologne-based institute concludes: "Taxpayers have to foot the bill for misunderstood municipal policies - they often have to finance inefficient operations."

One only needs to look at France and Great Britain to see that things can be run differently – i.e. better. In France, for example, 79 percent of the population is supplied with tap water by private companies. Paris changed its water supply to this kind of system over 100 years ago. When compared directly one against the other, then water supply and wastewater treatment is far more efficient in France than in Germany – with prices that are up to one-third cheaper than we pay here. And the water is just as good as here and fulfils European standards. At the same time the open <text>

French and British markets paved the way for the global expansion of their domestic suppliers who now dominate the international market. What is also interesting here is that it would not be new for Germany to have water supplied by the private sector: water in the Ruhr region had been privately organized until the turn of the century – when Gelsenwasser was sold off to local authorities.

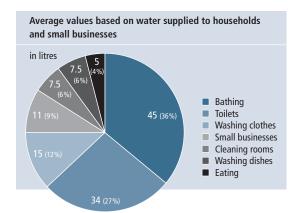
Opening up the German water resources market is well overdue. It would mean that local companies, with the best possible domestic references, would have the necessary preconditions to achieve far more in other regions of the world – and this would benefit both consumers and taxpayers. The chances and opportunities which are available are demonstrated by REMONDIS' commitment within the field of water management in countries such as Poland, Spain, France and Turkey.

Conclusion: the state's duty to provide "services of general economic interest" is the argument often used to prevent the private sector supplying tap water, of which only four percent is used as a foodstuff. This excuse is particularly unjustified because the politicians responsible believe that medical care and food retailing – and so mineral water, too – must face competition.

#### Municipalities: sparkling sources of income (euros million)

	2004		% change compared to 1999	
	West Germany	East Germany	West Germany	East Germany
Supply companies	2,738.5	501.5	22.3	20.6
Wastewater treatment	123.2	9.4	239.4	276.0
Waste disposal	54.3	16.4	43.7	-15.9
Tourism	40.5	7.5	2.8	-2.6
Agriculture & Forestry	5.6	1.6	5.7	0
Other community services	164.4	19.9	8.7	-4.8

Municipal income from direct economic activities – from a selection of areas; other community services: e.g. municipal abattoirs and undertakers' businesses; source of data: Federal Statistical Office of Germany



Only 4% of drinking water is used as a foodstuff.

#### Plant technology

## The purest of water

#### NEW WATERWORKS IN TETTAU SUPPLYING 120,000 PEOPLE

People living in the south of Brandenburg now have a guaranteed supply of drinking water: the Tettau waterworks has been modernized and is now one of the most modern of its kind in Europe supplying top quality water.

The Tettau waterworks is one of the largest waterworks in the state of Brandenburg. It supplies 120,000 inhabitants as well as many companies in Brandenburg and Saxony with water. The low sodium content of the Tettau water,

"Handing over all aspects of our municipal business operations to REMONDIS Aqua contributed towards this project being a success." Dr Roland Socher, Chairman of the Lausitz Water Association

> which is processed by REMONDIS, means it is perfect for a low-sodium diet. The natural source of the Tettau water is also germ-free so neither chlorine nor other disinfectants need to be added. As the water is of such high quality, it is also used by the food producer, Sachsenmilch, to make high quality dairy products such as yoghurt and rice pudding. Sachsenmilch is based in the region and is a subsidiary of the Müller Milch Group, Germany's largest dairy business.

> It cost 10 million euros to rebuild the waterworks. Half of this came from the State of Brandenburg and the European Union. The new plant was officially put into operation in May. Amongst the many guests was Dr Dietmar Woidke, Minister for Rural Development, the Environment and Consumer Protection in the State of Brandenburg. He commented on the grants received to construct the waterworks saying: "State and EU funds should also be used to ensure

that the financial burden on citizens as well as on industrial and commercial businesses which are already established here or wish to move here can be kept at a reasonable level."

The raw water used by REMONDIS Aqua comes from the reservoir in the Lausitz "Urstrom Valley" via one of Germany's largest walkable horizontal wells as well as from 36 vertical wells. Powerful pumps transport the water from depths of 20 to 30 metres below ground – on average 23,000 cubic metres a day. In the new waterworks, REMONDIS processes the water into drinking water using aeration, adding lime water, sedimentation and filtration. The drinking water is then transported to the consumers via a pipe network covering more than 1,400 kilometres. (dartsch)

#### Average values

Parameter	Tettau Waterworks	Ceiling value	
	8.2		
		0.5	
		50	
	27	250	
Sulphate*	115	240	
	55	-	
Iron*	< 0.02	0.2	
Manganese*	> 0.02	0.05	
*mg/l			



Raw water has been taken from the reservoir in the Lausitz "Urstrom Valley" in the south of Brandenburg for over 50 years.

#### WAL Betrieb

REMONDIS Aqua has been supplying drinking water and treating wastewater for the Lausitz Water Association via its 100% subsidiary WAL Betrieb since the beginning of 2006. Wastewater treatment technology



### The water in the River Main is clean again

REMONDIS IS RUNNING A NEW CENTRAL SEWAGE TREATMENT PLANT IN GEMÜNDEN AM MAIN

Whilst the rest of the country is talking about overpriced drinking water and a lack of competition on the water resources market, the people living in Gemünden in Bavaria can be very pleased with life: wastewater treatment charges have been lowered. And the new sewage treatment plant is also much less expensive than originally anticipated.



The new sewage treatment plant was put into operation in July.

In the middle of the 80s, the authorities responsible criticized the wastewater system in Gemünden for the first time demanding that an alternative be found for the five old and ramshackle sewage treatment plants. When the high charges for the wastewater were due and even legal action was threatened, the final decision was made to call in experts for advice: the cooperation work with REMONDIS Aqua began in January 2005. Since then, things have moved quickly and have turned out to be cheaper than expected.

"REMONDIS Aqua's expertise and experience contributed towards us finding a custom-made, state-of-the-art solution with the best possible economic framework conditions and then implementing it with a construction period of just 15 months." Hans Schneider, board member of the Stadtwerke Gemünden a. Main

> REMONDIS took over the technical operation of the plants and supported the Gemünden municipal works in their move to build a central sewage treatment plant to replace the five old wastewater facilities.

Transforming the municipal works into a municipal company made it possible for the sewage treatment plant to be put out to tender as a private sector project. REMONDIS took over the construction tender and the investment management work. When the local authorities had first looked to build the plant at the beginning of the 90s, the costs had been estimated to be around 7.3 million euros. Everyone was very pleased, therefore, when the tender brought in offers which were well below this sum. The construction of the new plant cost a total of 4.5 million euros. It was built under difficult conditions as the site is located under an overhead power line as well as on the Main flood plain. The ground had to specially prepared to strengthen the subsoil's bearing capacity - all in all it was one of the biggest construction projects carried out in the city's history. The central sewage treatment plant was officially put into operation in May just 15 months after construction work had begun.

The new sewage treatment plant treats wastewater from around 19,000 inhabitants according to the so-called DIC-SBR process (sequencing batch reactor). This process, in which practically all treatment processes are carried out in one and the same reactor, is commonly used in the industrial sector but is rarely used by local authorities. Anne Jargstorf, environmental engineer and plant manager at REMONDIS, explained, "The SBR process is simple but extremely effective and was able to be implemented in Gemünden without any problems whatsoever." The treated water is fed directly into the River Main. The Main-Post newspaper described the project as being a "role model project". The old, decentralized facilities will now be gradually shut down and dismantled one after the other. And the Gemünden citizens have also profited from the way RE-MONDIS Agua has been operating the facilities: the charges for wastewater treatment fell last year by 21 percent. "The cooperation between the Gemünden municipal company and REMONDIS Agua has already begun to bear fruit," the Main-Post commented. (dartsch)

## A strong team

THE POLISH CITY OF TOSZEK AND REMONDIS AQUA JOIN FORCES



More and more towns and districts in Poland are working together with a private partner in order to be able to modernize their infrastructure. Toszek in Upper Silesia has chosen to work with REMONDIS Aqua.

Just under a year ago, the city council of Toszek in the south of Poland decided to look for a private partner for its water and environmental service sector and to sell 50 percent of its shares in its company ZGKiM (Zaklad Gospodarki Komunalnej i Mieszkaniowej) which had, up to then, been owned completely by the council. Following a public tender procedure, the town and district of Toszek chose REMONDIS to be its partner. The joint business, REMONDIS Aqua Toszek, is responsible for supplying drinking water, treating wastewater, cleaning the city, clearing roads in winter, managing property and maintaining the water and sewer pipeline networks. REMONDIS is market leader in Poland with its subsidiary, REMONDIS Sp. z.o.o., and is already responsible for waste collection and disposal in Toszek.

The town and district of Toszek lies fifty kilometres west of Katowice in the Silesian Voivodeship and has around 10,000 inhabitants. One of the reasons for selling off a part of the municipal business was the need for investments to create a sustainable infrastructure. "I am sure this public private partnership was not an easy decision for the city to make, but I am convinced that it was the right one," commented Professor Jerzy Buzek. Mr Buzek is a member "The partnership between the city and district of Toszek and REMONDIS is an excellent example of how we live in a united Europe in which all borders should disappear."

Professor Jerzy Buzek, a member of the European Parliament and former Minister President of Poland

of the European Parliament and was patron of the official celebrations at the beginning of the cooperation work.

The waterworks, drinking water pipes and sewer canals in Toszek all need urgent renovation work done on them – especially if EU guidelines are to be fulfilled. The necessary investments can now be carried out with REMONDIS' support. For REMONDIS Aqua, holding a share in the new company means it now has a foothold in the water supply and wastewater treatment sectors in the Silesian region. "We believe that there are opportunities for us to expand here and win other contracts in this region," said Helena Dytkiewicz, a managing director at REMONDIS Aqua in Poland. (dartsch)

Half of all municipal businesses in Poland are already joint-stock companies.



Professor Jerzy Buzek, a member of the European Parliament and former Minister President of Poland. In the background from left to right: the mayor Jacek Zarzycki and Helena Dytkiewicz, REMONDIS management.

REMONDIS AKTUELL | 29

## **REMONDIS supplies the paper industry** with its most important raw material

#### WITH A VOLUME OF 2,400,000 TONNES, REMONDIS IS THE NATION'S LARGEST SUPPLIER OF WASTE PAPER

Each citizen collects approx. 80 kilograms of waste paper every year. The waste paper is used to make new paper – an almost perfect life-cycle. Over the last few years, waste paper has become the most important raw material needed by the international paper industry.

A postcard from Tunisia flies past, two exercise books, a shoe box, a pile of newspapers: in its paper-sorting plant, REMONDIS processes waste paper, card and cardboard which has been thrown out for recycling. It comes from private households, from printing businesses, department stores and the industry. Plastic film and other unwanted materials are removed and then the waste paper is sorted according to quality and pressed into large bales before being taken to paper mills.

Last year, 15.5 million tonnes of waste paper was collected by households and industrial businesses in Germany. This is a global per capita record. Practically all paper used by the newspaper industry, all packaging and all corrugated cardboard in Germany is made from waste paper. This is an important contribution towards protecting the climate and the environment because – according to the IFEU Institute in Heidelberg – producing paper from waste paper needs almost two-thirds less energy and 60 percent less process water. Wastewater loads are 75 percent lower than if wood is used and the greenhouse effect 25 percent lower.

European waste paper is in great demand in Asia. The paper industry in this region has grown by a huge amount and the demand for raw material has been steadily rising. "Many products are shipped from Asia to Europe. We use the ships which are travelling back to Asia to transport the waste paper. On balance, transporting paper from Hamburg to Shanghai by ship is no more expensive than to Munich by lorry," commented Thorsten Feldt, managing director at REMONDIS Trade & Sales GmbH. REMONDIS' biggest customers for waste paper, however, are German paper mills such as Rhein Papier GmbH or Smurfit Kappa Zülpich Papier in the Rhineland region. Rhein Papier works with one of the fastest paper machines in the world, the PM1. This Cologne-based company produces around 300,000 tonnes



"We process waste paper into a high quality raw material within 24 hours." Thorsten Feldt, managing director at REMONDIS Trade & Sales GmbH

of newspaper paper each year – 100 percent of which is made from waste paper – for customers such as the BILD newspaper. "Today's BILD newspaper can, theoretically, be printed on the same paper as the day before. Processing and recycling can be carried out within less than 24 hours," Thorsten Feldt continued. The paper delivered to Cologne by REMONDIS is first cut up into small pieces and then put in large drums with large quantities of water. Once the paper has dissolved it is put through a number of sorting phases during which any unwanted materials are removed. Paper clips and staples are removed using centrifugal forces. → The first paper recycling process was invented by Justus Claproth, a professor at the University of Göttingen, in 1666

"An important cornerstone of our company strategy is to create closed life-cycles for raw materials. Besides the economic aspects, we feel it is important to do this so we can look beyond the theoretical debates and actively contribute towards climate protection and a sustainable economy." Thomas Conzendorf, board member at REMONDIS AG & Co. KG

#### **\*** RHEIN PAPIER

Rhein-Papier presented REMONDIS with its "Logistics Partner of the Year" award in 2006

matter of moments, the paper is rolled up into reels and separated off. Each reel contains approximately 35 kilome-

tres of paper - enough for several hundred newspapers.

addition of further chemicals is not required.

The paper is merely enriched with corn or potato starch. The

This or similar methods are used to produce more than 20

million tonnes of new paper, card or cardboard in Germany

each year. Three-quarters of this is made using waste paper.

The businesses using the greatest amount of waste paper are the producers of packaging paper (60 percent) and

graphic papers (26 percent). However, fresh wood fibres,

which are, for example, needed for printing magazines, are

important to keep the waste paper life cycle going round.

Paper is especially good for recycling but cannot be end-

lessly recycled. "It is estimated that a paper fibre can be

recycled between seven and eight times. After that it is too

small to be recycled again," Thorsten Feldt explained. The

paper life-cycle, therefore, needs rejuvenating all the time

to keep it going round. (dartsch)

Around 100 million tonnes of paper are produced across Europe each year – just under 50 percent is made from waste paper. In Germany, the amount of waste paper used is even greater.

Finally the printing ink is washed out by warming up the paper pulp and mixing in a special soap. Air is blown up into the vat creating a foam – this foam moves upwards taking the particles of ink with it. The ink and foam are then simply skimmed off.

New paper can now be produced from the clean waste paper pulp. The paper pulp is mixed with a large volume of water and spread over the wide mesh in the papermaking machine. At this point 98 to 99 percent of the pulp content is water. The next step is, therefore, to press the water out of the pulp and suction it off. The damp paper is then dried at high temperature. All these processes are carried out at high speed. The machine, which is 100 metres in length, processes the paper at a speed of around 130km/h. In a

1.8 tonnes of waste paper are needed to produce 1 tonne of paper.



The reel storage area at Rhein-Papier GmbH.

Industrial services

## **Major inspection at the refinery**

THE BUCHEN GROUP CLEANS OIL REFINERY IN GELSENKIRCHEN

Several thousand people are kept busy for many weeks when a refinery is "spring-cleaned". The tasks are carried out under extreme conditions – and the people are under great time pressure. The REMONDIS subsidiary, the Buchen Group, specializes in drawing up cleaning solutions for such kinds of major inspections.

This summer, all of the machinery at the oil refinery in Gelsenkirchen-Horst was at a standstill for a total of five weeks. The plant belongs to Ruhr Oel GmbH, a joint venture between the mineral oil businesses Deutsche BP AG and Petróleos de Venezuela. The refinery was dismantled into individual pieces and cleaned. After all necessary repair and maintenance work had been carried out, the plant was then inspected by the TÜV authorities. Such major inspections must be carried out every few years – as stipulated by law.

Up to 3,000 people from partner businesses from all over the world were involved in the work. A special container village was set up to house them. The Buchen Group cleaned around 1,000 pieces of machinery in Gelsenkirchen including heat exchangers, air coolers, kilns, columns, storage tanks and pipes. Besides this, they also changed the catalytic converters. The different machinery parts were cleaned using extra-high pressure equipment in large wash areas set up specifically for this purpose. During the cleaning process, the hot water shoots out of the nozzles (up to 1,000 bar) at a rate of 200 litres a minute. This is the only way to remove the deep-seated oil residue. The ground is sealed off: an oil separator, catalytic converters and special wastewater treatment equipment all ensure that the water is processed in an environmentally friendly way and that as much oil as possible is recovered from the water.

#### THE BUCHEN GROUP

Buchen UmweltService is one of the leading industrial service businesses in Germany. Buchen provides its industrial services across Europe from industrial and tank cleaning work, providing a power plant service and maintaining canals to mobile sludge dewatering services to managing plant standstill times and handling catalytic converters in refineries.

Ruhr Oel GmbH's refinery in Gelsenkirchen is the secondlargest of its kind in Germany. In both the Horst and Scholven facilities, crude oil is refined into a number of products including diesel, petrol, heating oil, kerosene and bitumen. It has a capacity of 12.9 million tonnes of crude oil a year. 18 million litres of fuel alone leave the plants each day – unless an inspection is being carried out. During this time, production is at a standstill, so the work must be carried out extremely accurately but quickly, too. Every single detail, no matter how small, has been planned in advance by the Ruhr Oel specialists so every task must be executed perfectly. Even a delay of a few days means losses amounting to millions of euros. Everything went to plan at the Gelsenkirchen plant. The refinery was able to start working again after the five weeks were up. The cleaning specialists at the Buchen Group had to clean around 1,000 pieces of equipment and machinery in just five weeks.







Hazardous waste must be disposed of correctly to prevent unnecessary environmental pollution

Industrial waste

## **Environmental protection needs** intercontinental cooperation work

GERMANY OPERATES THE WORLD'S BEST HAZARDOUS WASTE INCINERATION PLANTS

Over the last few months, the planned import of hazardous waste from Australia has been hitting the headlines. Does it really make sense to transport toxic waste half way around the world? REMONDIS aktuell put this question to Dr Ludwig Ramacher, a doctor of chemistry, an environmentalist and a longstanding employee at **REMONDIS** Industrie Service.

**REMONDIS aktuell:** Dr Ramacher, what waste is it exactly that is supposed to be brought to Germany for disposal?

Ludwig Ramacher: It primarily involves HCB waste and HCB-polluted construction waste. HCB stands for hexachlorobenzene which, in the past, was used to produce, for example, pesticides. The chemical composition of HCB is very stable making it practically non-biodegradable in the environment. The Stockholm Treaty now bans the

production and use of HCB. The 22,000 tonnes in Australia is old waste which has been stored in Sidney Harbour for almost 20 years now and is now threatening to pollute the groundwater.

**REMONDIS aktuell:** What is the reason for bringing the HCB-polluted waste from Australia to Germany via South Africa? That sounds absurd.

## "Germany is taking over a slice of responsibility for the environment with its high quality hazardous waste incineration plants." Sigmar Gabriel, Federal Minister of the Environment, in an interview with the magazine, Der Spiegel.

Ludwig Ramacher: It's not though. HCB-polluted waste can only be disposed of in an environmentally friendly way if it is incinerated at very high temperatures in plants that can cope with material containing chlorine. There are only a handful of such plants around the world, most of which are located in Europe. And only these plants are able to break down the chemical structure of HCB by incinerating the material using very high temperatures and so reducing the molecules into harmless elements.

**REMONDIS aktuell:** Why doesn't a continent such as Australia have its own plant?

Ludwig Ramacher: There are actually two small plants in Australia which could possibly treat the material. The capacity of the plants, however, is less than 500 tonnes a year – you can work out for yourself, therefore, how long they would need to destroy the 22,000 tonnes. A further factor is that these plants are already running at full capacity.

**REMONDIS aktuell:** Those opposing the import of this material have said that the incineration of the waste in Germany would be a health risk for those living here.

Ludwig Ramacher: This fear is ungrounded. The discharged air undergoes many different cleaning processes and filters. The emissions are monitored 24/7 and the data is sent online to the relevant authorities. The values are well below the ceiling values set by law – and Germany is subject to the strictest emission laws in the world.

**REMONDIS aktuell:** Although the Federal Ministry for Transport expressly welcomed the transport of the material, the Ministers for the Environment for the states of Schleswig-Holstein and NRW stopped the transport at the very last moment. What will happen to the material now?

Ludwig Ramacher: That's a very good question. Any other alternative would be a worse alternative. We can only hope that Australia will find another country that can offer an environmentally friendly solution which is at least almost as good. The population of Australia is the same as that living in the German state of North Rhine-Westphalia and is really too small to justify building plants with such large capacities. The decision to ban the incineration of hazard-



ous waste from countries, where it is economically unviable to build such plants, really needs to be looked at again.

**REMONDIS aktuell:** What effect would a general ban on hazardous waste imports have on Germany?

Ludwig Ramacher: 20 to 25 percent of the material currently being incinerated in German plants comes from abroad. Should there be a ban on such imports – although this is not a matter up for discussion – then several plants would have to close. That really would be absurd: some of the best plants in the world would have to close so that the material can be disposed of in other countries where the processes are less environmentally friendly. That reminds me of the environmental catastrophe that occurred just off the lvory Coast – it is these sorts of catastrophes which must be prevented. And not the safe disposal of hazardous waste in state-of-the-art plants that are subject to the strictest of environmental laws. *This interview was held by Katja Dartsch* 

REMONDIS runs three hazardous waste incineration plants with a total annual capacity of 124,000 tonnes.

#### Importing and exporting hazardous waste

- According to the Basel Convention, hazardous waste must primarily be disposed of in the country it was generated in and exports kept to a minimum. It is, in principle, forbidden to export such waste to developing countries.
- Germany has sufficient capacities to treat hazardous waste: around 16 million tonnes a year.
- Each year, almost 6 million tonnes of hazardous waste is imported into Germany and 1.1 million tonnes exported.
- Germany is the largest exporter of pesticides with fertilizer producers such as Bayer and BASF.

Both the Opel Astra and the Opel Zafi are built at the Bochum plant. FJGEDFEG &

(174)



Opel is the second-largest vehicle manufacturer in Germany with locations in Rüsselsheim, Bochum, Kaiserslautern and Eisenach. The Group employs around 28,000 people.

Industrial services \_

## **Opel and REMONDIS:** driving forward together

#### 20 YEARS OF SERVICES FOR THE BOCHUM FACTORY

Each morning, hundreds of workers travel to the Opel factory in Bochum even though they are not Opel employees. They are employed by external companies – by service providers such as REMONDIS.

Opel's best selling car is manufactured at its factory in Bochum: the Astra model. Both the Opel Astra and the Opel Zafira are made in Bochum. And axles and gearboxes. Around 9,700 employees work at the factories in the Ruhr region. The production processes generate a large amount of waste: timber, metal, sludge and paint, solvents, paper. Almost 50 different fractions. REMONDIS is responsible for collecting and processing this waste – and has been doing this work for 20 years.

REMONDIS has had its own office on the factory site since 1987. "That way we can be reached at all times and our service can be integrated into the ongoing production processes," explained Raphael Meschede, managing director of the REMONDIS subsidiary GSL Gesellschaft für Service und Logisitik. He and his colleagues take part in training courses and seminars held by Opel. By doing so they can notice straight away if there is a potential problem. There are many advantages for having an office on site – for example when it comes to innovations. REMONDIS developed a compactor skip at the Opel factory with an integrated lifting and tipping system which proved its worth and is now being used throughout the whole of the company.

Besides waste management, REMONDIS also provides a further service in Bochum which shows just how flexible and versatile the company is: REMONDIS paints small vehicle parts. 22 employees work in this section. They prime the mudguards, doors, car boot lids – all in all 1,200 different car body parts. Including around 1,000 latch plates, connecting pieces between the inside of the car and the engine, each day. Unlike the other parts, which are supplied to garages in the region, the latch plates are produced especially for the ongoing production process. Mr Meschede explained: "If we didn't have the plates ready on time, then the whole production process would come to a standstill." The paint workshop covers several floors - the small parts need to pass through 11 dipping tanks before they can be further processed. And so REMONDIS plays an integral part in the car production process of the world's largest automobile manufacturer General Motors – and not only in Bochum. (dartsch)



#### Thermal treatment

### EVZA

From the end of 2007 onwards, more than 300,000 tonnes of municipal waste will be transformed into electricity and steam in Stassfurt. A new REMONDIS location is being developed in Staßfurt near Magdeburg: a thermal treatment plant is to supply the neighbouring industry there with energy. The first trials at the new plant have already been successfully completed: the water pressure tests on the two steam boilers (98.3 bar) went according to plan. "We are well within schedule. We will have the plant up and running by the end of the year," said Bernd Fleschenberg, managing director of REMONDIS' subsidiary EVZA Energie- und Verwertungszentrale. In the future, more than 300,000 tonnes of municipal waste and commercial waste similar to household waste will be processed into energy at Staßfurt. The soda works will be

Standing up to the pressure

CAPACITY OF NEW INCINERATION PLANT IN STASSFURT SECURED

profiting from the energy generated at the plant as REMONDIS will be supplying it with 75,000 megawatt hours of electricity a year as well as 360,000 megawatt hours of steam. The plant will be running to capacity despite the present building boom. Being the largest environmental service company in Germany, REMONDIS will be able to take volumes of waste from other thermal treatment plants and mechanical-biological plants for the Staßfurt plant. Furthermore, REMONDIS will also be treating household waste from the city of Braunschweig which will be transported to the plant in an environmentally friendly way, namely by rail. (dartsch)

Energy sector \_

## Accredited fuel protects the climate

#### REMONDIS SECONDARY FUELS AWARDED SEVERAL ACCREDITATIONS



Many power stations and cement works use environmentally and climate friendly fuels in their plants, namely secondary fuels made from high calorific waste. As secondary fuels are primarily made from biogenic components such as timber, paper/card and cotton materials, their emissions, when incinerated, contain far fewer climate-damaging gases than the emissions resulting from incinerating fossil fuel. Last year, around 2.5 million tonnes of secondary fuels were recycled across the country. REMONDIS produces a total of

around 350,000t of secondary fuels each year thus reducing CO<sub>2</sub> emissions by the same amount. The Gütegemeinschaft Sekundärbrennstoffe und Recyclingholz e.V. (BGS) has awarded both the REMONDIS branches in Erftstadt and Lünen as well as the REMONDIS associated company, R.A.B.E. Abfallaufbereitung in Meschede, with two seals of approval, RAL-GZ 727 and RAL-GZ 724. (*dartsch*)

Industrial services

### MUEG cleans up tar pit

#### MUEG CLEANS UP ACID TAR PIT IN SLOVENIA



Acid tar is produced when refineries process crude oil using the sulphuric acid method. In Pesnica Dvor in Slovenia, such acid tar had been deposited in a large, natural pit. The company, Petrol, and the Slovenian government commissioned MUEG Mitteldeutsche Umwelt- und Entsorgungs GmbH from Braunsbedra (Saxony-Anhalt), a REMONDIS associated company, and the firm, Gorenje, to empty and clean up this pit. 17,500 tonnes of acid tar and around 7,000 tonnes of contaminated earth were removed using a revolving tower crane and then sent by rail to Germany for treatment. MUEG produces a blended fuel from the acid tar which the Schwarze Pumpe power station near Cottbus then uses to generate energy. (arndt)

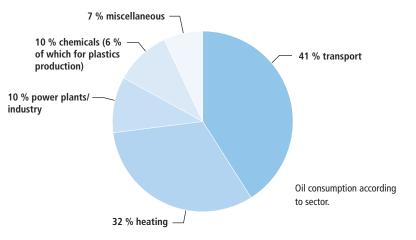


Plastics recycling \_

### **REMONDIS conserves resources**

SAVING CRUDE OIL BY COLLECTING AND PROCESSING PLASTICS WASTE

A large amount of crude oil is needed to produce plastic products. Around 6 percent of the oil pumped out of the ground is used by the plastics industry. Approximately 3.7 tonnes of raw gasoline (naphtha) and, therefore, about 18.7 tonnes of crude oil are needed to produce one tonne of ethylene for plastics production. Plastics recycling, therefore, makes an active contribution towards protecting natural resources. Each year, REMONDIS processes approx. 109,000 tonnes of plastics and uses this to produce 43,000 tonnes of granulates and flakes. On balance, this means almost 1.5 million tonnes of crude oil are preserved each year. (*löderbusch*)



#### Metal recycling

## TSR growing in the east

#### **VOLUME INCREASES BY TEN PERCENT**

Germany's largest metal recycling company is continuing to grow: the TSR Group has taken over the east German company, K&L Rohstoff und Recycling GmbH. The German Cartel Office has already approved the takeover. The TSR Group, in which REMONDIS has had a 60 percent share since last autumn, has, therefore, been able to strengthen its market position in the states of Saxony and Thüringen and further extend its activities. But even before this move, the TSR Group had been treading a successful path: in the last 12 months alone, the company succeeded in increasing its annual volume of waste metal by around 10 percent to 11 million tonnes. K&L Rohstoff und Recycling was founded under the name "Kern und Lenhart" in 1993 and employs approx. 50 people. The company collects scrap steel, non-ferrous metals and foundry scrap and then processes it for recycling using shears, presses and cable strippers. The material comes from metal-turning firms and blacksmiths as well as private households. Large steelworks and foundry businesses in the east of Germany then take the processed raw material from the company. K&L Rohstoff und Recycling run eight branches in east Germany as well as a site in the Czech Republic. (schreyer)





Traineeships

## **REMONDIS** provides a promising future

MORE THAN 1,300 TRAINEES AT RHENUS, SARIA AND REMONDIS

It's a new record: more than 1,300 young people are currently doing an apprenticeship or traineeship at REMONDIS and its sister companies, SARIA and Rhenus.

Federal Minister for the Environment, Sigmar Gabriel, is currently campaigning for more traineeships and apprenticeships within the environmental branch and has started a new traineeship campaign: "The environment provides a promising future". The minister explained: "Once again there are not enough traineeship and apprenticeship places in Germany this year. On the other hand, the fields of environmental protection and renewable energy have proven to be areas of growth in the past. We want to use this campaign to show that this dynamic economic growth can also produce new traineeship places." REMONDIS has been committed to supporting young generations for many years and is supporting Mr Gabriel and his campaign. When the Environment Minister visited the Lippe Plant in Lünen in June, he praised the company during a press interview with the Ruhr-Nachrichten newspaper: "REMONDIS was one of our first partners."

400 young women and men began their professional lives at the company group this summer. Compared with the

#### APPRENTICESHIP & TRAINEESHIP COURSES AT REMONDIS

Chemical technology	Management assistant for tourism	Industrial mechanic, engineering operations
Chemical laboratory technician	Management assistant in traffic services	and maintenance
Chemical technician	Management assistant in wholesale and	Machine operator
	foreign trade	Mechatronics specialist
Motor technology	Office administrator	Metalworker
Construction mechanic	Office communications clerk	
Motor mechanic	Service assistant for dialogue marketing	Craftsmanship and logistics
Vehicle mechatronics engineer for commercial		Gardener
vehicle engineering	IT	Logistics assistant
	Computer science graduate	Logistics specialist
Environmental technology	Informatics clerk	Management assistant in warehousing
Specialist for environmental services and waste	IT specialist	Packing specialist
management	IT systems clerk	Plasterer
Specialist for pipe, sewage and industrial services		Process mechanic, plastic and rubber
Specialist for wastewater technology	Industrial electronics	technology
	Electronics technician for automation technology	Professional truck driver
Commerce	Electronics technician for energy and building	Road builder
Freight forwarding and logistics services clerk	services engineering	Specialist for agricultural services
Graduate in business studies (VWA or BA)	Industrial electronics engineer	Specialist for harbour logistics
Industrial clerk		Specialist for roads (RKI)
Management assistant for the auto repair trade	Industrial metal engineering	Specialist for water resources management
Management assistant for haulage and logistics	Construction mechanic	Specialist for warehouse logistics
services Equipment technology		Surveyor

year before, therefore, the total number of trainees and apprentices has increased by 42 percent to 1,304 exactly. "Our need for young, well trained and committed staff is growing – and we are using our range of traineeships and apprenticeships to the best of our ability to lay the foundation stone for the future," explained Andreas Oellerich, head of personnel at REMONDIS. 47 different professions are taught here – from industrial clerk, construction mechanic and professional truck driver to surveyor and chemical laboratory technician (see table).

Being an international market leader within the water and environmental service branch, the traineeship places at RE-MONDIS are in great demand. Some people even move cities to be able to join the company: Peter Enke, for example, who is working as a trainee at the company's head office as part of his university studies said: "I moved from Berlin to Lünen to be able to do my traineeship at REMONDIS. What I learn here will mean there is a wide variety of opportunities open to me later on." The fact that many people, who began as trainees, end up in managerial positions proves he is right. Klaus Rohmann, for example, previously a trainee at REMONDIS, now heads the controlling department. He said: "Right from the very beginning I have been fascinated by the way REMONDIS gives so many young people the opportunity to take on responsibility and help to develop the company." Michaela Koch would also start a traineeship at REMONDIS again: "REMONDIS is a go-getting family run business. All doors are open to anyone who is committed and does good work." Her career began with a holiday job. Today, she is head of the in-house sales department at PROVERO GmbH and is responsible for approval management. Looking back she says: "I liked the fact that trainees are given tasks for which they have to find a constructive solution. That way you learn to work quickly, independently and autonomously." (dartsch)

The number of traineeship places at SARIA, Rhenus and REMONDIS increased by 42 percent in 2007.

#### Site portrait -

## Doing the rounds on snow chains

THE REMONDIS BRANCH IN NORDHARZ

Fog hangs over the Brocken, the highest peak of Germany's Harz mountains, more than 300 days a year. On the few days when it lifts, the employees at Abfallwirtschaft Nordharz GmbH have a spectacular view from their offices of the highest mountain in north Germany.



Abfallwirtschaft Nordharz GmbH is a joint company between REMONDIS, the majority shareholder, and the district of Wernigerode, which has been part of the Harz region since July. It is active throughout the Harz region and has locations in Wernigerode, Halberstadt and Quedlinburg. 250,000 inhabitants and many commercial businesses are customers of Abfallwirtschaft Nordharz GmbH including the Hasseröder brewery and the Harzer Schmalspurbahnen GmbH.

After the collapse of the Berlin Wall in 1989, the district of Wernigerode began looking for a private partner to set up a modern waste management system. It chose REMONDIS: Norbert Rethmann, son of the company founder and today

"As we were well aware that modern environmental services mean more than collecting and depositing waste, we started to look around for a strong and experienced partner in 1990. REMONDIS was awarded the contract – and has proven to be forward-looking helping to set the future course for the Harz district." Dr Michael Ermrich, district councillor for the Harz region and chairman of the supervisory board of Abfallwirtschaft Nordharz GmbH chairman of the supervisory board of RETHMANN AG & Co. KG, personally led the negotiations himself. "He told us that Abfallwirtschaft Nordharz could work far more productively without us having to reduce the workforce," remembered Gabriele Rohr, managing director of the company. "And that's what happened. We have grown bit by bit and have gradually increased our workforce from 85 to 145." A sorting plant for recyclable materials was built as well as processing facilities for waste timber and construction waste. Two of the district's three landfills are currently be recultivated. The company itself owns a fleet of 55 vehicles which are all run on biodiesel. The fleet includes a particularly small rear end loader which is full once it has emptied 100 rubbish bins. "We need this small vehicle to be able to drive through the very narrow streets in the historical cities, for example, in the world heritage town Quedlinburg," said Gabriele Rohr. As is the case with every vehicle travelling around the Harz region, the small rear end loader always has snow chains on board during the cold season. The weather there should never be underestimated; snow lies on the Brocken 100 days a year. (dartsch)



The fleet of vehicles owned by Abfallwirtschaft Nordharz GmbH. All vehicles are run on biodiesel.

42 I REMONDIS AKTUELL

#### > Impressions



"Disposing of waste – the safe way" - this was the motto used at the REMONDIS head office in Lünen in the middle of August to present the new media package for training employees in the environmental service branch.



Environment Minister Sigmar Gabriel (2nd from left) and ministerial departmental head Dr Helge Wendeburg (far right) view the Lippe Plant together with REMONDIS board member Egbert Tölle (far left) and Chairman of the Supervisory Board Dr Hermann Niehues.





ANRW Minister President Jürgen Rüttgers (2nd from left) with (from left to right) Antonius von Hebel, head of municipal projects at REMONDIS Region West, Gerhard Weber, Board Chairman at Gerry Weber International AG, and Hans Vornholt, managing director of REMONDIS Region West, during their visit to an event organized by the CDU to discuss future ideas.



Norbert Rethmann, chairman of the supervisory board of RETHMANN AG & Co. KG, talking to Nobel Peace Prize holder Lech Walesa, former President of Poland.

NRW Environment Minister Uhlenberg (left) at the REMONDIS booth at an event organized by the Efficiency Agency of the State of NRW where he learned more about contracting models within industrial water management from Lars Meierling, authorized signatory at REMONDIS Aqua.



Roland Ruscheweyh, a member of the management at REMONDIS Aqua, at the official celebrations signalling the start of the PPP in the Polish city of Toszek

Testing the "boiler water" the traditional way at the EVZA in Staßfurt: (from left to right) Dr Klaus Horch, managing director of CES-TEC, UIrich Haake and Bernd Fleschenberg,





Clean water for everyone: official celebrations for the new waterworks in Tettau.

Signing the contract in 🕨 Saporoshje, Ukraine.









#### > Environmental services | production

A healthy atmosphere, great covering qualities and prices that make you feel good. REMONDIS' professional CasuBlanca dispersion paint has a unique ecological formula to create the perfect room. The CasuBlanca paints also get their excellent properties from the white pigment, casul, developed and produced by REMONDIS. Advantages you shouldn't ignore:

- Particularly economical: whether matt or glossy, a paint which has extremely high covering qualities and goes a long way – a 10l pot covers up to 80m<sup>2</sup>
- No smells odourless when you're painting and after it's dried
- Healthy living thanks to the ecological formula: no added biocides, preservatives or softening agents
- CasuBlanca, unique paints with the ISEGA accreditation for food applications

REMONDIS Production GmbH, Brunnenstraße 138, 44536 Lünen, Germany, Telephone: +49 2306 106-223 Fax: +49 2306 106-228 www.remondis.de, auftrag.production@remondis.de Are you interested in learning more? Casul can do much more. Why not ask about our products for the paper and building component industries. We are very happy to send you more detailed information. Our experts are just a telephone call away!

