

PHOSPHORUS – MORE RECYCLING FOR GOOD CROPS

Latest news

THE RECYCLING PROFESSIONALS –
REMONDIS launches educational project
at the didacta

Water resources management

REMONDIS Aqua expands in the
Netherlands

Environmental services

McDonald's and REMONDIS: cooperating
for over 20 years

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Saransk – a role model for Russia

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PHOSPHORUS – THIS VITAL ELEMENT IS RUNNING OUT

Phosphorus is a vital nutrient for humans, plants and animals and cannot be substituted. And yet this vital element is running out. Around 0.09% of the Earth's crust is made up of various phosphorus compounds – looking at economic viability and today's technology, however, only a fraction of this can be mined. Reserves of this natural resource are gradually becoming depleted. It is high time for more phosphorus recycling. REMONDIS is well aware of this and is taking action. **Page 4**



REMONDIS AQUA EXPANDS IN THE NETHERLANDS

REMONDIS Aqua continues to grow on the international market. The company has once again succeeded in expanding its business by acquiring the industrial wastewater division from the Dutch company, Delta N.V., last December. Its Dutch industrial customers are now already benefiting from innovative water management systems and attractive full-service packages. **Page 18**



RESPONSIBLE GLOBAL CITIZENS

For over 20 years now, McDonald's has been working with REMONDIS to achieve greater sustainability. The two companies cooperate in four German states implementing a waste management system to reduce waste volumes as well as to contribute towards conserving natural resources and preventing climate change through systematic recycling. One of the main reasons for this success is the company's ability to provide both local and central services. **Page 28**

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EDITORIAL



Thomas Conzendorf,
REMONDIS Board Member

Dear Readers!

Did I hear someone saying recycling is on everyone's lips? That might sound a little strange but really it is not that far from the truth. Phosphorus is one of the most important nutrients for plants and animals alike – and so for humans, too. This valuable mineral is found as a phosphate compound in fertilisers to ensure there is abundant growth and sufficient harvests and that humans and animals have a strong bone structure. In theory, there is plenty of this nutrient in the world as around 0.09% of the Earth's crust is made up of various phosphorus compounds. In practice, however, only a fraction of this can be used. Natural contamination and a lack of suitable technology mean that phosphorus is already becoming scarce. Recycling is the only way to buck this trend. REMONDIS has, therefore, been intensifying its efforts in the area of phosphorus recycling. REMONDIS' subsidiary, RETERRA, already recycles this material on an industrial scale, processing around 500,000 tonnes of sewage sludge and returning approx. 10,000 tonnes of phosphorus to the natural cycle every year. RETERRA, however, has gone a step further. The company recovers phosphate from sewage sludge ash and processes it so that it is almost 100% plant available. REMONDIS Aqua also recovers phosphorus from the production wastewater of large dairy businesses using its innovative REPHOS method. There are, therefore, no limits to REMONDIS' innovative energy when it involves recycling one of the Earth's most important nutrients.

This last winter broke every single record. It was the darkest, snowiest, coldest and longest winter for decades and presented the towns and districts with some huge challenges. Gritters, road cleaners and road salt stores were in operation practically 24/7 and many found themselves pushed to their limits. Those cities that were able to rely on a strong private sector partner to carry out these tasks could count themselves very lucky indeed – such as the City of Essen where the waste management businesses are operated as a public private partnership with REMONDIS to offer a trouble-free service even if the winter is somewhat longer than usual.

The aim of REMONDIS' new educational initiative is to raise awareness for the need for more recycling through play. Its educational project, "THE RECYCLING PROFESSIONALS", was presented to the public for the very first time at the didacta in Cologne, the world's largest educational exhibition. One part of this project is the identically named board game which proved to be extremely popular at the exhibition. This award-winning game is not only fun to play, it also teaches children how to separate waste correctly. Teachers can also apply to REMONDIS to have theatre performances held at their schools about the different aspects of recycling. The response has been overwhelming. To be continued ...

I hope you enjoy reading this issue of REMONDIS aktuell!

Yours

A handwritten signature in black ink that reads "Thomas Conzendorf". The signature is written in a cursive, flowing style. Below the signature, the name "Thomas Conzendorf" is printed in a standard sans-serif font.

Thomas Conzendorf

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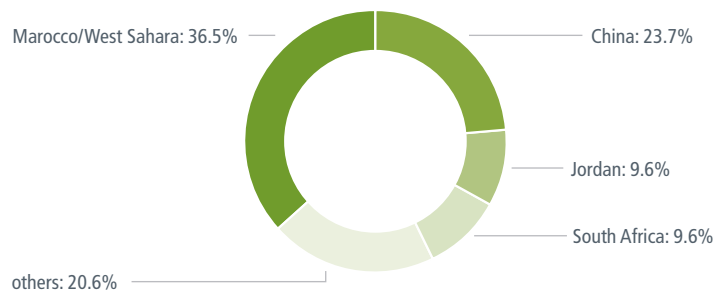
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Environmental services

Phosphorus – this vital element is running out

REMONDIS EXPLORES NEW WAYS OF RECYCLING PHOSPHORUS

Just four countries own around 80% of the world's reserves of phosphate that can be extracted with today's technology.



Life on our planet depends on a few vital elements. These include water, light, heat and phosphorus compounds which are essential for all living organisms. Phosphorus plays an important role here – namely in the fundamental structures and functions of these organisms. Without phosphorus, there would be no DNA and no cellular energy transfer. Flora and fauna need an ongoing supply of this substance. This nutrient, however, is becoming scarce. Around 0.09 percent of the Earth's crust is made up of various phosphorus compounds – looking at economic viability and today's technology, however, only a fraction of this can be mined. Reserves of this natural resource are gradually becoming depleted. It is high time for more phosphorus recycling. REMONDIS is well aware of this and is taking action.

In his search for the legendary "philosopher's stone" in 1669, the German pharmacist and alchemist, Henning Brand, came across a substance that lit up in the dark when it reacted with oxygen. For this reason he called it 'phosphorus' derived from Greek meaning 'bearer of light'. At that time, Brand had no idea that he had discovered one of the most important chemical elements for the existence of humans and indeed life on Earth. Phosphorus is not found in its pure form in nature but as a compound – primarily as phosphate in the Earth's crust. The largest supplies of raw phosphates – so-called rock – are located on the African continent in Morocco and West Sahara, in China as well as in the US state of Florida. This means that just four countries own around 80% of the world's reserves of phosphate that can be extracted with today's technology: together Morocco and West Sahara own 36.5%, China 23.7% and Jordan and South Africa 9.6% respectively. Russia and Kazakhstan both have reserves which are, however, small compared to the others. Simply looking at geopolitical aspects, therefore, Europe will have a problem finding a supply of phosphates over the medium term. And that's not all. The US Geological Institute estimates that continental reserves will only last for a few more decades.

Phosphorus will become increasingly scarce within just 50 years which in turn will make it more and more difficult to feed the world's population as global agriculture is dependent on phosphate fertilisers. At the same time, the quality of phosphate is gradually decreasing. The majority of the reserves are contaminated with cadmium and other heavy metals, some of which are radioactive. Indeed, the only known global reserves whose contamination levels are below EU limits are on Russia's Kola Peninsula. Experts believe that supplies of phosphate suitable for the production of fertiliser will have been used up before global oil reserves run out. Faced with these prospects, scientists and recycling experts around the world are looking at ways of recovering used phosphates and returning them to production cycles. Time is of the essence, however, as there are currently 7 billion people needing to be fed and this number is growing all the time.

One known source of phosphate is sewage sludge. Traditionally, farmers spread sewage sludge on their fields to use the phosphate in it as a fertiliser. REMONDIS RETERRA already recycles this material on an industrial scale – processing around 500,000 tonnes of sewage sludge ►



Life on Earth is simply not possible without phosphorus



The legislator is planning to issue a decree on phosphorus recycling

- ▶ each year and making an important contribution towards phosphate supplies. This direct use of sewage sludge helps to return approx. 10,000 tonnes of phosphorus to the natural cycle every year. Another way of recovering phosphate is to extract and use the precipitated or biologically enriched phosphates in the sewage sludge. For the most part, Germany and other countries incinerate sewage sludge that contains pollutants. Companies that have the necessary know-how are able to recover phosphate in its pure form from the incineration residue. A method that has a promising future and which is also being promoted by REMONDIS. Having spent several years researching this process, RETERRA is now able to process the phosphate in sewage sludge ash so that it is almost 100% plant available. The



“RETERRA is giving phosphate a helping hand by using targeted processing methods to improve availability for plants.” Aloys Oechtering, managing director of RETERRA GmbH

new product resulting from this method, RETERRA-PHOS, can be compared to Thomas phosphate which has been used in agricultural businesses for over 100 years now.

Keeping sewage sludge in mind during wastewater treatment

The choice of flocculation agent used in wastewater treatment has a major effect on how efficiently the phosphate can be recovered from the sewage sludge ash. The amount of iron contained in the incineration ash is the decisive quality factor determining whether the phosphate can be reused. Iron rich ash is generated when iron salts are used as a flocculation agent in sewage treatment plants. In such cases, the iron content is often greater than the phosphate content making it difficult or economically unviable to recover the phosphate. If, however, sewage treatment plants use aluminium salts – such as REMONDIS' own product ALUMIN – to precipitate the phosphate, then the ash has a low iron content and is more suitable for producing fertilisers and phosphorus. In view of this imminent shortage of fertiliser, the legislator is planning to issue a decree concerning the recycling of phosphorus. A nationwide switch from using iron salts to aluminium salts in wastewater treatment would, therefore, be desirable. REMONDIS already has the best possible product with ALUMIN to help sewage treatment plants adjust to the coming phosphorus recycling regulations and enable sewage sludge ash to be recycled in the best possible way.



A further method to recover phosphorus is also based on a REMONDIS patent. REMONDIS began carrying out preliminary experiments in this area over ten years ago – at that time to recover nitrogen. Breakthrough was achieved in 2008 with the successful development of the REPHOS® process which had been specifically designed for one of the plants run by the dairy business, Küstenland Milchunion. The Humana subsidiary, Küstenland Milchunion, is one of the most modern and efficient cheese factories in Germany. This large dairy business produces high quality milk products at its factory in Altentreptow in the state of Mecklenburg-Vorpommern. This plant generates production wastewater that contains organic matter and high concentrations of phosphorus. Conventional biological methods were unable to separate this phosphorus satisfactorily.

By carrying out intensive research work, REMONDIS was able to develop a model that has proven to be both an ecological and economical success. At the heart of the process is REPHOS® which uses an optimised MAP precipitation method (magnesium, ammonium, phosphate). Compounds of magnesium with ammonium and phosphate separate from the sewage sludge once the salts have been added – namely in the form of crystals containing high concentrations of phosphorus. Thanks to the special features of this technology, a further dewatering process is not necessary. One very special feature of this method is the fact that these crystals have the best possible shape – tiny white pellets similar to the consistency of coarse sand. This special structure is ideal for its later use in fertilisers. Moreover, the REPHOS® product dissolves very slowly in water. This means that the phosphorus is released gradually into the soil and is effective for a longer period of time. REMONDIS has integrated this process into an integral multi-phase concept for Küstenland Milchunion. At the Altentreptow cheese factory, the organic matter is first removed from the

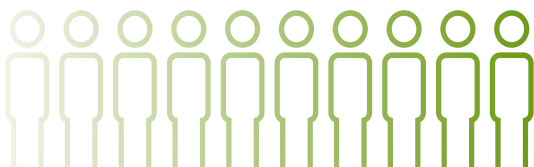
wastewater – ahead of the REPHOS® stage – and used to make biogas. To be able to do this, REMONDIS built a combined heat and power plant on the factory grounds with the electricity generated being fed into the grid operated by E.ON. This clever combination of generating energy and recovering phosphorus makes the system highly commercial and cost-effective. The REPHOS® products are also in high demand. Each year, around 280,000 tonnes of this mineral are used in Germany alone to produce fertilisers. This patented REMONDIS process can be used in all industrial businesses which generate wastewater containing high levels of phosphorus, for example in factories producing starch or refining cooking oil.

RETERRA, ALUMIN, REPHOS – the subject of phosphorus recycling is already playing an increasingly important role in many business divisions and production areas within the REMONDIS Group. Together with its sister company SARIA, the company is continuing to research different ways of recovering this vital nutrient – so that farmers can carry on growing abundant supplies of food in the future, too.

Whether it involves using sewage sludge, processing incineration ash or treating wastewater – REMONDIS already recycles phosphorus on a grand scale



The crystals recovered by the REPHOS® process contain high concentrations of phosphorus and are ideal for their later use in fertilisers



Phosphorus recycling is the order of the day.
7 billion people need to be fed

The mission to save raw materials

REMONDIS LAUNCHES EDUCATIONAL PROJECT AT THE DIDACTA IN COLOGNE

REMONDIS®

Whether it be a smartphone, tablet computer or digital camera – modern life is resource intensive. Products are being replaced at an ever faster rate, the world's population continues to grow quickly and our natural resources are being used more and more intensively. All this is leading to our planet's reserves being drastically reduced and that's not all: global demand for raw materials is increasing all the time. The consequences are sobering: many of the materials needed to produce new technologies will have been used up by the end of this century. With these facts mind, REMONDIS decided to launch an educational project – developed in cooperation with experienced teachers – to make children and teenagers more aware of these problems. Its project "THE RECYCLING PROFESSIONALS" was presented to the public for the very first time at the didacta exhibition and proved to be a great success for all those involved!



There was much praise for REMONDIS' wide-ranging educational project at the didacta. At the heart of this integral concept are educational theatre performances. A group of teaching experts – all of whom have decades of experience of working with children and teenagers – are on the road to promote the conservation of natural resources by making children at kindergartens, primary and secondary schools (up to the age of 16) more aware of the subject using modern 'edutainment'. One of the more unusual aspects of this project is the fact that these experienced teachers are also qualified actors and know exactly how to motivate those taking part in the events.

Award-winning board game

There was certainly no time to be bored at the didacta exhibition stand with the singing, playing and competitions that went on during the five days. The visitors to the stand were not only able to talk in detail about the subjects of recycling and the scarcity of raw materials but also had the opportunity to try out and win their own "RECYCLING PROFESSIONALS" board game. This game is also part of the project and helps to teach children and young teenagers how to segregate household waste and recyclables correctly. At the top of every hour, one of the teaching experts – who kept the visitors informed and entertained throughout the day – raffled off ten of these games which had also won the 'Promotional Gift Award'. "We deliberately chose the board game because, unlike the many digital games, board games get people to sit down together around a table and so promote social skills", explained Herwart Wilms, managing director at REMONDIS Assets & Services GmbH & Co. KG. "This is particularly important for subjects such as recycling and waste segregation as we know that waste segregation works best in residential areas where people are in close contact with each other", Wilms continued.

Moreover, a number of the different theatre modules were presented at the didacta during which the visitors were able to test their knowledge. From nursery rhymes, to building blocks, to interactive sorting games and quizzes – the individual modules have been created by experienced teaching experts and have been adapted to the exact

Everyone joined in at the didacta singing, playing games and taking part in the competitions





requirements of the different age groups. At the end of Germany's leading educational trade fair, the names of all those who had taken part in the raffles over the previous five days were once again put into a hat and ten winners drawn for an exclusive educational theatre performance given by teachers from the German state of North Rhine-Westphalia. The shows, which offer a very special kind of learning experience thanks to the rapidly changing media and the state-of-the-art technology used, will be held before the end of the summer term from the end of June to the beginning of July.

The future of the RECYCLING PROFESSIONALS

What are the future plans for the RECYCLING PROFESSIONALS? Further theatre performances are expected to also be held outside the state of North Rhine-Westphalia during the 2013/14 school year. Besides these performances, one important step towards implementing this educational project

is to develop further accompanying material. To this effect, questionnaires were handed out to the visitors at the exhibition stand at the didacta to hear their feedback. A total of 600 questionnaires were filled in providing the company with important ideas and suggestions on how to further develop the project. Working together with experienced teaching experts, a modular teaching kit is to be created on "sustainability" and "resource scarcity" including a variety of teaching aids such as worksheets, games and pictures to make children and teenagers more aware of these issues. This teaching kit will be available to teachers during the next school year.

All in all, the RECYCLING PROFESSIONALS at the didacta in Cologne were able to make contact with around 2,000 institutions from across the whole of Germany. There is nothing, therefore, stopping this mission to save raw materials from being a total success!

Learning about how to separate waste is fun – with our "RECYCLING PROFESSIONALS" board game

"We deliberately chose a board game because, unlike the many digital games, board games get people to sit down together around a table and so promote social skills." Herwart Wilms, managing director at REMONDIS Assets & Services GmbH & Co. KG

Recycling

Initiative to promote alternative building materials

CUSTOMERS IMPRESSED BY THE QUALITY AND COST-EFFECTIVENESS OF THE SECONDARY AGGREGATE GRANOVA®



Local authorities often find it difficult to carry out earthworks and road construction projects due to a lack of funds. One cost-effective and environmentally friendly solution to this problem is to switch from naturally sourced building materials to using secondary mineral aggregates. Few people, however, are aware of the advantages of this secondary raw material. Several businesses belonging to the REMEX Group – a REMONDIS company – have now begun a comprehensive information campaign to change this state of affairs.

At the heart of this joint initiative is the quality-assured secondary aggregate, granova®. In accordance with environmental regulations, this material can be used to build roads, noise protection embankments and other types of embankment as well as as a backfill and fill material. For the decision-makers working in the construction industry, this secondary aggregate is an ideal alternative to primary raw materials such as gravel, sand, basalt and limestone. The two main advantages of this material are that it helps to sustainably conserve valuable natural resources and at the same time cuts costs. As a result, projects can be

carried out that would otherwise be impossible to finance if primary building materials were used. Savings of up to 1 million euros per kilometre of road are, for example, possible for road construction projects and in some cases noise protection embankments can be built at no cost at all.

Greater awareness needed

Despite these obvious advantages, the construction industry still tends to hold back from using these secondary aggregates. Berthold Heuser, an authorised signatory at the Düsseldorf-based company, REMEX Mineralstoff GmbH,



1,300,000 tonnes
p. a.

Each year, the REMEX Group produces over 1.3 million tonnes of the secondary aggregate, granova®, at seven different locations

The use of secondary aggregates is determined by stringent legal specifications and regulations covering both technological and ecological issues

commented: "Specialists now know that secondary aggregates are absolutely suitable building materials. There is often a feeling of antipathy towards them in tender approval processes, however, which can be put down to ignorance. Moreover, some of the decision-makers believe that they are less likely to make a mistake if they opt for conventional, tried and tested primary building materials."

Astrid Onkelbach, marketing and product manager at REMEX, also believes there is much ground still to be covered: "There are still so many areas where these secondary aggregates could be used and yet decision-makers are shying away from them even though they have the same physical properties as primary materials and even offer more environmental advantages." What is needed is qualified advice and objective information and the companies involved in this initiative are intending to step up their efforts to provide precisely this.

Production in accredited facilities

granova® is made from the incinerator bottom ash (IBA) resulting from the thermal treatment of municipal waste. The ash undergoes a systematic mechanical process once any metals such as iron, copper and brass have been removed for further recycling. Having been refined, the IBA aggregate (IBAA) is stored for a period of three months. The aggregate is then graded according to its composition and delivered to the customers in a variety of grain sizes. Each year, the REMEX Group and its specialist German subsidiaries and associated companies produce over 1.3 million tonnes of the secondary aggregate, granova®, at seven different locations. All of the companies are accredited specialised businesses with extensive know-how and comprehensive experience.

Stringent quality assurance including a returns guarantee

Each and every collection, processing and production stage involved in the production of granova® undergoes extensive quality assurance controls. Our highly trained employees and state-of-the-art technology ensure that only high quality secondary aggregate leaves our plants. The final product stands out, therefore, thanks to its predetermined and certified quality. Proof is provided that the aggregate

A secondary aggregate with a host of advantages

granova® provides a whole range of advantages in earthworks and road construction projects:

- Ecologically sensible way to conserve primary raw materials
- Great cost savings compared to conventional building methods
- Security of using a quality-assured product that is fit for purpose
- Use of a technologically high quality building material
- Reduction in CO₂ emissions as less energy is used in the production process
- Sustainable building process promoting the recycling sector
- Proven to be environmentally compatible

is not only technically suitable but also has the correct material and water supply properties – and this proof is furnished by approved, independent testing centres.

In order to provide additional security, REMEX offers an unusual extra service: granova® IBAA is the first secondary aggregate in Germany to be sold with a 30-year returns guarantee. Besides supplying the material, the company also offers a supplementary package of comprehensive additional services – providing support during the planning of the project and continuing all the way through until the building work has been completed. Such services include helping their clients to apply for the relevant permits, carrying out additional material tests at the building site, drawing up all documentation and recording operations in a logbook.

A further area of application: concrete products

Besides this joint information campaign, the group of companies is also looking to promote innovations and tap into other areas of use. One example of a further possible area of use for granova® is in the production of concrete goods and paving stones made of concrete. A certain proportion of the naturally sourced aggregate can be substituted here with secondary mineral materials without the quality of the final product being affected in any way. This method is already used in the Netherlands and is also being promoted by the government there through appropriate regulations. REMEX's Dutch subsidiary, Heros Sluiskil B.V., already produces a granulate that is used as a substitute for natural aggregate in concrete production processes.

Typical areas of use for granova® are in road beds under a watertight surface made of asphalt or concrete as well as for building landfills and noise protection embankments

The Netherlands

Outstanding recycling

THE REMEX GROUP IS A SUCCESS IN THE BENELUX COUNTRIES, TOO



REMEX' Dutch firm, Heros Sluiskil B.V., is among the top ten most successful companies in the country – thanks to its nomination for the national "TV Success Award 2012". Throughout the year, the TV channel RTL 7 presented a number of particularly successful firms from a variety of sectors to its viewers. As a result, Heros has become one of the leading businesses in its field.



these Dutch specialists have now taken on an international pioneering role using IBA in reinforced and non-reinforced concrete.

Over half a million tonnes of secondary aggregate

Heros' head office and plant are located on a 45-hectare site in Sluiskil, a Dutch city with excellent traffic connections around 40 kilometres west of Antwerp. Each year, the company processes approx. 550,000 tonnes of IBA at this plant, the majority of which is used as a substitute building material in road construction and earthworks projects. Moreover, Heros also processes around 140,000 tonnes of scrap metal recovered from the waste incineration ash and operates a facility to biologically treat over 500,000 cubic metres of contaminated industrial wastewater each year. In addition, the Heros grounds are home to a plant producing biogas and biodiesel.

Waterway on the doorstep

Heros Sluiskil has its own harbour facilities with railway sidings and a 500-metre quay to store and transport the materials. By having direct access to the canal, the company has everything in place for it to be able to ship materials effectively. Even large ships transporting loads of 25,000 tonnes and with a draught of up to 8 metres are able to dock here.



Heros leads the market for processing incinerator bottom ash (IBA) and recovering metals in the Benelux countries. Moreover, this rapidly expanding company focuses on developing and building up new fields of application. One such recent development has been to use its state-of-the-art technology to produce high quality granulates for the ceramics industry and as an aggregate for concrete. In October 2012, a new directive came into force regulating the use of processed materials as an aggregate for concrete and as a substitute for natural aggregate materials and



"Together with our parent company, REMEX, we have everything in place for our business to continue to enjoy strong growth."

Arie de Bode, managing director at Heros Sluiskil



The REMEX Group's Dutch company also produces and markets secondary aggregate under the granova® brand name

REMEX – Facts & Figures

The REMEX Group – a REMONDIS company – specialises in processing minerals and producing building materials. REMEX products are used in road construction and earthworks projects, for constructing railways and making concrete, in noise protection embankments and road verges as well as to build landfills and enable landscapes to be revegetated. The REMEX Group currently has more than 60 locations in Germany, the Netherlands, Italy and Switzerland.

China

Working together for greater sustainability

REMONDIS AND ITS CHINESE PARTNERS DEVELOP RECYCLING SOLUTIONS FOR CHEMICAL PARK IN SHANGHAI



REMONDIS Industrie Service International continues to grow and has now become a shareholder in a waste management and recycling company handling hazardous waste based in Shanghai, China. This joint venture places the company in an excellent position enabling it to unite the waste management structure already in place with new types of recycling technology.

REMONDIS®

With more than 25 million inhabitants, Shanghai is by far the biggest industrial centre in China. Besides its financial sector, this cosmopolitan city is also home to a large number of international industrial businesses and their suppliers – from the chemicals and automobile industries, to shipyards, to mechanical engineering and shipbuilding.

REMONDIS also works in this megacity: in November 2012, REMONDIS Industrie Service International GmbH purchased a 50 percent share in JiHui Environmental Protection & Science & Technology Co. Ltd. which is now being run under the name, JRS-JiHui-REMONDIS-Shanghai.

Qizhou Wu, Vice-Director of the Environmental Protection Department (EPD) Shanghai



Focusing on recycling

The joint venture, which is owned by REMONDIS and its Chinese partners Zhenghua Liu and Wei Xie, is to focus on the recycling of hazardous waste. JiHui already has some experience of recycling such materials, in particular electroplating sludge, waste oil and emulsions, metal drums and plastic IBC containers. Just like REMONDIS, the company focuses on processing and recycling. This year, the joint venture is intending to process around 60,000 tonnes of hazardous waste. REMONDIS has brought technological know-how into the business which will open up new prospects for the company so that it can enjoy quality-oriented growth.

JRS-JiHui-REMONDIS-Shanghai is certainly located in the best possible place: it is based in the Shanghai Chemical Industry Park (SCIP), China's largest industrial park for chemical companies. The 32-square-kilometre grounds are home to the primary Asian production facilities of numerous prestigious companies including BASF, Evonik, Bayer and DuPont as well as Sinopec Shanghai Petrochemical,

one of the country's biggest petrochemical businesses. The joint venture already has strong business ties to the firms based in the SCIP and growth prospects are good, especially as JiHui already operates a recycling centre in the park. This is extremely well designed and has state-of-the-art technology and will now be further expanded by the three partners.

The local Environmental Protection Department (EPD), responsible for environmental issues in the park, is in favour of hazardous waste being recycled reflecting the ecological targets of the Chinese government. "The central Chinese government is highly committed to promoting all possible measures to protect the environment. Besides supporting initiatives to optimise air and water quality, top priority has been given to the materials and energy recycling of waste", explained Jürgen Feiler, managing director at REMONDIS Industrie Service International. "The market for recycling and disposing of hazardous waste in China is technically highly demanding and will provide REMONDIS with diverse opportunities to bring in its many years of experience."

Already well established in the north

This Shanghai joint venture is REMONDIS Industrie Service International's second pillar of business in the



JiHui REMONDIS Shanghai's new company grounds

People's Republic: four years ago it set up a joint venture to recycle and dispose of hazardous waste in the north Chinese city of Changchun. The success and the positive experience it has enjoyed here with the authorities as well as with its customers and Chinese partners resulted in it deciding to play a greater role in the hazardous waste market in China. The Government's push for industrial waste to be handled more safely and its plan to end the use of landfills will increase market potential in the future, too.

Shanghai Chemical Industry Park: with the company located right next to the various production plants, it is close to its customers and can offer them highly flexible services

VIP guests attend official opening

A large number of customers attended the official opening of the company in Shanghai as well as numerous prominent guests including Mr Wu, Vice Director of the city's Environmental Protection Department (EPD), Stefan Möbs, Deputy Consul General of the German Consulate General, and Jan Nöther, managing director of the German Chamber of Foreign Trade. Thomas Breitkopf, board member of REMONDIS AG & Co KG, took great pleasure in welcoming the guests.



Jan Nöther (left), managing director of the German Chamber of Foreign Trade in Shanghai, and Jürgen Feiler, managing director at REMONDIS Industrie Service



Wei Xie, JRS Shanghai



(from left to right) JRS co-partner Wei Xie, Qizhou Wu, Vice-Director of the Environmental Protection Department (EPD) Shanghai, Hongbo Jiang, REMONDIS Shanghai, and JRS co-partner Zhenghua Liu



Australia

Back to the future

NORBERT RETHMANN VISITS THE NEW COMPANY LOCATIONS IN AUSTRALIA



An opportunity that must never be missed: whenever new companies have joined the RETHMANN Group, Norbert Rethmann has always been one of the first people to visit the "new" head offices and branches. He introduces himself to the employees with the same phrase – "My name is Norbert Rethmann." – and then asks them to explain the business to him in detail.

Thanks to its acquisition of Thies Waste Management Services, REMONDIS Australia now has an additional 25 business locations as well as 600 new employees and 504 further vehicles

Thus, in November last year, the honorary chairman of the supervisory board travelled to Australia together with his wife, Irmgard, a former member of the supervisory board, Heinrich Zölzer, and a former PR officer, Claus M. Andreas, to visit a number of the branches previously owned by Thies Waste Management Services, a company taken over by REMONDIS just one month earlier (see also Ra 2/2012 and 3/2012). His trip began with a visit to REMONDIS Australia's head office in Mascot (Sydney) where CEO Luke Agati, CFO Mark Nusselein and Peter King, general manager for business, development & strategy, formerly from Thies, gave a general overview of the Australian waste management market and the company's new branches.

Thanks to its takeover of Thies Waste Management, REMONDIS has become the fifth-largest waste management company in Australia. By purchasing Thies, REMONDIS has increased its portfolio by a further three recycling facilities, six landfills, 13 transfer stations and three small shareholdings. All in all, REMONDIS Australia

now has an additional 25 business locations as well as 600 new employees and 504 further vehicles. Accompanied by the knowledgeable Siegfried "Sigg" Hanisch (business relations manager), Norbert Rethmann's first port of call was, of course, to the depot in St. Marys (Penrith). This was the company's first ever branch in Australia and was founded together with the container producer Schäfer in 1983 after they had been awarded their first waste management contract by the City of Penrith.

The next day, Norbert Rethmann visited the Somersby/ Gosford depot – approximately two hours from Sydney – which is responsible for the municipal Central Coast logistics contract (collection of household waste, garden waste and recyclables) until 2018. Here, too, it was possible to see the progress that had been made in re-branding the former Thies vehicles.

The next stop on his itinerary to see the new Thies facilities and branches was the Swanbank landfill near



◀ Visit to Rhenus' office in Singapore. (left to right) Heinrich Zölzer, Uwe Oemmelen (Rhenus board member), Norbert Rethmann, Irmgard Rethmann, Ms N. Oemmelen

A group photo in front of the ▶ collection vehicles at St. Marys depot (near Penrith). St. Marys was RETHMANN's first branch in Australia (1982)



◀ Visit to the Rocklea transfer station where the b-doubles are loaded. Centre: CEO Luke Agati; 2nd from left: Peter King, Director and General Manager Strategy & Development, 3rd from right: Siggie Hanisch, Manager Business



▲ At REMONDIS' head office in Mascot (Sydney). In the centre, CEO Luke Agati



Brisbane. This 250-hectare area was a former underground and open cast coal mine and is now used to deposit over 1.1 million tonnes of household and commercial waste, excavated earth, wastes requiring special supervision and contaminated soils every year. Swanbank is one of the largest landfills in the country. A second landfill section for a further 18 million tonnes is currently undergoing the approval procedure. The huge, 26-metre long, b-double high volume side-tippers were of particular interest which were being loaded at the Rocklea transfer station close by – the next step of the visit. The waste collection vehicles from Brisbane first empty the household waste into a large bunker. A wheel loader then pushes the waste into the open b-doubles which are waiting on a road at a lower level. By using this method, one single b-double truck can transport material from up to nine waste collection vehicles to the landfill where the unloaded waste is immediately covered with excavated earth. The visitors were pleasantly surprised by just how clean this huge landfill is.

Peter King also pointed out the approx. two and a half metre flood mark at Rocklea really bringing home just how high the flood waters were at the transfer station in January 2011. It is unbelievable just how quickly this facility has been returned to its impeccable state. Norbert Rethmann, his wife and Heinrich Zölzer then left Australia to visit Rhenus' office in Bangkok. Before arriving in Australia, they had stopped over in Singapore to call in on Rhenus' office there, from where Rhenus board member, Uwe Oemmelen, organises the group's Asian business.

Former PR officer, Claus M. Andreas, however, remained in Australia for a few more days to visit further "Thiess"

facilities with Siggie Hanisch. The first two locations on this second leg of the visit were the Hume sorting plant and the Mugga Lane landfill located close to Canberra. Both made an excellent impression. The plant in Hume sorts the contents of the recycling bins (paper/cardboard/card, glass, metals, plastics) from the whole of the Australian Capital Territory. The landfill now being run by REMONDIS is to be expanded from 2015 onwards and its operating period extended by a further 20 years.

The group then continued on to Melbourne to see the Hallam depot with its 80 vehicles and 122 employees which is responsible for collecting municipal waste from a large number of districts. Here, too, the vehicles have all been re-branded. The final leg of the journey included visits to the Picton/Wollondilly depot/transfer station and the extremely well-kept Unanderra/Wollongong depot, both situated south of Sydney. The Wollongong depot is located in a commercial park close to the industrial port from where, for example, hard coal is shipped to Europe.

Indeed, all of the new "Thiess" facilities made a great impression on those visiting the country with Norbert Rethmann and they are all well set up for a successful future with REMONDIS in Australia.

One thing is certain: Norbert Rethmann's visit has contributed greatly towards further cementing the former Thiess employees' sense of belonging within the group.

Claus M. Andreas

A b-double high volume side-tipper at Swanbank landfill near Brisbane



Water resources management

Expansion in the Netherlands



REMONDIS AQUA STRENGTHENS ITS PRESENCE ON THE DUTCH MARKET

Accelerated internationalisation and a greater technological lead: REMONDIS Aqua has once again succeeded in expanding its business by acquiring the industrial wastewater division from the Dutch company, Delta N.V.. Dutch industrial customers are now already benefiting from innovative water management systems and attractive full-service packages.

REMONDIS®

REMONDIS Aqua is already responsible for managing numerous complex wastewater treatment facilities in the Netherlands

For the last three years now, REMONDIS Aqua has been operating the wastewater facility owned by the specialty chemicals company, Akzo Nobel, at the industrial harbour in Rotterdam enabling it to demonstrate both its expertise and range of professional services in the Netherlands, too. Its takeover last December of two of Delta N.V.'s subsidiaries paved the way for the next logical step: creating the Dutch subsidiary, REMONDIS Aqua B.V., to unite the REMONDIS Aqua Group's international experience of working with industrial customers with the extensive market knowledge of the acquired wastewater specialists, DELTA MBR B.V. and Triqua B.V..

Bespoke offers with comprehensive services

By taking over the former Delta subsidiaries, REMONDIS Aqua now has a wide presence on the Dutch market and is a contracting partner for other prestigious industrial

customers in the food, chemicals and building supplies sectors. Well-known brands such as The Dow Chemical Company, Agip KCO and FrieslandCampina now rely on the expertise of this REMONDIS specialist company.

One of the main goals of the company's portfolio is to provide as wide a range of wastewater management services as possible so that its industrial customers are able to concentrate fully on their core business. Besides operating and maintaining existing wastewater facilities, the company also upgrades and modernises existing plants or builds completely new facilities. Its services include planning, constructing and financing such wastewater facilities as well as operating and maintaining them so that its customers no longer need deal with wastewater management at their business.

By cooperating with scientific institutes and carrying out its own laboratory studies, REMONDIS Aqua is able to procure the necessary know-how to give it a decisive competitive edge.

At the heart of progress

Based in the Dutch university town, Wageningen, REMONDIS Aqua B.V. is perfectly located to keep its finger on the scientific pulse of innovative water technology. There is a great demand within the Dutch industrial sector for facilities and services to supply water and treat wastewater, one of the reasons for this being the more stringent regulations that have been imposed by the authorities there. Moreover, the Government has declared wastewater recycling to be one of its political goals in order to conserve its freshwater supplies which are already becoming scarce, especially in the coastal regions. Thanks to its expertise in the areas of research and innovations, REMONDIS Aqua B.V. has the perfect set-up to meet these local requirements and is able to offer vital technology such as membrane filtration to solve the tasks on hand.

Innovations to benefit customers

One of REMONDIS Aqua's strengths is its innovative energy. Its core areas of expertise include cutting-edge wastewater treatment methods such as biological wastewater treatment using membrane filtration – a process that enables a precise separation of material fractions. Over the coming years, increased focus will also be put on the anaerobic treatment of industrial wastewater as such processes significantly increase the energy efficiency of wastewater treatment. REMONDIS Aqua already operates a number of such plants and has all the experience needed to ensure this process remains stable and effective. The technology used is being continuously further developed in a wide range of pilot facilities and adapted and fine-tuned to meet the individual requirements of the company's various industrial customers. Dr Martin Lebek, an authorised signatory

at REMONDIS Aqua GmbH & Co. KG, commented: "Our own research and development activities, the exchange of information with our scientific partners and our comprehensive expertise in the area of professional water management all provide the best possible setup for developing groundbreaking solutions – an ideal basis for continued success in the Netherlands."

(from left to right) René van 't Hoft, legal adviser Delta N.V., Dr Dave Horians, business development Delta N.V., Dr Martin Lebek, authorised signatory REMONDIS Aqua, and Dr Eckart Döpkins, managing director REMONDIS Aqua B.V., at the closing of the transaction in Amsterdam



Water resources management

Cost-effective water management

REMONDIS AQUA CREATES INNOVATIVE SOLUTIONS FOR TURKISH INDUSTRIAL PARKS



Being one of the emerging markets, Turkey has stood out thanks to its rapid economic growth. One of the driving forces behind this dynamic development is the network of investment centres located all around the country: around 60 technology development and free trade areas as well as more than 260 organised industrial parks in 80 provinces. An ever growing number of these industrial estates are choosing REMONDIS to be their partner to operate their wastewater facilities.

REMONDIS®

These organised industrial parks in Turkey create an investor-friendly area for companies by offering them tax advantages and a fully developed infrastructure including social facilities. They offer everything that is needed to encourage industrial businesses to settle in the region: good traffic connections, a low-cost supply of energy, fast communication networks and a wide range of services – including reliable water and recycling systems.

One in ten people living in Turkey already benefit from the water management services provided by the subsidiary REMONDIS Su ve Atiksu, which was founded in 2007

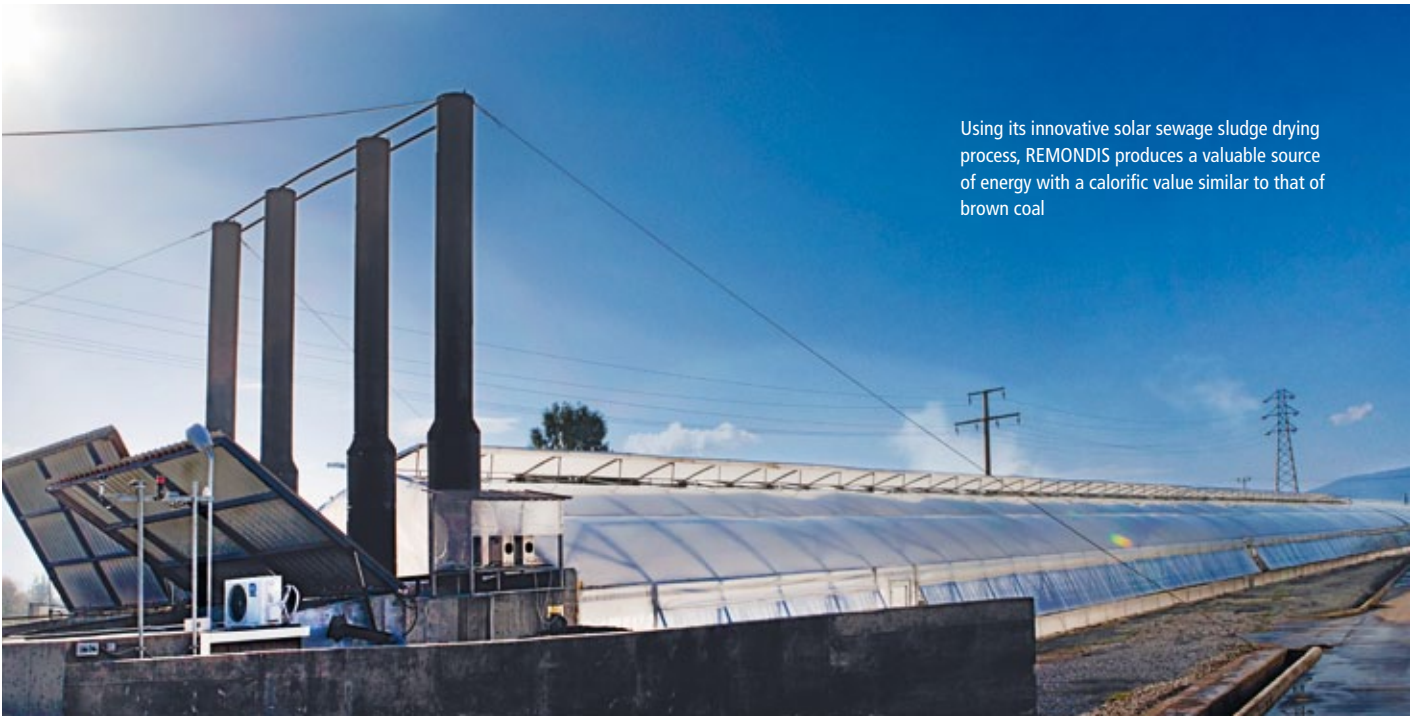
An attractive allround service

The Turkish subsidiary REMONDIS Su ve Atiksu is a competent specialist for operating and maintaining wastewater treatment facilities. This company provides water management services at the organised industrial parks in the provincial capitals of Antalya, Bolu, Izmir, Isparta and Tekirda. Up to 80,000 cubic metres of water are

processed at each facility every day. The free trade zone, IZBAS, in Izmir also uses REMONDIS Su's sewage treatment plant service and has signed an additional contract with the company commissioning them to operate their water supply facilities and sewer networks.



Every day, REMONDIS processes up to 80,000 cubic metres of water at each of the facilities under its control



Using its innovative solar sewage sludge drying process, REMONDIS produces a valuable source of energy with a calorific value similar to that of brown coal

Transforming sewage sludge into energy

Besides running the sewage treatment plants in these industrial parks, REMONDIS Su's activities also focus on developing efficient and sustainable processes to dry out sewage sludge. The reason behind this: by removing water from the sludge, the weight and volume of the sewage sludge are greatly reduced leading to much lower transport and disposal costs. Moreover, the resulting material is a valuable source of energy with a calorific value similar to that of brown coal.

There is a great potential in Turkey for this work: more than 575,000 tonnes of sewage sludge are generated in the industrial sewage treatment plants alone each year – a huge volume of source material whose volume and water content can be reduced by up to 90 percent or more if suitable drying-out processes are used. For the most part, REMONDIS Su uses two drying methods which can also be combined with one another: the conventional thermal method using fossil fuels and the trend-setting solar drying process.

Pioneering solar drying facility

REMONDIS Su has been playing a leading role in the innovative field of solar drying processes. In the summer of 2012, for example, Turkey's first fully automated solar sewage sludge drying facility was opened in the City of Fethiye. Its structure is similar to that of a greenhouse enabling it to make full use of the sun's rays. With this facility, up to 12,000 tonnes of sewage sludge can be

dried each year. REMONDIS Su built and financed the plant. Today, the company is responsible for operating the facility in addition to its other tasks which include running the city's municipal sewage treatment plant.

Cooperation work with cement producers

This resource-friendly and cost-effective solar sewage sludge drying process is also of great interest to the organised industrial parks in Turkey. REMONDIS Su is, therefore, developing special projects to build and operate solar drying facilities in these industrial zones. At the same time, it is promoting cooperation projects with the Turkish cement industry. The dried sewage sludge can be used as a substitute for fossil fuels in these plants – a further opportunity, therefore, to reduce consumption of conventional fuels and cut CO₂ emissions.

REMONDIS offers a wide range of water and environmental services to the companies located in the organised industrial parks

REMONDIS is well established in the water and recycling sectors in Turkey with its nationwide network of business locations





The sewage treatment plant in Genthin is one of the highest performing plants of its kind in the new German states

Water resources management

20 years of success

REMONDIS WATER MANAGEMENT IN THE NEW GERMAN STATES



Water management systems in the east of the country were in a difficult state at the time of the reunification of Germany: whilst those working in the old GDR did all they possibly could to ensure there was a supply of drinking water throughout the country, too little money had been invested in the infrastructure. This resulted, for example, in many sections of the pipe networks in the new states having to be replaced. Private sector commitment was needed here to achieve this. Soon after the reunification of the two countries, therefore, a number of companies decided to offer their water and environmental services in the east of Germany – among them the family-run RETHMANN Group.

Today, the REMONDIS Group is a reliable partner for the local authorities in the new German states

Back in 1992, the City of Genthin awarded the RETHMANN Group a contract to handle the treatment of its wastewater. This involved building a new sewage treatment plant – one of the highest performing in the new German states – and then gradually extending it to include a biogas plant and a facility to clean the insides of tanks. In 1993, EURAWASSER, a company belonging to the group, concluded a public private partnership agreement with the municipal water and wastewater association, WWAV, covering the City of Rostock and surrounding districts. This contract was the first concession

model for water in the new German states as well as the first operator model for wastewater of this magnitude. Over the years, the REMONDIS Group has proven itself to be a reliable partner for local authorities in the new German states: in Mecklenburg-Vorpommern alone, for example, EURAWASSER supplies over 400,000 people with fresh water. An official function is currently being organised to celebrate the 20 years of sustainable success of this public private partnership which will be taking place in June. "By working together, we have succeeded in reaching all of our



Frank Szymanski
Mayor of Cottbus



Angelika Gramkow
Mayor of Schwerin

ambitious goals”, said WWAV managing director, Katja Gödke, commenting on her positive experiences of working with the private sector operator in Rostock.

“We have really benefited from having EURAWASSER work alongside the municipal business right from the very beginning. It has truly been a win-win situation for both partners”, commented Angelika Gramkow, Mayor of the state capital Schwerin. Another anniversary is being celebrated with its municipal partner there this year: EURAWASSER has owned a 49 percent share in Wasserversorgungs- und Abwasserentsorgungsgesellschaft Schwerin (WAG), a subsidiary of the utilities company Stadtwerke Schwerin mbH, since its foundation ten years ago. WAG supplies water to more than 100,000 local inhabitants. Moreover, the company is responsible for operating the wastewater treatment facilities owned by the municipal business Schweriner Abwasserentsorgung (SAE). This cooperation also includes additional water services such as special laboratory work. WAG has a strong partner, Aqua Service Schwerin Beratungs- und Betriebsführungsgesellschaft (AQS) and the REMONDIS Group, to enable it to provide such services.

Lausitzer Wasser is one of the largest and most prestigious water management businesses in the German state of Brandenburg. The REMONDIS Group works together with this water association in a public private partnership supplying water to and treating wastewater from the approx. 135,000 local residents as well as commercial, industrial and retail businesses. “We know that we can rely fully on Lausitzer Wasser when it comes to investing in the region’s future. The company is, for example, providing know-how to restore the landscape of the Lausitz mining region”, explained Frank Szymanski, Mayor of the City of Cottbus.

Wasserverband Lausitz Betriebsführungs Gesellschaft, a company belonging to Lausitzer Wasser, is located practically right next door. Here, in the south of Brandenburg, REMONDIS is responsible for water supply and wastewater treatment in the Lausitzer Seenland region. No-one from this company, by the way, understands the ongoing criticism currently being expressed in Germany about the new EU directive on awarding water concessions. After all, numerous experts believe that the new directive will not only lead to greater transparency but also to increased legal certainty. Dr Roland Socher, chairman of the Wasserverband Lausitz, commented: “We really cannot understand the current debate in Germany. We have been working within the framework of a service concession for many years. Our services are both successful and of a very high quality and benefit the consumers in the region – the water management facilities remain in the hands of the local authorities, the services are provided by REMONDIS.”

The fact that today’s debates about water management in the east of Germany involve administrative guidelines rather than contaminated drinking water can be put down to the work carried out by private sector companies.

INTERNATIONAL GUESTS IN ROSTOCK

VIP visits to EURAWASSER Nord:

In January, the company welcomed Roman Skudnjakow, government spokesperson for the Nizhny Novgorod region, to its offices. During his trip, he toured the central sewage treatment plant to get an overview of how it is set up and run as well as to learn more about the ‘Rostock Model’ which manages water resources. In March, Behçet Saatçı, Mayor of the Turkish coastal city of Fethiye, was invited to Rostock. REMONDIS Aqua designed, built and financed a solar sewage sludge drying facility in Fethiye which was put into operation in 2012. Just as is the case in Rostock, REMONDIS Aqua works very closely with the local authorities in Fethiye. The visit, therefore, was an excellent opportunity for all those participating to exchange information and experiences.

EURAWASSER NORD LAUNCHES NEW WEBSITE

www.eurawasser-nord.de, has been online since the beginning of the year and includes a wide range of new content and images. It offers its customers many advantages including the possibility for all correspondence with the company to be handled via the Internet.



Water is and must remain simply water

A COMMENTARY BY PROFESSOR KARL-ULRICH RUDOLPH ON THE CONCESSIONS DIRECTIVE FOR WATER



Water, our most important foodstuff, must always satisfy the most stringent quality standards. Looking at the reality of the German water sector, therefore, it should make absolutely no difference whether water flows through publicly owned or privately owned pipes. The current debate about the EU's new Concessions Directive is truly superfluous.

A European Citizens' Initiative, called "right2water", has been set up by European public service trade unions and has turned the subject of water supply into a kind of battle between 'the good and the bad'. As far as they are concerned, public sector water companies are per se 'good'. The private sector, on the other hand, is described as being a gang of greedy companies wishing to cheat local inhabitants out of their money and happy to wantonly allow water quality and water infrastructures to deteriorate in order to make a profit. Such polemics could not be further from the truth.

The same people, who have been alarming the public talking about the spectre of a private sector water monopoly and collecting signatures on the street to promote the "human right to water", also go to their favourite drinks cash-and-carry store without a second thought to buy crates of drinking water that are supplied exclusively

by private sector companies. Quite rightly no-one is questioning this water as the quality of such products has remained at a consistently high level for decades now. At the same time, we all use a good 90 percent of the valuable water piped to our houses either to clean ourselves or our homes or as a means to transport human waste. Indeed it is of very little importance to the water whether it flows through publicly owned or privately owned pipes. Water quality is stipulated by strict legal regulations and these are absolutely binding for each and every operator. In fact, both public and private sector water companies have to adhere to stricter quality rules when it comes to tap water than do the previously mentioned mineral water producers. Of course it is a human right to have access to clean water. No-one would seriously dispute this fact. This human right, however, could become an expensive luxury if either side should have a monopoly on the water distribution market.

The majority of our drinking water already comes from private sector suppliers, namely in the form of bottled mineral water



Prof. Karl-Ulrich Rudolph

is head of the IEEM – Institute of Environmental Engineering and Management – at the University of Witten/Herdecke gGmbH, a member of the Science and Technology Board of the EU Joint Programme Initiative on Water Challenges and a coordinator of the UN Water DPC Working Group on Water Efficiency.

Across the EU, this is precisely what the debate concerning the draft of the new concessions directive is about. There is strong opposition in Germany to the proposal for a concessions directive, in particular from the German states and local authorities. They question whether there is really any need at all for a Europe-wide regulation for granting concessions. The greatest fear of those opposing the directive is that cities and districts might be forced to privatise their water distribution operations. Municipal representatives in Germany have succeeded in creating massive political and media pressure that frequently has little to do with objective arguments.

The fact of the matter is that private sector service providers are already responsible now for ensuring that there is a trouble-free supply of top quality drinking water to hundreds of German districts. They have been doing this work for decades – precisely because there has never been a single case in which there have been doubts about the quality of the water. The private sector is well aware that its promise to supply such high quality water can only be kept if the networks are maintained correctly, regular investments are made in the plant infrastructure and the environmental and social standards are strictly adhered to. Those companies that fail to do this will lose their contract and their image will be ruined. This fate, however, could not happen to a local authority if it has a free rein to do whatever it wants and does not have to face competition from the private sector. Who would be there to check up on the quality of the water in cases of doubt? Who would fix consumer-friendly prices?

One thing should be made very clear here: water is not for sale. No-one has the right to make drinking water resources their own. In this respect, therefore, water will always remain a public commodity irrespective of who is responsible for distributing it (and similarly for treating the wastewater generated by this). Those, however, who believe that water pumps, water pipes, water filters, the

maintenance and repair work on such structures and the running of water facilities are a public commodity are mistaken. Across the world, and in Germany too, the private sector provides important services for their municipal and industrial partners building and operating water facilities – from waterworks, pipe networks and reservoirs to sewer networks and sewage treatment plants. Such services are provided by privately owned companies facing fair competition so that the best conditions are able to be found for fee payers and consumers. In the future, too, those inviting tenders, i.e. the local authorities, will continue to be the ones responsible for defining the high quality standards of their local water sector and for ensuring these are adhered to.

A further softening of the rules concerning the tender-free, in-house granting of contracts and public-public cooperation agreements when granting contracts and concessions – such as those recently earmarked by the EU Internal Market Committee – is to be vehemently opposed especially in view of quality issues and the setting of future prices. The Citizens' Initiative is, admittedly, right about one thing: water is a human right. Precisely for this reason, therefore, no-one should claim the right to be allowed to grant no-bid contracts and concessions within the water sector without there being any kind of supervision or public transparency. Supervision and public transparency are precisely what the EU Concessions Directive is demanding. Looking at the huge future tasks on the international water sector, it would be truly foolhardy if in Germany of all places – a country so dependent on exports – the water sector were to be no longer transparent, it were to isolate itself from the global market and its innovative energy and competitiveness were to be lost as a result. The private sector is campaigning for fair competition so that quality and price continue to be at the right levels in the future, too.

Private sector service providers are already responsible now for ensuring that there is a trouble-free supply of top quality drinking water to hundreds of German districts

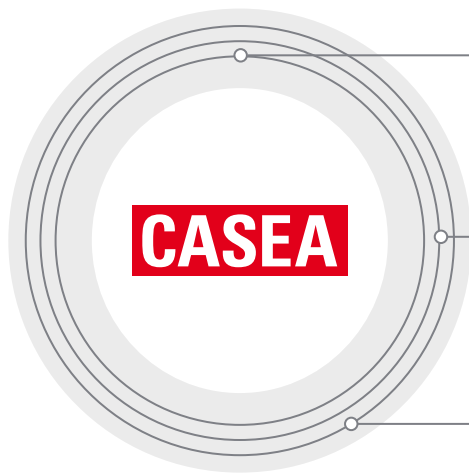
Latest news

Three brands under one roof

REMONDIS UNITES ITS GYPSUM ACTIVITIES

Gypsum and anhydrite products have a long history. Whether it be the Egyptian pyramids in Giza or the Alabaster Mosque in Cairo – gypsum was already being used as a building material in the ancient world. REMONDIS has also been producing gypsum for decades although its longest-running plant in Ellrich was founded considerably later in 1869. Today, businesses retailing building supplies, the building trade itself and a whole variety of industrial customers benefit from this versatile raw material and the refinery services which the company group is able to offer thanks to its state-of-the-art facilities. At the beginning of the year, REMONDIS merged its various gypsum activities into one company – run under the name CASEA – to pool its know-how in this field and so be able to focus on its customers' needs even more effectively than before.





✓ CASUBIN

Products for the building trade and for retailers selling building supplies



✓ RADDIBIN®

Flowing screed binders

✓ TECTOBIN

Calcium sulphate raw materials, calcined gypsum and special plasters

Previously, the gypsum division had been run under the product name RADDIBIN® and the name Südharzer Gipswerk GmbH (SHG), which the company had purchased in 2009. In 2012, REMONDIS' gypsum sector sold around one million tonnes of products generating an annual turnover of approx. 60 million euros. As both gypsum and anhydrite are natural source materials and are suitable for numerous different applications, it can be assumed that demand will continue to grow, especially considering the continuing boom in the construction and property industries.

"By merging our gypsum activities into the new company CASEA GmbH, we have succeeded in creating a highly efficient and sustainable gypsum organisation which is capable of handling the increasing challenges of the market such as developing new products, securing resources and fulfilling legal regulations", explained Peter Knechtle, managing director of CASEA GmbH.

By uniting its technical and marketing expertise, the company has not only been able to generate synergies but also to create clearly defined areas of responsibilities. The reason behind the decision to unite these activities, however, was not simply to standardise and reorganise in-house processes. Rather the aim was to set up a new brand structure to improve the business and make it easier for customers to understand the product range, which comprises the three product brands CASUBIN, RADDIBIN and TECTOBIN. Whilst CASUBIN covers all products for the building trade and for retailers selling building supplies, the company's flowing screed binders are sold under the RADDIBIN brand. Its TECTOBIN division covers calcium sulphate raw materials, calcined gypsum and special plasters.

CASEA presented at the BAU trade fair

CASEA GmbH and its different products were presented to the public for the first time at the BAU exhibition in Munich, the world's leading trade fair for architecture, materials and systems. "The BAU fair was the ideal place for us to present the reorganisation of our gypsum division and explain the advantages of the new company to our current customers as well as to potential future clients", explained Peter Knechtle. "The response to the new appearance of our gypsum division was very positive indeed with the new company attracting the interest of many national and international visitors to the fair", Knechtle continued. All in all, the employees working at the exhibition stand at the BAU believed the time spent there had been very successful. Intensive work has been carried out since then to process the contacts made during the fair and some successful discussions have already been held as a result. Plans are already being made to participate in the next BAU exhibition which is taking place in 2015. By then, all three quality brands should be firmly established on the market under the management of CASEA!

By uniting the company's know-how into the new firm CASEA, new opportunities should be created to push forward innovations in the individual product areas



Peter Knechtle (right), managing director of CASEA, talking to international visitors at the BAU trade fair in Munich

McDonald's Germany aims to systematically reduce its volumes of waste as well as to conserve natural resources through increased high quality recycling



Sustainability

Responsible global citizens

MCDONALD'S AND REMONDIS: COOPERATING FOR OVER 20 YEARS

McDonald's has been working with REMONDIS in order to achieve greater sustainability. The two companies cooperate in four German states implementing a waste management system to reduce waste volumes as well as to contribute towards conserving natural resources and preventing climate change by systematically sending as many materials as possible for recycling. One of the main reasons for the success of this longstanding working relationship is the combination of local and central services that REMONDIS is able to provide.

“One of the goals of our ‘Vision 2020’ programme is to significantly reduce our emissions, consumption of raw materials and volumes of waste.”

Dagmar Burger, Department Head of Community Relations, Region West, McDonald’s Deutschland Inc.

McDonald’s offers its guests an uncomplicated restaurant experience all across the world – and the same is true in Germany. Each day, more than 2.7 million people visit the 1,440 restaurants around the country making the company the market leader on the German restaurant market. At McDonald’s, success and responsibility go hand in hand. The company is well aware that its future success depends on the balance it achieves between supporting society, protecting the environment and advancing its business. For this reason, McDonald’s Germany focuses on sustainability following strictly defined principles which have been divided up into four main areas: ‘ecological footprint’, ‘product responsibility’, ‘attractive employer’ and ‘brand dialogue’.

Ecological footprint: climate and resource protection

McDonald’s has been committed to protecting the environment for many years and drew up its own guidelines on the subject in 1999. Its primary goal: to run a long-term sustainable business enabling it to continue to grow and, at the same time, ensure its guests are fully satisfied with its service. McDonald’s is, for example, looking to achieve the smallest possible carbon footprint throughout the whole of its supply chain. All aspects of environmental protection are, therefore, taken into consideration in all decision making processes as well as other criteria such as appropriateness, availability and cost-effectiveness. “This includes – wherever possible – us using renewable raw materials, drawing on alternative energy sources and developing technical innovations”, explained Dagmar Burger, Department Head of Community Relations, Region West, McDonald’s Deutschland Inc.

Comprehensive services from a single source

When it comes to reducing its ecological impact, the company prefers to develop longstanding cooperation agreements with reliable partners.

It is precisely for this reason that McDonald’s has been working together successfully with the REMONDIS specialists for many years now. This work covers the whole of the ‘West Region’ which includes four German states: North Rhine-Westphalia, Hessen, Rhineland-Pfalz and the Saarland. Focus here is put on recyclable waste as well as the joint goal of both companies to recycle such

materials in the best possible way and return them to production cycles. “Companies like McDonald’s need a partner who offers nationwide services just as they do. With our extensive network of branches, we are always close to our customers enabling us to offer them the intensive service they need – including visiting the restaurants and instructing the employees as required”, said Christoph Haub, key account manager at REMONDIS. The individual REMONDIS branches are responsible for providing the restaurants close to them with local support; this support is organised centrally by the key account division in charge of commercial, industrial and retail customers. Thanks to this system, McDonald’s has just one contact person for all the services it needs which also guarantees the system runs efficiently.

Moreover, the extensive network of facilities and logistics operated by REMONDIS creates reliability and high levels of transparency. Being provided with complete documentation on all material streams is extremely important for McDonald’s as the company orients itself towards the guidelines of the ‘Global Reporting Initiative’, which sets out its international standards on sustainable reporting. McDonald’s is also looking to further grow the quantity and quality of the materials sent for recycling in the future – to add value wherever possible and so benefit both the environment and the business.



REMONDIS advises McDonald’s on general ways of optimising its waste management systems as well as on how to improve methods used at individual restaurants

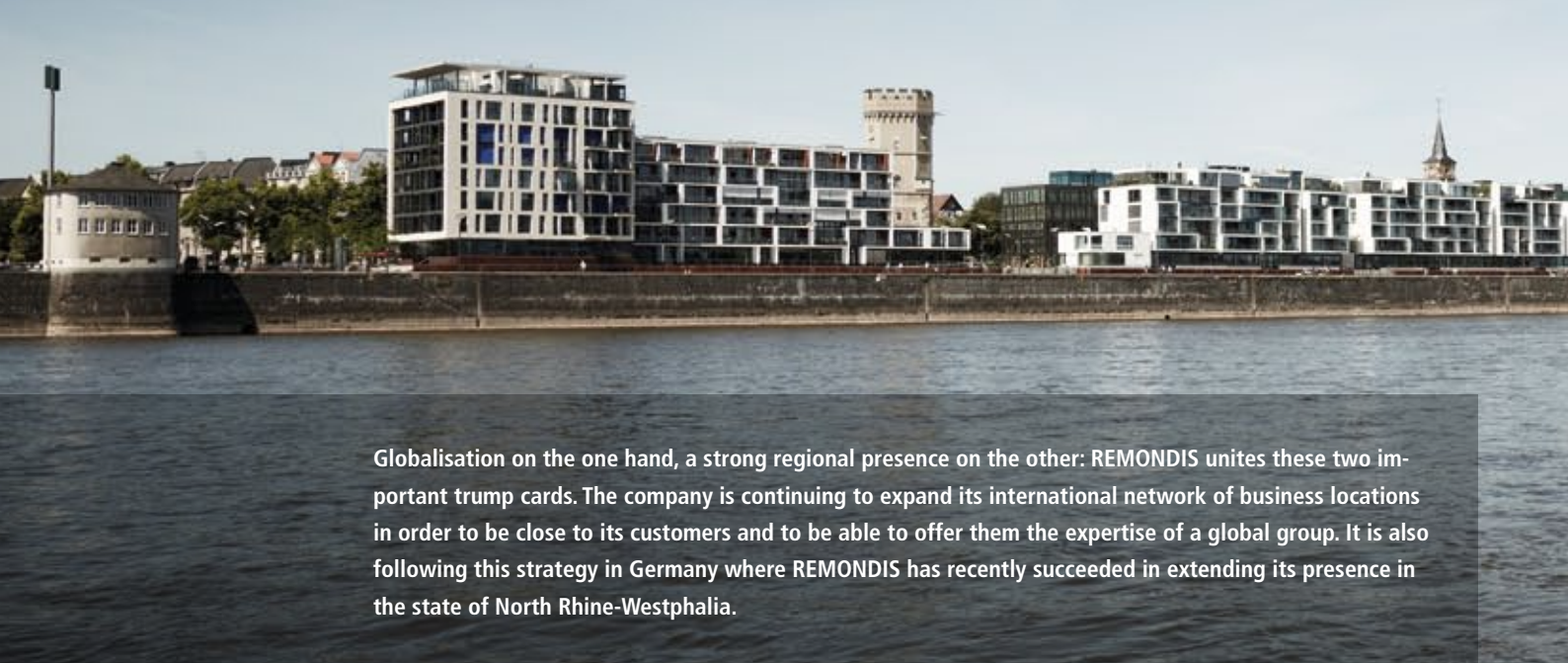
Dagmar Burger, Department Head of Community Relations Region West McDonald’s Deutschland Inc., talking to REMONDIS key account manager, Christoph Haub



Close to our customers

Keeping an eye on growth regions

BRANCH NETWORK EXTENDED TO STRENGTHEN LOCAL ECONOMIES



Globalisation on the one hand, a strong regional presence on the other: REMONDIS unites these two important trump cards. The company is continuing to expand its international network of business locations in order to be close to its customers and to be able to offer them the expertise of a global group. It is also following this strategy in Germany where REMONDIS has recently succeeded in extending its presence in the state of North Rhine-Westphalia.

REMONDIS®

Protecting the environment and preventing climate change are important issues. When it comes to environmental services and waste management, therefore, companies, councils and local residents wish to work with a professional partner that has comprehensive specialist knowledge, extensive experience and reliable know-how. This is not all though – a further decisive factor is how near the company is located to them. REMONDIS’ aim, therefore, has always been to develop a close network of branches so that they are only a short distance from their customers enabling them to react quickly and provide a full range of services.

REMONDIS is targeting growth regions to expand its network of locations

Expansion in growing economic areas

New locations are, in particular, being set up in growth regions. This enables the company to access promising potential for its operational business and at the same time provides tangible benefits for the upcoming regions whose economy and authorities need to have a highly efficient infrastructure. “Investments in prospering economic and administrative centres are an important factor in our catalogue of site criteria”, explained Jürgen Mauthe, managing director of REMONDIS’ West and Rhineland Regions.

These two companies have a total of 50 business locations in North Rhine-Westphalia, the German state with the largest number of inhabitants.

Acquisitions strengthen proximity to customers

Over the last few months, targeted efforts have been made to expand the company’s presence in this region. Thus, REMONDIS took over Kluger Entsorgungssysteme at the end of last year. By acquiring this family-run business, the company now has a greater number of locations in South Westphalia, a fairly rural area but one which is also home to important industrial firms including over a hundred global leaders. Looking at the large number of regional metal-processing businesses there, REMONDIS’ acquisition of Kluger means it now has, in particular, greater access to local metal recycling opportunities.

In addition, it acquired Cologne-based Georgi Abfalltechnik with retroactive effect from the beginning of 2012. The Cologne-Bonn region is considered to be part of the largest and most productive economic area in Europe. A wide range of sectors operate there from major corporations

Customers can access the wide range of services provided by the whole of the REMONDIS Group via their local branch



to highly specialised craftsmanship and industrial businesses. Thanks to the acquisition of these new locations, REMONDIS has primarily been able to extend its services for SMEs as well as for private individuals. Combined with its existing activities, the company now has an even broader base in and around Cologne. At the same time it has extended its network geographically towards the south west as the takeover of Georgi also included a business location in the neighbouring Eifel region.

Reliable waste management and recycling services are also in demand outside the private sector. Thus, Münster-based w.a.r. Wertstoff- und Abfallrecycling GmbH in the north of North Rhine-Westphalia now belongs to the REMONDIS Group. The activities of this newly acquired business help to optimise the range of services in the areas of managing construction site, industrial and commercial waste as well as of recycling paper and other recyclable materials. Being the capital city of the identically named administrative district, Münster is home to numerous educational institutes and administrative bodies. At the same time, the retail trade plays an important role here.

Continuity with some added extras

One common feature of all these locations has been their smooth integration into the REMONDIS Group which has meant practically no changes for the customers – for the most part their contact person has remained unchanged and they have continued to receive the high quality of service they have been used to. All customers, however, have gained a further decisive advantage: they can now access the expertise of the whole of the company group via their REMONDIS branch and benefit from a range of services that is not only unusually diverse but also always highly specialised.

■ REMONDIS' business locations

A worldwide network: REMONDIS is close to its customers with over 500 branches and associated companies in 35 countries

Saransk – a role model for Russia

SEPARATE WASTE COLLECTION SYSTEM PROVES TO BE POPULAR



The catalogue of tasks, which some forward-looking regions within the Russian Federation are intending to implement, resembles a guidebook to the world of modern recycling. The most important milestones in this list are reducing waste volumes, modernising waste collection logistics, introducing effective waste management and recycling systems and returning recyclables to production cycles. Thanks to REMONDIS, a separate waste collection system has been successfully implemented throughout Saransk, the capital of Mordovia. The city has, therefore, developed a system that is setting an example for all other districts across the whole of Russia.



Many towns in the Russian Federation have tried to introduce separate waste collection systems into their towns – such efforts, however, have met with only modest success so far. Not so in Saransk. The city council and the government of the Republic of Mordovia have set themselves the ambitious goal of optimising waste management in the capital and other districts in Mordovia by extensively modernising their current systems. This includes building and operating sorting plants in order to recover recyclable materials and return them to production cycles which, in turn, will considerably reduce the volumes of residual waste sent to landfill. This has been made possible by an exemplary partnership set up between the Saransk city authorities and REMONDIS, one of the world's leading water and recycling companies. The joint venture, "REMONDIS Saransk", was founded by the two companies, the municipal business MP "Spetsawtochozjaistwo Saranskoje" and REMONDIS, in the summer of 2011.

Modern logistics and infrastructure the basis for efficient recycling

The new company was able to implement the first modernisation measures soon after its foundation and these were warmly welcomed by the local residents not least thanks to the city's cleaner appearance and the more efficient waste management system. By the beginning of September 2011, all of the waste containers in the town had been replaced with 1.1 m³ euro containers and 5 m³ and 0.66 m³ bins. This step included delivering 1,300 plastic containers and 130 galvanised 5 m³ euro containers to 371 blocks of flats and setting them up in appropriate areas.

The commercial customers in Saransk have also benefited from these rapid modernisation measures. The changes made in both the private and commercial sectors have, for example, made it easier for bulky waste to be collected. Thanks to the modern containers being used, bulky waste

REMONDIS has helped the City of Saransk to create a modern recycling sector – also by introducing state-of-the-art technology



can now be collected directly from the households using the new fleet of special vehicles that were produced in Germany. A special collection system, such as the one used before the modernisation process, is no longer necessary. Unnecessary transport journeys have been stopped and the number of waste collection vehicles reduced from over 50 to just 19.

One welcome side-effect of this improved efficiency, besides optimising costs, is the clear reduction in emissions of particulates and hazardous substances as less fuel is being used. Thanks to this positive environmental record and the improvement in the sanitary condition of the city, the waste collection system modernised by REMONDIS has helped to increase standards of living for the local residents.

One of the reasons behind the success of this joint venture has been the introduction of a separate waste collection system. Recycling bins with yellow lids have been set up alongside the grey residual waste bins at each of the 371 municipal collection points as well as at the premises of commercial customers. The recycling bins are used to collect paper, cardboard, polymer packaging, film, foil and plastic bottles. The recyclables, freed of residual organic materials such as food debris, are collected by two special vehicles, which are on the road every day, and taken to a sorting facility. At the sorting plant, the recyclables are separated into different fractions as cleanly as possible and pressed into bales. In order to sustainably strengthen the regional industrial sector, the pressed recyclables are sent to various further processing businesses in the Volga region which then return them to the economic cycle. Thanks to these efforts, the amount of residual waste sent to the municipal landfill has dropped each month by 8,000m³ since the end of 2011. This is the equivalent of around 10% of the overall volume of waste generated by the city of Saransk.

Informing local residents about segregating waste – educating younger generations about the environment

The fact that the people living in Saransk have accepted the waste segregation system so enthusiastically can partly be put down to the extensive information campaign being held about the necessity of separating waste. REMONDIS has, for example, hung up posters in the houses to provide local residents with important



information. Each day, the local TV channel broadcasts a video about waste segregation at peak viewing times. Moreover, REMONDIS supports the work carried out at the city's schools providing brochures and teaching projects. This has been so effective that the schoolchildren are now initiating environmental projects themselves.

One such example is Alexander Popow, a year 10 pupil from Saransk. He prepared a project about the impact of household waste on the environment as part of the "Pupil of The Year" competition and now holds classes for primary school children together with "REMONDIS Saransk". He teaches the younger children about the importance of separating waste, about environmental protection and sustainability and about the need for more recycling. As part of this educational campaign, REMONDIS worked together with school principals to draw up suitable teaching plans. These include school trips during which the children can experience recycling first hand – from the collection, to the sorting and processing of the material.

Saransk has succeeded in creating a sustainable infrastructure for a separate waste collection system that has been fully accepted by the local residents. As a result, the city, which is preparing for its role as one of the venues of the 2018 World Cup, is also serving as a model for other districts and regions in the Russian Federation. In 2012, Saransk was named the cleanest and most "livable" city in Russia. REMONDIS looks forward to continuing to support Russia on its path towards greater sustainability as it looks to create a modern recycling sector.

Special classes are held for primary school children in Saransk to make them more aware of the need to segregate waste

The children take part in school trips to experience modern recycling first hand

Award-winning energy



BEG IS THE BIGGEST ELECTRICITY PRODUCER IN THE CITY OF BREMERHAVEN



Everyone is talking about issues such as climate change, the energy turnaround and energy costs. Not only individuals, however, must look at ways of saving energy but also cities, districts and regions. Bremerhaven, the largest city on the German North Sea coast, is pursuing the goal of becoming a climate-friendly town and has introduced a number of measures to cut carbon emissions and save energy. Last year, the City of Bremerhaven was presented with the European Energy Award and it has dedicated this award to Bremerhavener Entsorgungsgesellschaft mbH (BEG), one of REMONDIS' associated companies, in recognition of the major role it has played here.



For decades now, Bremerhaven has been focusing on generating energy from alternative sources. BEG, a public private partnership run together with REMONDIS, operates both a thermal residual waste incineration plant with an annual capacity of around 300,000 tonnes and a central sewage treatment plant designed to cover the requirements of a total 600,000 inhabitants. The energy produced by these facilities is sufficient to satisfy the annual requirements of approx. 25,000 four-person households, making BEG the city's biggest electricity producer.

In addition, BEG also operates its own district heating network which supplies public institutions such as the hospital in Bremerhaven, the main fire station, the civic centre and government offices with heat from the thermal residual waste incineration plant. Moreover, district heat is also passed on to the local energy provider which uses it to cover the needs of more than 10,000 flats.

Almost 100% of the energy generated by the thermal residual waste incineration plant and the central sewage treatment plant comes from waste and sewage gas making it very environmentally friendly. On the one hand, it helps to conserve our natural reserves of valuable primary fuels such as crude oil, natural gas and coal. On the other hand, the

continuous measurements taken and the daily evaluation and inspection of the emission data ensure that the emissions not only meet but are clearly below the legal limits laid down in the 17th Ordinance of the Federal Emissions Control Act (17. BImSchV). Indeed, this sustainable production of energy was one of the main reasons behind the City of Bremerhaven being presented with the European Energy Award which it dedicated to BEG as a sign of its appreciation of the company's commitment. "We are really proud of the fact that the City of Bremerhaven has handed the award over to us on long-term loan allowing us to display it in our offices and show it to our customers, visitors and employees", commented Stefan Ketteler and Dr Addissou Lothar Makonnen, managing directors of BEG.

The European Energy Award (eea) is a European quality management and certification system that rewards the efforts made by cities to cut energy consumption, use energy efficiently and increase the use of regenerative sources of energy. The activities undertaken by the cities to prevent climate change are recorded, evaluated, planned, controlled and checked on regularly. The aim of the award is to identify and implement sustainable ways of protecting the climate.

25,000

The energy produced by the plants is sufficient to satisfy the annual requirements of approx. 25,000 four-person households

One for all!

REMONDIS INDUSTRIE SERVICE DEVELOPS A NEW COLLECTION VEHICLE FOR GARAGES

There are currently around 38,000 garages in Germany, all of which generate a wide variety of waste – from hazardous substances, e.g. waste oil or used brake fluid, to classic recyclables such as paper and plastic film. The problem that all these businesses must face is where to send these different fractions. REMONDIS Industrie Service has responded to its customers' needs and developed a new vehicle called the "MOBIWER" which has been specifically designed to collect garage waste and can pick up a wide range of hazardous materials in just one trip. This modern service not only benefits the company's customers but the environment, too.

REMONDIS®


01 SERVICING FLUIDS CONTAINING OIL/OIL FILTERS

02 CAR BATTERIES

04 COOLANTS

03 BRAKE FLUID

05 WASTE OIL

Special skills are needed to ensure that the different types of garage waste are segregated according to type and collected safely. In most cases, several companies have to be called in to cover the various requirements. Not only classic recyclable and waste fractions must be collected such as paper, cardboard and plastic film but also numerous hazardous materials, e.g. servicing fluids containing oil and lead accumulators, which have to be handled and processed by specialist businesses. Often, "external" groups interested only in individual types of material try to get a foot in the market and – depending on price fluctuations – try to remove these from the overall volumes of waste.

"Garages may be unable to continue their work if their waste is not collected on time. Our goal was to design a vehicle that could transport all types of waste to prevent this happening", explained Manfred Korzonnek, branch manager at REMONDIS Industrie Service in Berlin. With this aim in mind, they worked together with a well-known vehicle manufacturer to develop the MOBIWER which was first tested in Berlin and then fine-tuned. Thirteen such

collection vehicles are already being used by REMONDIS Industrie Service across Germany. Equipped with collection tanks, storage compartments and containers, the MOBIWER can collect oil, oily servicing fluids, brake fluid and engine coolant in just one trip. Moreover, small volumes of starter batteries can be taken if the garage does not use the plastic containers specially designed for this waste. A second version of this vehicle will be on the road for the first time this spring which will have a larger tank for waste oil and be able to hold 8.5m³. The first of these new MOBIWERS will be delivered to REMONDIS' branch in Lübeck at the end of the first quarter.

All in all, REMONDIS' collection service for garages offers a whole host of advantages. The main benefits for its customers are lower costs, a reduced workload and a comprehensive range of services. At the same time, fewer trips are needed leading to a significant reduction in CO₂ emissions. The eco-friendly MOBIWER – one vehicle for all types of waste!

The MOBIWER has been designed so that it can safely transport up to six different fractions – with each type of waste carefully stored separately from the others. Further information and a 360° view of the truck can be found at mobiwer.de



Customer report

A world full of colours – environmentally friendly and clean

**BASF COATINGS GMBH IN WÜRZBURG COUNTS ON REMONDIS TO MANAGE ITS PLANT
WASTE MANAGEMENT ACTIVITIES**

BASF Coatings GmbH's site in Würzburg, which employs around 300 people, develops and produces a high quality range of innovative basecoats. Practically all of the major car manufacturers in Europe use the company's products to paint their vehicles.

REMONDIS and BASF have been partners for many years. Their mutual goal is to strengthen sustainability and increase resource conservation

BASF Coatings GmbH's declared aim is to establish development and production processes that meet the highest technical and qualitative demands in an environmentally friendly manner and that take sustainability into account. This principle also applies to the management of the waste materials generated at BASF's plant and corresponds perfectly, therefore, with REMONDIS' corporate philosophy. This determination to achieve greater sustainability, to conserve resources and to handle pollutants and wastes responsibly has created the solid foundations on which the work between the two companies is based.

REMONDIS Industrie Service GmbH & Co. KG – or RIS for short – has been responsible for managing the waste at BASF Coatings GmbH in Würzburg since July 2012. RIS has its own staff working at the plant who collect, transport and organise all the waste generated there. This includes collecting and recycling both non-hazardous waste such as card, plastic film and water-based basecoats as well as hazardous waste requiring special treatment. Such materials are, for the most part, conventional solvent-based paints and chemicals that – if they cannot be sent for materials recycling – are thermally treated in specially



“The limited amount of space at the site presents a challenge to those managing the waste.”

Dr Daniela Brinkhoff, REMONDIS key account manager; Dr Bernhard Schulze Langenhorst, managing director of REMONDIS Industrie Service (right)

designed facilities which destroy the pollutants and generate electricity and process heat that are fed into the national grid.

BASF Coatings GmbH attaches great importance to there being an integral waste management and recycling system at its plant that reflects the company's responsibility towards protecting the environment. As a result, an extensive waste management concept had already been developed over the years for all the different types of waste generated at the 3.1 hectare site before REMONDIS Industrie Service took over the project. “The limited amount of space at the site presents a challenge to those managing the waste”, explained Dr Daniela Brinkhoff, the key account manager at REMONDIS responsible for BASF. The production processes at BASF are not allowed to be interrupted in any way by the waste management activities. Good communication is key here. The managers at the two companies responsible for waste management are, therefore, in constant contact with each other to ensure that this work is – effectively – carried out in the background and is unable to have a negative effect on the plant's production processes.

“It is essential that qualified personnel work on site if the complex waste management system is to work efficiently”, Dr Brinkhoff continued. The BASF employees first segregate the waste into different containers at a number of collection areas located around the plant. RIS then removes the

various materials and ensures they are sent to the correct processing facilities. Thanks to this close cooperation work between REMONDIS Industrie Service and BASF Coatings, first steps have already been made to optimise the collection and recycling methods used which in turn will help to reduce the plant's impact on the environment and so help to conserve resources and prevent climate change – for a world that is not only full of colours but also environmentally friendly and clean!



REMONDIS Industrie Service collects non-hazardous waste from BASF Coatings GmbH's plant in Würzburg as well as hazardous waste requiring special treatment

Environmental services

Turning old into new

REMEX AWARDED TWO MAJOR REMEDIATION PROJECTS

Two of the greatest environmental problems we have to face today are land consumption and urban or rural sprawl. Each day, around 87 hectares of open land are being converted, the equivalent of approx. 600m² per minute. The consequences of this unchecked land consumption are huge: whilst there is less and less fertile land available for agriculture and forestry, more and more urban properties are lying idle. Some of these are located in so-called brownfield areas and more often than not planners have to solve a number of complex problems if they wish to reuse these areas – for example the ground may be polluted due to former commercial, industrial or military activities. REMONDIS' subsidiary, REMEX, specialises in clearing up contaminated land and offers bespoke solutions to sustainably improve soil quality. It recently carried out two such projects in the German cities of Minden and Solingen.

REMEX helps to conserve natural resources by carrying out remediation projects and systematically cleaning up contaminated land



For 90 long years, the 6,700m² grounds on the right bank of the River Weser in Minden were used to produce roofing felt and adhesive substances made from tar and tar oil distillates. All that remained after the plant closed down in 1984 was an abandoned piece of land containing several pits – up to six metres below ground – filled with substances that were highly dangerous for both people and the environment. With the pits no longer leak proof, these substances were able to seep out and, after several decades, reach the groundwater which flows into the River Weser. High time, therefore, to initiate some suitable remediation measures.

The tar oil pits in Minden were full of substances that were highly dangerous both for people and the environment

Following REMEX ProTerra GmbH's participation in a public tender and its presentation of the most cost-effective offer, it began its remediation work on behalf of the AAV (Association for Remediation Services) for the state of North Rhine-Westphalia in cooperation with the District of Minden-Lübbecke. The project was made more difficult by the fact that, during the 90 years of processing tar, the pits had been built on top of each other so that it was not always possible to determine precisely where they were located nor how big or how deep in the ground they were. "In one case, we discovered a six-metre deep pit after we had begun digging which no-one had known

about and which was also full of highly toxic substances”, explained Jens Fuhr, the manager responsible for the project at REMEX ProTerra. “The foundations under the pits and the plant installations were also much larger and more solid than had been anticipated which also slowed down the project”, Fuhr continued.

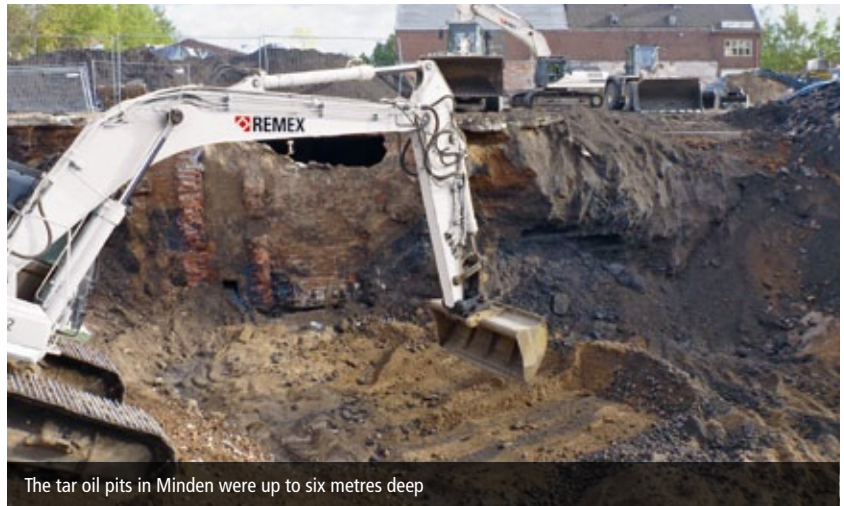
Thanks to its state-of-the-art technology and the many years’ experience of its employees and project managers, REMEX ProTerra was able to catch up on any time lost. They were also able to keep within the fixed budget despite the additional work and volumes of material involved. Around 19,000 tonnes of contaminated volumes of tar, construction waste and soil were excavated from this property in Minden. Having re-filled the area with clean earth and recycled building materials, the District of Minden-Lübbecke can now market the land for commercial and industrial use.

Besides such old brownfield sites, areas of land still being used by businesses can become polluted and require suitable remediation measures. It was discovered just recently that a company’s grounds in Solingen had become polluted with various hazardous organic and inorganic substances from old sedimentation tanks and settling ponds – some of which had even reached the groundwater. The bidding consortium, “Bodensanierung Hammerstein Solingen” headed by REMEX Mineralstoff GmbH, who was responsible for both the technical and business aspects of the project, was awarded the contract to carry out the remediation work.

“Extensive work safety measures had to be implemented because of the contaminants involved and because the production facilities and offices located around the



Special safety gear had to be worn to be able to take samples



The tar oil pits in Minden were up to six metres deep

polluted land had to carry on their business as usual. At the same time, we had to make sure that no-one as put at risk by the contaminants that were removed during the remediation work”, explained Thomas Vollmar, the manager at REMEX Mineralstoff GmbH in Essen responsible for the project. Working closely with GBU oHG, a firm of consultants, a remediation concept was drawn up that took all aspects of the ongoing operations and building work into account.

A total of approx. 25,000 tonnes of earth and other materials were excavated from the grounds in Solingen and taken to suitable processing facilities and landfills. Around 22,500 tonnes of the recycled building material “remexit” were used to re-fill the area. REMEX, therefore, uses resource and eco-friendly methods to create clean land for homes, businesses and nature – turning old polluted grounds into usable land!

Around 22,500 tonnes of the recycled building material “remexit” were used to refill the excavated area in Solingen

News in brief

8th REMONDIS EURAWASSER Forum in times of economic and ecological change

The REMONDIS EURAWASSER Forum is one of the leading platforms held in Germany for discussing sustainability and other future issues. Once again, prominent guests will be travelling to this year's scientific forum which will be focusing on the challenges caused by the worsening economic situation in Europe and the global changes to our climate. At the same time, it will be discussing the changing conditions for local political processes and the importance of communication as well as attempting to look into the near future.

The keynote speaker at the event, which is being held in Rostock on 04 and 05 June, will be Wolfgang Clement on the subject: "Changing Economy: do we need an Agenda 2020?". Other speakers taking part include the honorary chairman of the supervisory board of the RETHMANN Group, Norbert Rethmann, the Mayor of Rostock, Roland



Methling, meteorologist and oceanographer, Prof. Mojib Latif, and the science writer, Dr Joachim Bublath. The event will be rounded off with a maritime evening held in the "Hohe Düne" boathouse and the participants will also have the opportunity to go on a tour of the area in the morning of 05 June 2013.

News in brief

Mecklenburg-Vorpommern's best apprentice works at EURAWASSER Nord



Robert Egger was presented with an award by the Minister for Families Kristina Schröder in recognition of his excellent results

For the seventh year running, the German Chambers of Commerce and Industry organised a ceremony in Berlin to honour the country's best apprentices. Robert Egger from Rostock was also among the 229 top apprentices at the event, i.e. all those who had passed their final exams with the grade "very good" or higher. The 22-year-old had completed his apprenticeship to become a wastewater technology specialist at EURAWASSER Nord GmbH and was the only apprentice in his field and indeed the only person

from the German state of Mecklenburg-Vorpommern to receive the award from the Minister for Families Kristina Schröder and Hans-Heinrich Driftmann, President of the DIHK (German Chambers of Commerce and Industry).

With its apprentice being presented with this honour, EURAWASSER Nord GmbH has once again received further recognition for its apprenticeship courses having already been named a "TOP Training Company 2012" at the end of last year. "It was definitely the right decision to do my apprenticeship at EURAWASSER. This family-run company can offer me great career prospects as well as diverse further training opportunities", commented Robert Egger, who is currently taking part in a study sponsorship scheme. Frank Martens-Jung, HR manager at EURAWASSER Nord GmbH, passed on this compliment to the trainers and all others involved saying that EURAWASSER Nord shall continue its work as a training company in order to provide young people in Mecklenburg-Vorpommern with promising career prospects.

Making dreams come true ...

... or at least the dreams of four-year-old Philipp from Rohrdorf and seven-year-old Silas from Huzenbach. Both boys had written to their local newspaper, the Schwarzwälder Bote, which was running a "Wünsch dir was" (Make a wish) feature sponsored by the Kreissparkasse Freudenstadt bank. Their wish: to spend a day at a waste management business. REMONDIS' branch in Freudenstadt helped the newspaper to make their dream come true enabling them to spend a whole day looking behind the scenes of Germany's leading water and recycling company.

First they were taken on a tour of the facility during which plant manager Christian Korpok explained the different processes to the boys – from the delivery of the recyclables, to the processing of the materials, all the way through to the marketing of the output. The highlight of their day was a trip in one of the sixteen waste collection vehicles operated by REMONDIS in Freudenstadt and



Philipp and Silas were both over the moon by the time they got back to the plant. To remind them of their special day, they were each given a cap, cup and mini container for their desks. Maybe one day these boys will not be travelling as a passenger but behind the wheel themselves.

Silas from Huzenbach (left) and Philipp from Rohrdorf really enjoyed their trip on a REMONDIS waste collection vehicle

REMONDIS names its 'Sales Employee of the Month'

In order to stress the importance of organic growth within the company group, emphasis is to be put on the subject of sales at REMONDIS this year. REMONDIS has devised a scheme to provide some additional motivation for its staff which began at the beginning of the year: each month the sales employee with the greatest number of effective customer contacts is to be presented with an iPad.

Moreover, an in-house commission is to be set up which will name the 'Key Account Manager of the Year' and 'Regional Sales Employee of the Year' for 2013 based on the recommendations from the sales managers from the different German regions. Each will receive a one-week holiday for two in recognition of their achievement.

January's 'Sales Employee of the Month' was Thorsten Hoof who works in regional sales at REMONDIS' branch in Melsdorf. Board member Thomas Conzendorf and Herwart Wilms, managing director, presented the happy



Thorsten Hoof (centre) receiving the iPad from Thomas Conzendorf (right) and Herwart Wilms

winner with an iPad in Lünen on 25 February to thank him for his exceptional work and outstanding commitment to his customers. The sales region covered by Thorsten Hoof, who has been at REMONDIS since 01 January 2007, comprises the City of Kiel and the District of Plön.



People

Everything clicks into place in Hamburg

DAY OF ACTION TO PROMOTE "HEALTH AND SAFETY AT WORK"

Many lorry drivers suffer serious or even fatal injuries when they are involved in an accident because they choose not wear their seat belt. Although accident research has clearly proven that wearing a seat belt can reduce or even prevent injury in up to 80% of all serious accidents, only 15% of lorry drivers actually wear their belt. REMONDIS GmbH in Hamburg, therefore, decided to hold a day of action to make their employees more aware of health and safety at work. The company chose not to hold 'dry' lectures but to raise awareness by having their employees experience situations first hand.

Instead of listening to dry lectures, the employees were able to experience situations first hand at the different stands

A total of eighteen stations were set up depicting day-to-day work situations and looking at health protection issues at work. Employees were encouraged to take part in the activities being held at each station. The most popular stations proved to be the truck accident simulator and the truck seat belt convincer which is part of the 'Hat's geklickt?' campaign (Has it clicked yet?) run by the 'Deutscher Verkehrssicherheitsrat' (German Traffic Safety Council) and the 'BG Verkehr' (Association for transport and traffic) to encourage more lorry drivers to accept and use seat belts. Other stands focused on work safety for industrial employees and included subjects such as cost-effective driving methods, securing loads when using skip tipper and hook container trucks, collecting waste with front and rear loaders and handling materials with care when driving a digger. Besides these hands-on activities, the company's series of films produced for the project "Nothing's going to happen!" provided additional advice on work safety. These films primarily focus on the subjects, "General risks in the waste management sector" and "Safety measures in container transport".

Special hands-on stations were also set up for the office workers where they were able to learn more about

subjects such as hygiene in the office and the best way to set up computer workstations. Moreover, they had the opportunity to try on impairment goggles to see how alcohol can affect their work. A special film was also shown demonstrating the typical accident hazards for those working in an office environment.

However, this day of action in Hamburg not only focused on work safety but also on health protection. This included a mobile vision lab and the 'MediMouse' device which helps to demonstrate good posture. In addition, those taking part had the opportunity to use special measuring equipment to learn how to relax. The stand set up by the AOK medical insurance company not only had information material available but also had experts on hand to provide advice on health protection at work. Besides the AOK, other companies that supported REMONDIS' day of action included BG Verkehr, Liebherr, the 'Fahr & Spar' team from MAN Quickborn and the Merkel doctors' centre. All in all, the day was a great success, not least because all those there were able to take part in the activities themselves. How about you – has it clicked yet?

> Impressions



◀ Thomas Breitkopf (left), REMONDIS board member, Stefan Möbs (centre), Deputy Consul General of the German Consulate General in Shanghai, and Qizhou Wu, Vice-Director of the Environmental Protection Department (EPD) Shanghai, at the opening ceremony in Shanghai

Irmgard and Norbert Rethmann (centre) during their visit to the new REMONDIS locations in Australia



◀ REMONDIS was one of the Top 3 companies nominated for the German Sustainability Award 2012. Managing director Aloys Oechtering accepted the honour from Prof. Gesine Schwan



Julia Behrend, business development EURAWASSER, at the BDE's parliamentary evening in Berlin



Friedhelm Susok (right), ▶ one of the presenters for 'THE RECYCLING PROFESSIONALS', in action at the didacta

◀ Roland Ruscheweyh (left), authorised signatory REMONDIS Aqua GmbH & Co. KG, and Roman Skudnjakov, government spokesperson for the Nizhny Novgorod region in Russia, during their visit to EURAWASSER Nord GmbH in Rostock





2013



2016



2019



2022



2025



2028



2031



2034



2037



2040



2043



2046



2049



2052



2055

**2058?**

No Zircon – No Brilliant Smiles

Dental prostheses must be functional and aesthetic. With its natural look, biocompatibility and durability, zircon meets these requirements better than any other material – so demand is correspondingly high. The availability of this mineral has been classified as particularly critical; reserves are expected to run out in ca. 45 years. REMONDIS is developing solutions to recover this 'white gold'. The highest levels of quality, worldwide. For a secure future. **German Qualität.**

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