

WASTEWATER TREATMENT AND REUSE ON CAMPING SITES

ENVIRONMENTALLY FRIENDLY SOLUTIONS FOR A WORLD WITH CLEAN WATER





CAMPING & CORONA

THE UNIQUE BOOM OF A BRANCH

What connects the Rolling Stones with "Tatort" and modern mobile homes? Quite simple: They all really took off in the 70s. Above all, camping has a faithful fan base and is again completely in fashion — and not only just since the Corona crisis. Hardly surprising. The camper stands for freedom, independence and a comparatively inexpensive holiday. Camping is, however, at lot more. It is a feeling of being alive, which at the moment is being rediscovered by the younger generation. Those whom climate and environmental protection are more important than the long-haul flight to Australia are rewarded with a relaxed holiday on wonderful camping sites. However, as with other booms, this trend also has its downside. The environmentally sound treatment and recycling of the wastewater for instance, presents camping site operators, planning offices and installers of wastewater treatment plants with major challenges. It is now time to take a closer look at the possible solutions.

You have just purchased a camper? Up until a few years ago you would not have been able to swank about this at any party. For a long time camping was considered to be the hobby of plebs, who opened up their first beer, dressed in fine rib vests, at 10 o'clock in the morning. Nevertheless, those who raved about the merits of near-natural rest and relaxation were at most derided —

readily by people who explored the Caribbean on cruise ships operated using heavy oil. Today it is completely different. Those who out themselves as camping fans in Year 1 after Corona, reap admiring glances, experience real interest and hear often enough the phrase "I have always wanted to do that sometime".

FIGURES PLEASE!

CAMPING IN THE OVERTAKING LANE

While cruises or long-haul flights are the new deadly sins, camping is experiencing a real revival. It is not only nature that profits from this. Because naturally behind the holiday with the camper there is also a complete branch of tourism. From the manufacturer of various campers and caravans in all sizes, shapes and colours right up to the operators of camping sites. Here a few facts and figures, which verify impressively the boom of the branch:



5.526

new Caravans were licensed in September 2020. Compared to the same month last year, this is an increase of 165.3 percent!



1.965

new caravan registrations were noted in September 2020. An increase of 22.7 percent.



51.000.000

overnight stays have been recorded so far in 2020 at Germany's approximately 3,000 campsites.



12.000.000.000

sales were generated by the German caravan industry alone, setting a new record for the sixth year in succession.



35 %

of German campsite visitors mentioned the Corona pandemic as a reason for deciding to go camping.



CAMPING SITE OPERATORS HAVE RECOGNISED

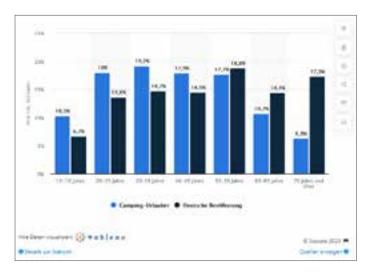
THE CRISIS AS OPPORTUNITY

Naturally these outstanding figures are also a snapshot in time. Status as of now: No one knows precisely, how long we must live with the Corona virus and what impacts the continuing crisis has on our holiday conduct. Along with the manufacturers of the campers and camping accessories, primarily the camping site operators have recognised the opportunities behind the boom. The result: With the visitor numbers the investments in the equipping and the infrastructure of the camping sites also increase. Ultimately, here there is in many places catching up to be done.

«Tourists must be kept sustainably enthusiastic.»

Namely in the widest sense of the word. Sustainably means on the one hand that tourists, who have just discovered camping for the first time, have also to be enthusiastic about this form of free time recreation in the longterm. Because rapid as the current boom has come about, so can it also disappear again. The good news: Camping site operators often have full control as to whether their facility leaves behind a lasting positive impression or not.

However, sustainable also means that camping must be seen as a new form of "eco-tourism". Although campers are often real gas guzzlers the holiday in Germany is, nevertheless, still considerably more environmentally friendly than the long-haul journey to South America. If the camping branch stays on the ball and manages to position itself credibly as environmentally friendly alternative to normal mass tourism, the trend will become a real turnaround.





Camping is popular across all age groups. The statistics show camping holidaymakers-in Germany according to age in comparison with the population in 2020. (Source: Statista)

Camping: Time to rethink holidays

The one who today thinks about camping visualises picturesque mountain lakes, endless beaches or natural woods. And, it is true: Many camping sites do not have to hide behind other popular travel destinations. This concerns the location, but also the features of the camping site. The latter is often very modern and offers the guests a great deal of comfort. This applies for the camping pitches as much as for the gastronomic offerings or the sanitary facilities. A further reason, why even more people are deciding for camping.

OVERCROWDED CAMPING SITES

DEMAND NEW CONCEPTS

And as we hinted at the start it is precisely here where the problem lies. Everywhere, where there are many people to be found, they leave marks — and meant here are not just the tyre tracks of caravans. It is much more about litter and wastewater. As there was hardly a single camping site operator who could reckon with the current boom, many waste and wastewater concepts were also not prepared for the rush of visitors.

« Camping is a holiday with nature – not against it. »

Granted: With a camper one is very flexible. But for many caravan owners it is rather more about enjoying nature. And once you have discovered a great location for yourself you are also happy to stay longer. Love of nature and the desire to keep it are then two sides of the same coin.

Many camping site operators have understood this and rely on time switches for air conditioning systems and showers, clean refuse separation or modern wastewater treatment. The last point in particular is discussed repeatedly. Ultimately, clean water as a resource is increasingly important. And this not only in Germany or Europe.

« Clean water is a human right. »

So much for the theory. The reality unfortunately looks somewhat different. Water is often neither drinkable or suitable for personal hygiene.

80 % of the wastewater worldwide is not treated and releases climate damaging greenhouse gases.

90 % of natural catastrophes strengthened through climate change are associated with contaminated water.

By 2050, 70 % of the world's population will be affected by the impacts of water poverty.





WATER PURIFICATION IS NECESSARY

CLEAN WATER DOES NOT FALL FROM HEAVEN

In any way, not always. Sometimes it must first also be treated. The problem: Camping sites are usually to be found in secluded places. Indeed, it is precisely this which gives them appeal. Nevertheless, for this reason a connection to a sewer is missing. Therefore decentralised wastewater treatment plants, as are also offered, installed and serviced by ATB WATER, have proved themselves as a solution. Because many already existing wastewater treatment plants, even before the Corona crisis and the rush of visitors, were outdated and overloaded.

« Water will become a scarce resource »

It should be added that with the climate change there comes a global phenomenon that ensures ever dryer summers with ever less rainfall. In the ideal case treated wastewater can therefore be used as process water – for example with the irrigation of toilet flushing. But what can an intelligent wastewater concept look like? Which systems can camping site operators use and can an already existing system be expanded? For over 20 years ATB WATER has found fitting answers for this and other questions – for a world with clean water.

« ATB WATER: Industrial solutions for camping sites »

Our wastewater treatment systems belong to the most modern of systems which are available on the market. More than 100,000 systems sold make ATB WATER by far the leading provider in Germany. Along with local and municipal authorities, companies from very different branches and industrial sectors trust our solutions – from care homes and hospitals over breweries or bakeries up to the fish and meat industries. As true East Westphalian family business we take on the responsibility – for our customers, our colleagues and the environment. This company philosophy is reflected also in our range of services. Thus we have developed branch solutions with which ATB WATER supported camping site operators, in Germany and the whole of Europe, with the planning and implementation of sustainable wastewater concepts.

« One example:

The camping site in Lienen in the Teutoburg Forest, Germany. »



IN THE MIDDLE OF THE TEUTOBURG FOREST:

THE LINIEN EUROCAMP CAMPING SITE

Almost 2,000 years ago the ancient Romans were already pitching their tents in the Teutoburg Forest. However, they were not particularly welcomed in a friendly way. The excursion at that time cost the lives of at least 20,000 legionnaires and entered history as the Battle of the Teutoburg Forest (Varusschlacht). Even decades later Roman historians spoke of the dark forest in the north, which with its clouded hills remained a secret over many years. And even today, an excursion into the Teutoburg Forest can be a real adventure. However, several things have changed. Bicycles and hiking boots have long replaced horse and high boot. Hospitality has a high priority and even guests from the former Roman Empire are very welcome. Particularly popular with camping fans is the Eurocamp camping site in Lienen. With the increasing number of visitors here also new ideas and concepts have had to be developed for the protection of the environment.

«Green idyll in Westphalia»

"Here we have preserved an ideal world and wish that the Teutoburg Forest also survives for future generations, explains Eberhard Krützmann. With his camping site the Westphalian has created a really comfortable oasis for the whole family. Along with the lovingly furnished holiday apartment in a farmhouse, guests also have the possibility of staying overnight in the so-called duck wagon or the cosily extended henhouse, and to enjoy the surroundings. With the famous "Externsteine" and the Hermannsdenkmal (Hermann monument) there are immediately two popular tourist attractions easily accessible from the camping site in Lienen. Some 7,000 tourist stay overnight here every year and use the some 170 annual places and 60 tourist pitches on the 70,000 square metre camping site with its quaint inn and modern sanitary facilities.



Tourist attractions, like the Externsteine, are not far from the camping site in Lienen.

«From planning to implementation»

The camping site operator has banked on environmental protection for years and thus has commissioned a wastewater treatment plant some time ago. The problem: The

plant, with a total number of inhabitants and population equivalents (PT) of 100 is far too small for the regularly fully booked camping site. Poor wastewater values, which in part also even exceeded the permitted limiting values were a clear sign that the existing plant no longer complied with the requirements. "We therefore approached the manufacturer", recounted the camping site operator. "The offer for the doubling of the plant size however, was for us neither effective nor economically sensible". Shortly afterwards, Eberhard Krützmann became aware of ATB WATER.

«Experience with the camping sector tipped the balance»

"Along with the expertise of the company the experience with the tourism and camping sector was also an important factor for my decision", explained the camping site owner. "In addition, I did not want an off-the-peg solution, but rather a concept which took into account the specific features of our camping site." After first discussions and an appraisal on-site, ATB WATER developed a concept for a perfectly fitting expansion of the wastewater treatment plant. Along with the expansion of the tank volume through two additional tanks, the plant capacity has now been increased from 100 to 250 PT and at the same time brought up to the latest stateof-the-art. Thus a classic SBR plant (sequential biological treatment), which is characterised by a moderate rate of power consumption, was created from a fully aerated plant.

«This approach has numerous benefits for camping site operators such as Eberhard Krützmann»



Rapid conversion:

Through the specialist material analysis, a wellfounded concept can be produced and agreed within the shortest time with all those partners involved in the project.



Cost efficiency:

As the already existing technology has been included and upgraded the financial expenditure can also be substantially minimised

Predictability:



Thanks to our experience, we can quickly estimate which solution is ideal for the camping site and how it can be implemented. Thus unpleasant surprises are pretty well excluded.

«One type of wastewater is not the same as another»

Naturally the camping site in the Teutoburg Forest is only one example. Because whichever wastewater is produced it varies from camping site to camping site. Particularly common are:

- » Fatty wastewater from kitchens and gastronomic facilities
- » Flushing water from WC-facilities
- » Shower and swimming pool water
- Uncontaminated precipitation water

For all these different types of wastewater there are different statutory rules and regulations, which camping site operators must take into account – from water rights law over the waste management law up to commercial statutory orders.

Specific features and challenges of camping site wastewater

- Daily varying quantities of wastewater and charges
- · Discontinuous operation depending on season
- The wastewater is relatively "thin", this leads to weak organic loading
- Camping sites near beaches means abrasive medium in the wastewater
- Separate chemical toilet reception points or direct discharge into the wastewater treatment plant?
- Optimum accessibility and selection of location for the avoidance of odour and noise pollution
- The larger the wastewater treatment plant, the more potential pitches are lost
- Re-utilisation or simple discharge of the treated wastewater?



Therefore, we would be happy to advise you and to show you which wastewater concept comes into question for your camping site. What is more, we take a good look at your personal requirements and wishes, get an idea of things on site and focus on the latest technology. Thus we ensure that we find just the right solution for you.

You have questions about wastewater treatment and reutilisation on camping sites? Send us an email, call us or set up a date for a personal consultation and let us talk about your objectives. The team from ATB WATER would be happy to meet you.

Follow us on social media:





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