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Big rigs come clean using treated water

When it comes to keeping their big rigs clean and sparkling, most truck drivers are as particular about a good wash as any car owner might be – maybe more considering the dollars some have wrapped up in their 18-wheelers. Owners of large vehicle fleets, such as buses and delivery trucks, seem to appreciate the value a clean machine has in properly projecting their corporate image. And during winter months in many northern states, just cleaning off road salt and sand is imperative to vehicle maintenance.

As a former truck driver, Chester Biadasz understands that first impressions make a huge difference in selling the image of reliable, quality businesses. When Biadasz bought Beaver of Wisconsin, a manufacturer and supplier of quality pressure-washing equipment and detergents, he capitalized on that knowledge to meet the cleaning needs of trucks, buses, farm equipment and even railroad cars. Beaver of Wisconsin, located in central Wisconsin community of Plover, currently works with over 1800 commercial vehicle accounts within a 300-mile radius.



Trucking company images shine with the use of treated water.

Yet, experience has proven that quality soaps and spray systems are not enough to assure a clean wash time after time. The water quality at each customer's location presents a critical challenge to getting vehicles really clean.

“We sell degreasers and washing soaps for vehicles. We use mild soaps so vehicle finishes last longer,” said Chester Biadasz, president of Beaver of Wisconsin. He went on to explain, those soaps and degreasers best achieve their goal with soft water. Everything revolves on the condition of the water to get the best results in cleaning.”

To meet the challenge, Beaver of Wisconsin sought the expertise of Water-Right, Inc., a water conditioning equipment manufacturer located in Appleton, Wisconsin. According to Kurt Gruett, vice-president of Water-Right, Inc., “Beaver runs into many different kinds of water conditions, hardness up to 50 grains, iron of 10, pH as low as 5.5. Treating these severe water problems is not an option, it is a necessity.”

High calcium content causes build-up on the washer's coils that can eventually plug the system up. The use of heated water – up to 200° F can increase the precipitation of calcium and

magnesium. Due to the corrosiveness of low pH water, different treatments are used so acids don't damage the coils of the pressure washers.

Because of the wide range of water problems in the area, Water-Right has partnered closely with Beaver of Wisconsin to share their expertise and recommend appropriate water-treating systems and equipment to use.

In many applications where the water source is not city treated, Biadasz has found great results through the use of Water-right systems that use Crystal-Right™ media, a manmade zeolite crystal manufactured exclusively by Mineral Right, Inc. in Phillipsburg, Kansas.

Water conditioners using zeolite crystals offer excellent filtering along with ion exchange capabilities. Zeolite water crystals are capable of removing hardness, iron, and manganese while raising pH levels – all in a single pass. With this unique capability in hand, Biedasz has all he needs to meet the challenges of problem water anywhere in the state, according to Gruett.

But those aren't the only water problems being tackled collectively by Beaver of Wisconsin and Water-Right, Inc. N & M Transfer, Neenah, Wis., a customer of Beaver of Wisconsin, operates a drive through truck wash that has a unique water-handling problem.

“At N & M Transfer there is no sanitary sewer available,” said Biadasz, “and the expense to run sewer lines made that option impractical. Because the ground table is less than four feet down, installing below ground storage tanks was also not an option. As a result, N & M Transfer can't discharge any water. At present, water is collected and stored in above ground tanks. Beaver of Wisconsin is now helping process all this water for re-use in the washing operation.”



Chester Biadasz, president of Beaver of Wisconsin, visits the water treatment room at N&M Transfer, Neenah, Wisconsin. Storage tanks of treated water and waste-water surround him.

Between 30 - 50 tractors and trailers go through the wash on an average daily basis. Each wash requires 500 gallons of water. Of that N & M reclaims 75% in a two-step washing program. The firm can hold 9,000 gallons of good treated water while processing 30 gallons a minute of wash water. The system achieves a 10 TDS (total dissolved solids) or less on the recovered water.

It is that kind of success that has maintained the working relationship of Beaver of Wisconsin and N & M Transfer over the past six years. Beaver of Wisconsin has been successfully working with Water-Right, Inc. for the past 10 years, sending employees to Water-Right's training and service schools to become better educated in treating problem waters. Biadasz says his company's affiliation with Water-Right gives him the ability to control the water quality and insure his customers receive the highest quality washes possible no matter the water quality problem.