



*Exclusively from...*

## **Wastewater Solutions, Inc.**

### **AUTOMATED, CBM PRODUCTION WATER TREATMENT**

#### **Injecting All-Natural Gypsum can:**

- **NEUTRALIZE BARIUM**
- **LOWER THE S.A.R.**
- **NEUTRALIZE CARBONATES/BICARBONATES**
- **NOTABLY REDUCE NEGATIVE EFFECTS OF HIGH SODIUM LEVELS**
- **IMPROVE CHEMISTRY FOR AGRICULTURAL USES**

Wastewater Solutions provides a fully-automated Solution Grade Gypsum injection system designed to consistently apply an accurate dosage of calcium sulfate to notably improve the chemistry of Production Water prior to surface/environment release.

Through cation exchange, injecting Gypsum completely neutralizes Barium, converting it to Barium Sulfate which is not water soluble and no longer poses an environmental concern. The calcium in Gypsum will also react with carbonates and bicarbonates in the water, neutralizing them, eliminating the harmful effects of what otherwise is an ion that is toxic to most all plants.

Gypsum will also react with Sodium in the water, converting it to Sodium Sulfate, a much more water-soluble form that can be readily leached down deep into the ground, below the root zone of most all turf or agricultural crops, minimizing negative environmental impact.

The addition of Calcium into Production Water also lowers the Sodium Adsorption Ratio (S.A.R.) and flocculates soil, which improves soil stability and increases oxygen and water penetration wherever the water is applied, improving growing conditions when used for agricultural irrigation.

Tens of thousands of tons of solution grade gypsum are injected in the U.S. every year, with proven results of improving water chemistry resulting in substantial improvements in soil stability, turf health and crop yields. This is a common treatment at sites using recycled municipal wastewater for irrigation, as that water tends to also be high in Sodium, Bicarbonates and other undesirable elements.

Wastewater Solutions' patented Aqua-Ject® injection systems offer a truly automated injection system designed for use in all types of applications with consistent and reliable operation, even in harsh weather environments. It is fully self-contained, and may be supplied with a built-in skid for easy installation with no cement or foundation requirement.

For more information, please contact:

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