Background

AquaGate+CLINO is a patented, composite-aggregate technology resembling small stones that is typically comprised of a dense aggregate core. In this application of the technology, a powdered zeolite based clinoptilolite mineral coating is utilized (Figure 1) with varying percentages of additive layer by percent of total weight.

AquaGate+CLINO serves as a delivery mechanism to reliably place reactive treatment and adsorptive materials into aquatic environments.

Product Specifications

**Aggregate:** Nominal AASHTO #8 (1/4-3/8") or custom-sized to meet project-specific need
* Limestone or non-calcareous substitute, as deemed project-appropriate

**Clinoptilolite:** Powdered – Approximate 200 Mesh
- Modified Zeolite Clay; Modified Natural Mineral (Clinoptilolite)
- Light Brown Powder; Odorless
Manufacturers – Product Designation
- Hydrosil International – HS200
  * Formulations Range from 5 – 30% by weight

**Ammonia Adsorption:** From 0.5 – 1.5% of the Clinoptilolite quantity by weight

**Binder:** Cellulosic polymer

**Permeability:** $1 \times 10^{-2}$ to $1 \times 10^{-5}$ cm/sec

**Dry Bulk Density:** 75 – 85 lbs/ft³

**Moisture:** 10 – 20% (maximum)