Tiffin is a picturesque city located in Northwest Ohio. As the Seneca County seat it is known for its fine educational institutions of higher learning and has been designated by the National Arbor Day Foundation as Tree City USA. The water treatment plant, currently owned and operated by Aqua America, sits along the Sandusky River and has been in operation since 1878.

Traditionally the Sandusky River has proven to be a very difficult water source to treat, especially with regard to turbidity. Due to the tiled farmland and topography, rapid water runoff causes the river turbidity to be very “flashy.” A typical morning may begin with river turbidity at 5-10 ntu which can quickly escalate to 1,000 ntu by early afternoon. To this day the plant reports experiencing raw water turbidities approaching 2,000 ntu twenty five percent of the time.

During 1995 and 1996 the plant was experiencing difficulty meeting State of Ohio water quality standards with regard to effluent turbidity, which at the time was 0.300 ntu. Mr. James Welty, current plant superintendent who was lead operator at the time, recalls trying many different aluminum and iron based coagulants to no avail. At issue was the inability for these metal salts to react quick enough to address the rapid fluctuation in river turbidity, especially in cold water conditions. The end result was not just overfeed of coagulant to attain adequate settled turbidities and a need for pH adjustment, but a continual headache that jeopardized plant water quality and regulatory compliance.

Mr. Welty was contacted by Delta Chemical (purchased by USALCO in 2011) and asked to consider bench testing of a newly developed polyaluminum chloride coagulant, DelPAC® 2020. After a series of successful tests and a plant trial DelPAC 2020 was selected as the coagulant of choice. Jim Welty recalls fondly that time in 1996 where the plant’s significant problems were resolved. “DelPAC offered us the quick reaction time and flexibility that we were looking for. With alum we typically struggled to achieve 7-10 ntu in the settling basins and 1.0 ntu in our effluent. To this day we are achieving less than 1.0 ntu and 0.04 ntu respectively with 66% less coagulant. I can’t say enough about how well the product has performed for us.”

Aqua America Tiffin’s goal has always been to achieve excellence and USALCO is proud to have been part of that over the years. DelPAC 2020 is manufactured using a patented process developed by Delta Chemical and went on to serve as the foundation of an extensive line of polyaluminum chloride based coagulants. DelPAC coagulants have become the products of choice in well over 1,000 water treatment applications throughout the US (sold direct or through distributors).
The DelPAC series includes DelPAC 2020, which has become widely accepted as the polyaluminum chloride of choice for cost effective improvement of finished water quality. When used as a coagulant DelPAC can provide longer filter runs, reduce or eliminate the need for alkali pH adjustment, and reduce sludge residuals. DelPAC 2020 meets the specifications of the American Water Works Association Standard B408-18 and complies with the requirements of NSF/ANSI Standard 60: Drinking Water Treatment Chemicals – Health Effects at a maximum dosage of 250 mg/L.

**PROPERTIES**
- **Appearance:** Color may vary
- **Specific Gravity @60°F:** 1.23 ± 0.03
- **Product Weight:** ~10.23 Lbs. /US Gallon
- **pH (neat):** 2.5 ± 0.3
- **Freezing Point:** -26°F

**SAFETY / HANDLING**
Observe caution when handling corrosive materials. Please consult the material safety data sheet (MSDS) for safety and handling precautions.

**DELIVERY**
275 gallon IBCs (totes), tank trucks and railcars

**SPECIFICATIONS**
- % Al2O3: 10.5 ± 0.5
- % Al: 5.6 ± 0.3
- % Basicity: > 70
- % Sulfate: 1.5 ± 0.5
- % Chloride: > 9.0

**PRODUCTION**
USALCO has production facilities in:
- Baltimore, Maryland
- Fairfield, Ohio
- Ashtabula, Ohio

**PRINCIPAL USES**
Drinking water / wastewater treatment – removal of suspended matter and phosphorus

**CUSTOMER SERVICE**
If you have any questions concerning this material, please contact our Inside Sales Department at:
410-918-2230 or info@usalco.com