

## CHEMISTRY FROM HYDRITE KEEPS CUSTOMER WITHIN DISCHARGE LIMITS

Hydrite Chemical Co. solves manganese problem in facility discharge to POTW

### BACKGROUND

With millions of gallons of liquids traveling cross-country, tank truck carriers are challenged to clean out trailers for the next load quickly and effectively. Facilities that perform this tank cleaning must also handle and treat their waste water prior to sending it to their city water treatment plant (POTW).

### CHALLENGE

Our customer's facility had a large customer that required frequent trailer cleaning of residual liquid containing a large amount of manganese. The normal waste treatment program failed to effectively reduce the manganese below the limit allowed by the city. The city threatened to levy fines and/or discontinue accepting the facility waste water which could result in shut down of the facility. The facility looked to stop accepting the manganese containing trailers; however their customer then indicated they would take all of their business to another location. This loss of business was not acceptable.

### SOLUTION

On site lab testing was performed on waste water samples containing manganese to develop a treatment program that would effectively reduce manganese to acceptable levels. Since classical hydroxide precipitation could not reduce manganese enough, several proprietary metal precipitants were screened. Hydriseq 1750 was found to be the best choice in the lab testing. Full-scale testing confirmed the performance of Hydriseq 1750 in minimizing manganese levels in the facility effluent when levels were otherwise above allowable discharge limits.

Our client was able to continue serving their customer's needs, keep their business and maintain discharge compliance.



## RESULTS

- **Manganese levels are being kept below the permit limit of 1 ppm**
- **Facility continues to clean manganese containing trailers, maintaining valuable customer relationship**
- **Waste water discharge remains within permit compliance limits set by the city**