

# Petro Chemical Wastewater Treatment

Industry White Papers

---



## Celanese

Application:

Treating off spec wastewater containing Raney Nickel, chromium, zinc and high levels of organics. Metals must be removed prior to bioreactor.

Prior treatment method:

Batch treatment using chemical reagents to precipitate metals then dewatering with a filter press precoated with diatomaceous earth. Labor intensive, generates large volume of sludge that is hazardous and must be transported offsite for disposal.

Our process:

Installed EC pilot plant and began treating a continuous flow at 50 gpm. No chemical except for waste caustic used for pH adjustment.

Results:

Superior removal of heavy metals, improved performance of bioreactor, reduced sludge volume by 70%, sludge is non-hazardous and is disposed of on-site eliminating transportation and disposal costs and associated liabilities. Savings to client is in millions of dollars. Upgraded system to a permanent installation, manage and operate project.