

Negotiating with POTWs
Claryville, Kentucky

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SaraLee

History

- **Sanitation District No. 1 operated a 500,000 gallon package plant**
 - Discharged downstream of water intakes
 - Deterioration of equipment
 - Odor complaints – NOV's
 - Development of surrounding community was on hold due to wastewater treatment constraints
- **Relationship with SD#1 was up and down**
 - We were and still are the major discharger to these treatment plants

New Eastern Regional Plant

- Began accepting flow October 2007
- 4 MGD capacity
- Replaced 3 package plants – some of which overflowed during rain events
- Discharges to small tributary of Ohio River upstream of both Northern Kentucky and Cincinnati drinking water intakes
 - Originally looked at running pipeline for discharge directly to Ohio River

City of Cincinnati Opposition

- Fought permit through the entire process
- Sued both State of Kentucky and Sanitation District No. 1
- Got congressional delegation
 - Led to meeting with EPA Regions 4 & 5, congressional representatives from Ohio and Kentucky
- Mediation – still happening

Cincinnati's Concerns

- Effluent would enter into Ohio River 11 miles (plus 5 miles of tributary) upstream of water intakes
- Protozoan parasites & Enteric Viruses
 - Cryptosporidium
 - Giardia
- Synthetic Organic Chemicals
- Endocrine Disrupting Chemicals
- Note: Northern Kentucky's Water intake is closer to the new discharge point and they had no issues with the new plant.

Sara Lee Potentially Drawn In

- Petition for hearing specifically stated:

“Increased pathogen load and endocrine-disrupting compounds have been associated with slaughterhouses and meat packing plants (such as the Kahn’s Plant) that will send it wastewater to the ERWWTP.”

No scientific study or background information was referenced to support the above statement

What did we do?

- We met with Sanitation District No. 1 well before the new plant was started up and throughout the start-up process.
- We communicated changes in production, shutdowns, etc.
- Worked through start-up issues:
 - Phosphorus
 - Color and UV kill rates at ERWWTP
 - Chlorides

Start-up Issues

- **New plant had intense scrutiny**
- **SD#1 wanted to be in full compliance ASAP**
- **Phosphorus levels caught SD#1 by surprise**
 - Old plant did not have Phosphorus limits
 - We investigated source and attributed the levels to liquid smoke
 - SD#1 started adding Alum
 - No Issues presently

Color and UV

- **Ultraviolet radiation was to be used to “kill” bacteria at final discharge.**
 - Biggest concern and issue
 - No color permit limit for Sara Lee
 - SD#1 tested constituents of wastewater for UV interference
 - SD#1 had to run system in manual
 - With experience this issue went away
 - We could have changed our polymers to remove the color of our wastewater

Chlorides

- SD#1's chloride permit limit changed from 2,298 mg/L to 600 mg/L
- Studies and mass balance before start-up showed that ERWWTP would meet new limit
- Start-up proved differently
- We were well within our permit limit
- Worked with SD#1 and hauled brine solutions to a different treatment plant
- Now – limited hauls, no issues

Lessons Learned

- Get involved in the process early, read their permit(s), make sure they have considered everything.
- Over communicate Openly
- Meet regularly
- Help the Regulator Out
- Visit their plant, invite them to yours
- Even projects that vastly improve the environment can be subject to the political process

“Emerging” Pollutants

- **Industry and treatment plants must understand that emerging pollutants will impact them in the future**
 - AP story on pharmaceuticals found in drinking water
 - Dateline story on blood testing for chemicals
 - CSI episode on endocrine disrupters