Region 8 Case Study – Slaughterhouse effect on a Small Town

Al Garcia
• 1,600 Publicly Owned Treatment Works (POTWs) with approved programs
• Treat ~80% of the national wastewater flow to waters of the U.S (32 billion GPD).
• 23,000 Significant Industrial Users (SIUs) and a large unknown universe of other IUs that account for at least 30% of all industrial wastewater generated in the U.S.
• 16,000 POTWS
• ??? CIUs and SIUs in these POTWs
2012 Clean Water Needs Report to Congress

Total Needs: $271 billion

• Small community: defined as serving less than 10,000 population
• $32.9 billion or 12%
• 80% of all POTWs service small communities
• 23 States - 80 to 95 percent of the POTWs service small communities
OIG Report - EPA Needs to Reinforce its Pretreatment Program

Sept 28, 2004

- How effectively have the Pretreatment regulations controlled industrial user discharges?

- What are the differences in how POTWs with and without approved Pretreatment programs oversee their industrial users and do these differences affect protection of the plant and receiving waters?
EPA Needs to Reinforce its Pretreatment Program

- Pass-Through:
  - POTWs with approved pretreatment programs - 17 percent
  - POTWs without approved programs - 40 percent
- Discharge to Impaired Waters:
  - POTWs with approved programs - 25 percent
  - POTWs without approved programs - 60 percent
- “One possible explanation is that EPA Regions and State agencies that are supposed to act as control authorities for POTWs without approved programs do not have standards for overseeing industrial users discharging to these POTWs.”
Oversight of SIUs Discharging to POTWs without Approved Pretreatment Programs

May 2007

- ~1,300 CIUs discharge to Municipalities without Approved Pretreatment Programs
- EPA/States act as Control Authority
- Outlines Control Strategies for minimum Pretreatment Program Elements
Region 8 Non-Approved Program Initiative

- Outreach to Region 8 non-approved programs
  - Wastewater Operator Training
  - Non-Approved Programs Traveling Road Show
    - Phone Calls, Visits
    - NPDES Requirements and Pretreatment Authority
- Region 8 Non-Approved Programs Ordinance example
- NPDES Permit Language
Non-Approved Program Visits

• Opening conference/Introduction with City
• Discuss City’s authority to protect its POTW
• Listen to City’s local concerns
• Provide training on inspections and sampling
• Closing conference with city
• Followup report and outreach
Fowler, CO

- Design Capacity
  - Biochemical oxygen demand (BOD) – 238 lbs/day
  - Flow – 0.109 million gallons per day (mgd)
Non-Compliance History

• The Town often receives more flow and BOD than the design capacity.

• The Town consistently fails to meet limits for BOD, BOD percent removal, TSS, and flow when it discharged in 2012-2014.
Jensen’s Blue Ribbon Processing

• Process Monday-Wednesday
  • 20 cattle are processed per week, can process up to 12 cattle in a day.
  • 20 to 25 hogs are processed one day every other week.
  • 20 lamb are processed every other week.

• 14 employees

• The facility discharges an average of 15,620 gpd on processing days
EPA Investigation and Sampling Event

• Operating days, Jensen’s discharging an average of 14.3% of the POTW’s daily flow capacity and about 21% of the POTW’s BOD capacity.

• Jensen’s appears to be discharging process wastewater in concentrations and amounts that are causing pass through and/or interference.