How do we deal with FOG?

- Time-consuming cleanouts
- Dangerous sodium hydroxide
- Ineffective bacteria and enzymes
What is Protein Matrix?

• No bacteria and no enzymes

• A mixture of proteins and polypeptides extracted from plants
  – water-based
  – non-toxic
  – non-volatile
  – non-flammable
  – biodegradable
  – NSF/ANSI 60 Certified
How does Protein Matrix work?

• Proteins disrupt intermolecular forces
  – Prevent large, sticky balls of fat
  – Facilitate conversion of individual FOG molecules

• Individual molecules are easier for sludge to digest

• Reaction byproduct will not resolidify
What does Protein Matrix do?

• Prevents FOG buildup in pipes, interceptors, and lift stations

• Reduces FOG-related cleaning and maintenance

• Does not harm downstream plant processes
Prevent Grease Buildup in Traps

One month of buildup

Three months of build up

[Protein Matrix logo]
Keep Lift Stations Clean

One week of buildup

Two months of Protein Matrix
But what about buildup in tough-to-reach places?
What can we do?

• Class 1 Div 1
  – NEMA 6 = $$!!$

• Solid chemical = dissolve over time
  – Tough to control

• Daily pour

• Gravity drip – like an IV?
Gravity drip = No consistency
Our Progress (thus far)
Field testing
“Worked like a charm”

- Pipes totally clean
- No need to jet
- No problems downstream
Your turn

• Is grease in hard-to-reach places as much of a problem as we think it is?

• How do you deal with it now?

• We are finalizing the design – what would you want to see?