



Gravity Drip Progress

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How do we deal with FOG?



Time-
consuming
cleanouts



Dangerous
sodium
hydroxide

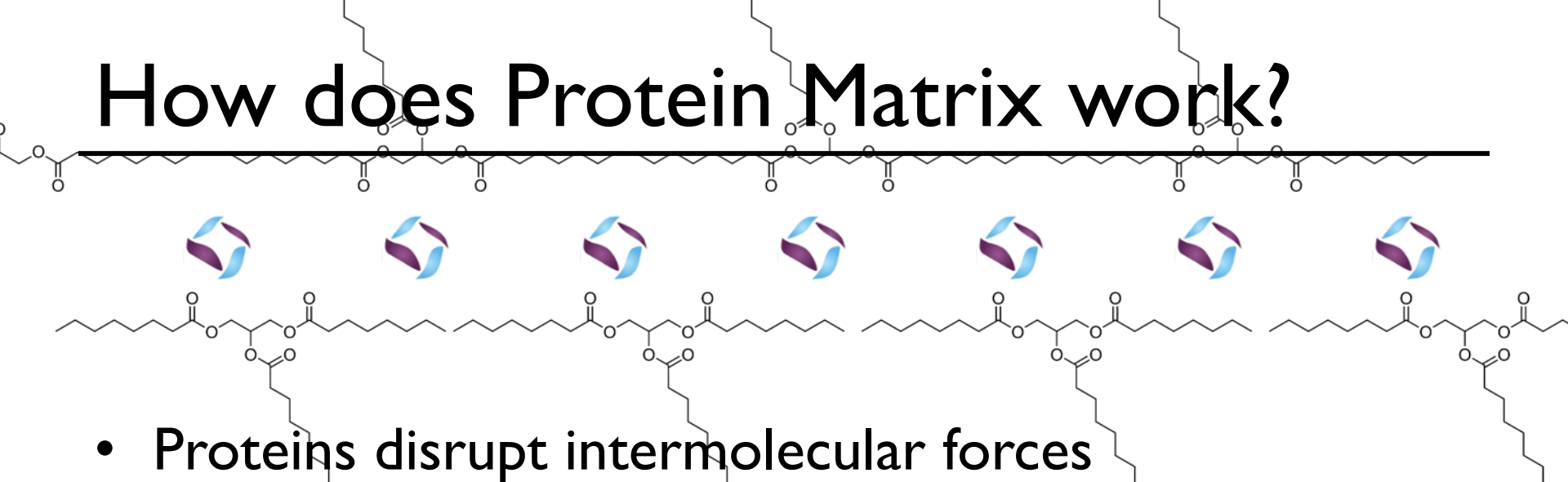


Ineffective
bacteria and
enzymes

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?

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- 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
Protein Matrix



Keep Lift Stations Clean

One week of buildup



Two months of
ProteinMatrix

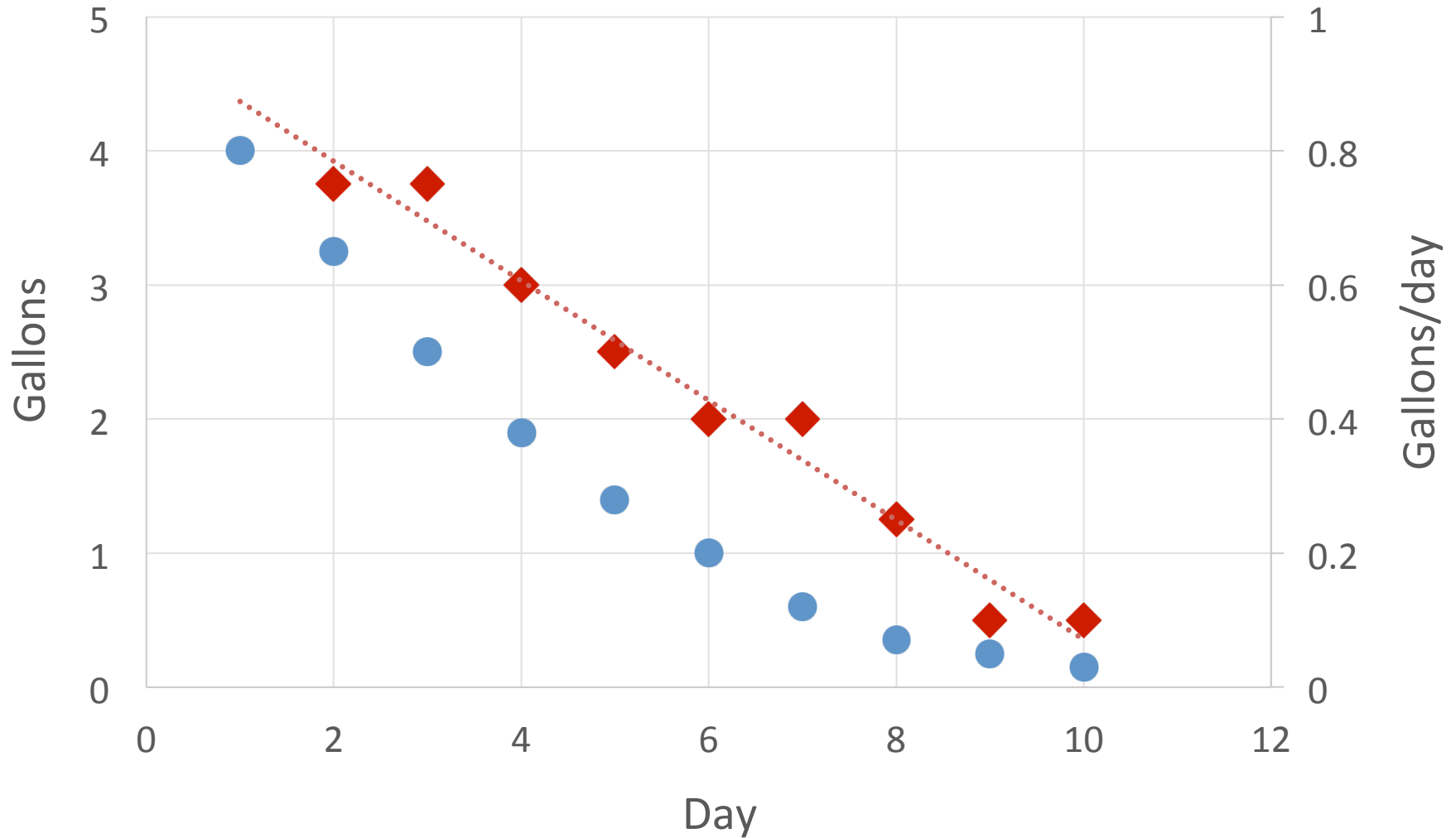


But what about buildup in tough-to-reach places?

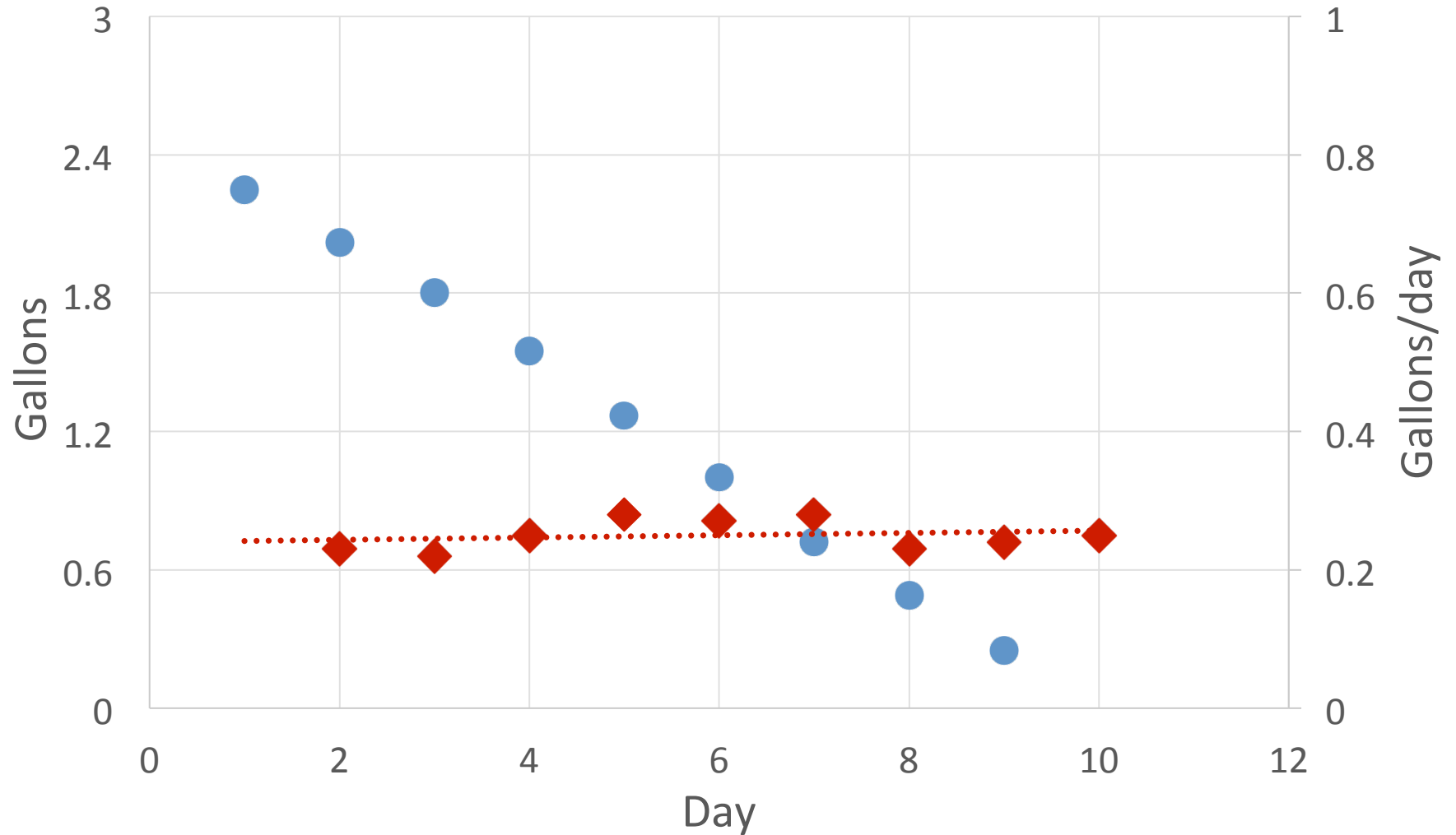
What can we do?

- Class I Div I
 - NEMA 6 = \$\$\$!
- Solid chemical = dissolve over time
 - Tough to control
- Daily pour
- Gravity drip – like an IV?

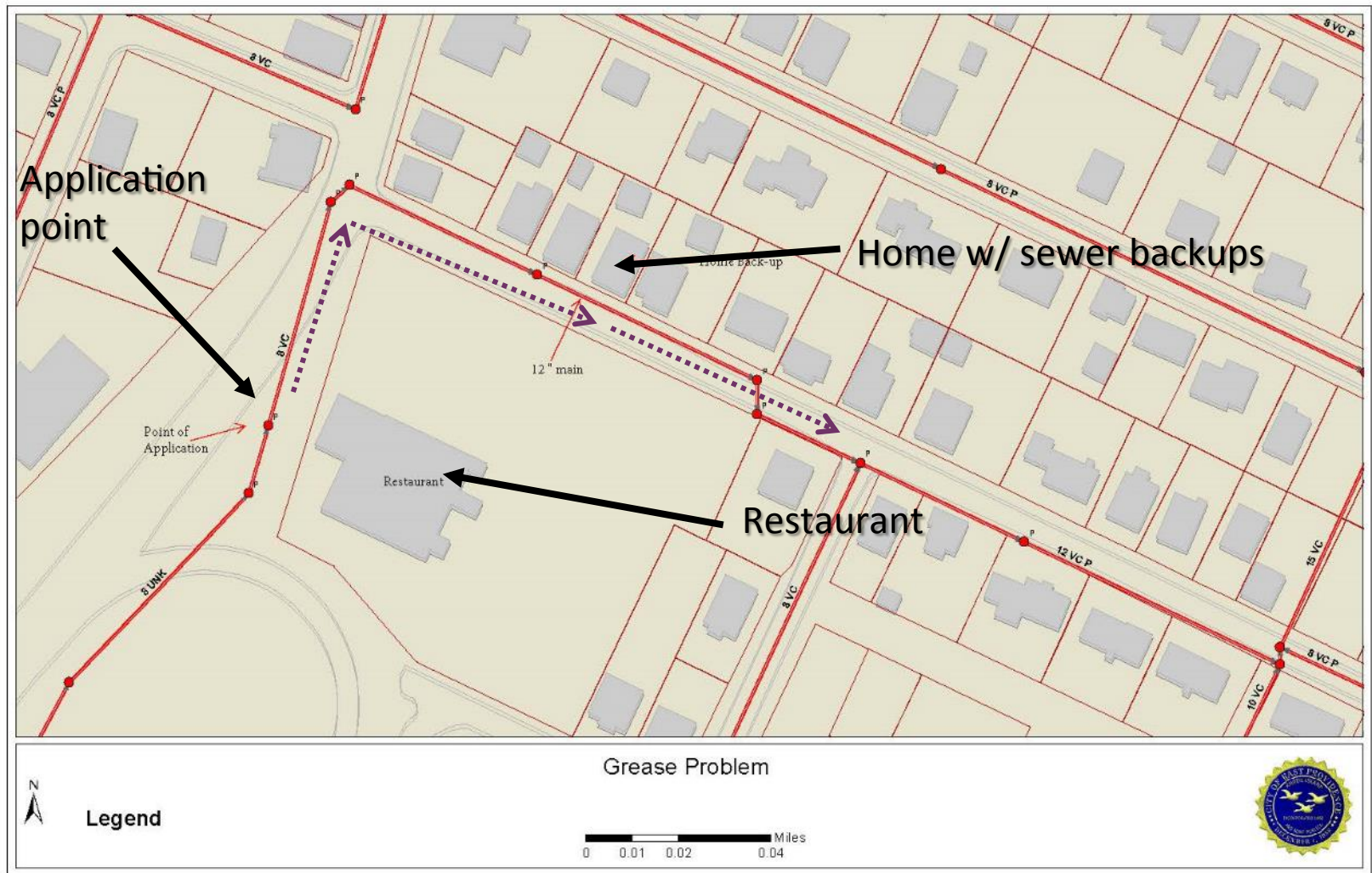
Gravity drip = No consistency



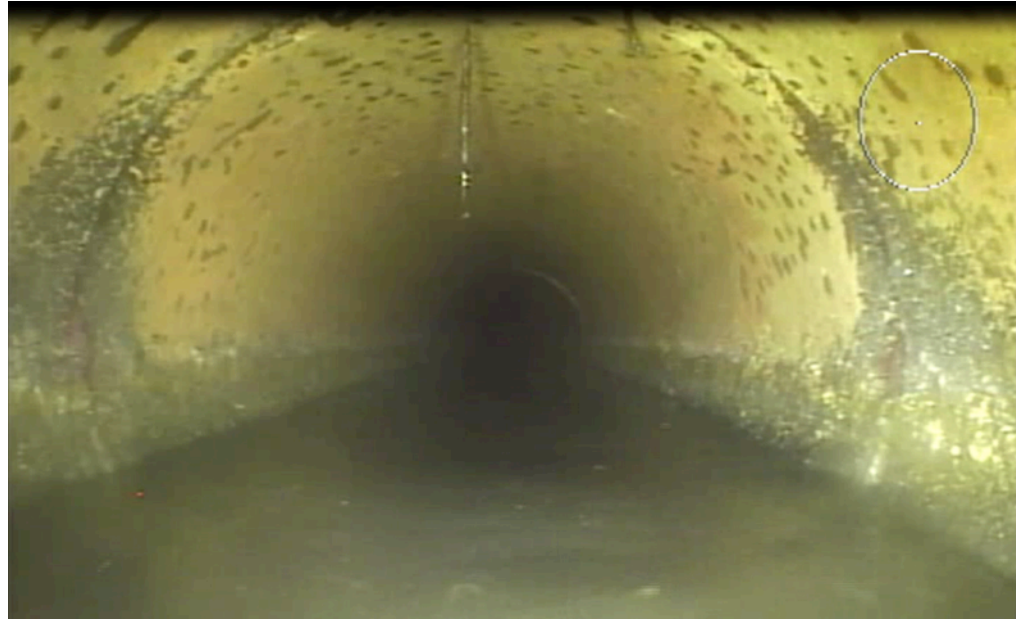
Our Progress (thus far)



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?