

Obstacles and Opportunities Working with Municipalities

Oregon Water Education Foundation
Annual Water Environment Short School
Clackamas Community College
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Baker Commodities

80 years as a green/recycling company

Private company headquartered in LA

NW locations include Seattle, Grandview,
Spokane, Portland and Grants Pass (OMT)

Portland services Kelso WA to Cottage Grove,
Florence to Long Beach WA and I84 to The
Dalles

How we do things

Pump and clean traps and interceptors according to the Preferred Pumpers guidelines

At our plant in North Portland

- Trap water goes through the roto screen to remove large particles
- Pumped through 2 skimmers to remove grease and smaller particles

Water Treatment System Roto Screen



Water treatment system



Treatment process

- From the skimmers, water is pumped into storage tanks
- Water is batched for processing
 - pH is adjusted to 9 – 10
 - Polymer is metered into the water just prior to the filter box
 - Polymer causes the remaining grease to flocculate
 - Filter box captures the flocculated grease

Filter Box with sludge



Water post filter box

Treated water is pumped to a holding tank to monitor the pH prior to discharge

Treated water is discharged to the City of Portland under a waste water discharge permit

Treated water typically has a TSS around 70

Treated water typically has less than 10 mg/L grease

Loading sludge for the digester



Pumper challenges



Great place for the dish machine



Plant display



Landscape areas



Safety around open manholes



Why we work at night

Odor issues for Restaurant customers

Access to interceptor manholes

Small work areas inside stores and restaurants

Block access to drive thru's

Our goal is to minimize the impact of trap and interceptor cleaning for our customer









Inspector, FSE and pumper triangle

Inspector regulates frequency and compliance for FSE

Pumper works for FSE as a vendor to maintain compliance with FOG regulations

Pumper does not work for the inspector

Pumper and inspector can have a challenging relationship

Pumper Inspector relationship obstacles

Challenges we have worked through

- Communication regarding scheduling
 - Originally inspectors just showed up to a pumping
 - Occasionally issues such as equipment breakdowns or delays at earlier pump outs caused problems
 - Now for the most part, inspectors note a trap on the schedule they would like to see and let us know

Pumper Inspector relationship obstacles

Challenges we have worked through

- Inspector / pumper power imbalance
 - Inspector has power through regulatory authority
 - Can make life difficult for our customers
 - Other government inspectors make us wary

Pumper Inspector relationship obstacles

Challenges we have worked through

- Requiring the pumper to return to clean a quarter size area of grease on the side wall of a 1,000 gallon interceptor
- Expecting a neglected interceptor to be spotless on the first cleaning
 - Time is costly in our business
 - Brought the interceptor to acceptable standard over two to three cleanings

Pumper Inspector relationship obstacles

Driver threatened to stuff the inspector into a grease interceptor

- Inspector called and reported the incident
- Driver was removed from grease trap routes
- Drivers and inspectors work together

Pumper Inspector relationship obstacles

Inspector interaction with our customers

- Inspector told FSE manager that the FSE was responsible for the proper cleaning and maintenance of the trap or interceptor : true statement
- Inspector also told FSE manager that they could not trust the pumper and insisted the FSE manager observe each cleaning

Pumper inspector relationship opportunities

Inspectors need to know how each pumper handles trap water

– Water treatment is expensive

- Labor costs
- Chemical costs
- Regulatory costs
- Extra strength fees

– Digester availability is limited

- Process 15,000 to 20,000 gallons to create one load

umper Inspector relationship opportunity

- Decanting and or stacking are illegal and provide unfair competitive advantage to those following the rules

Pumper Inspector relationship opportunity

Metro Preferred Pumper Program works well for Baker Commodities

- Inspectors listened to our needs and incorporated them into the program
 - We needed to have the flexibility to work overnight
 - Allowed us to customize our pump out report to meet their requirements and ours on a single form
 - Let us know what services they want to observe

pumper Inspector relationship opportunity

- Inspectors have worked hard to make the program work for all involved
- We may occasionally have bumps along the way but the relationships are there between the pumper and inspector to work through them

Things to consider

One of the many sets of rules we follow are the DOT Hours of Service regulations

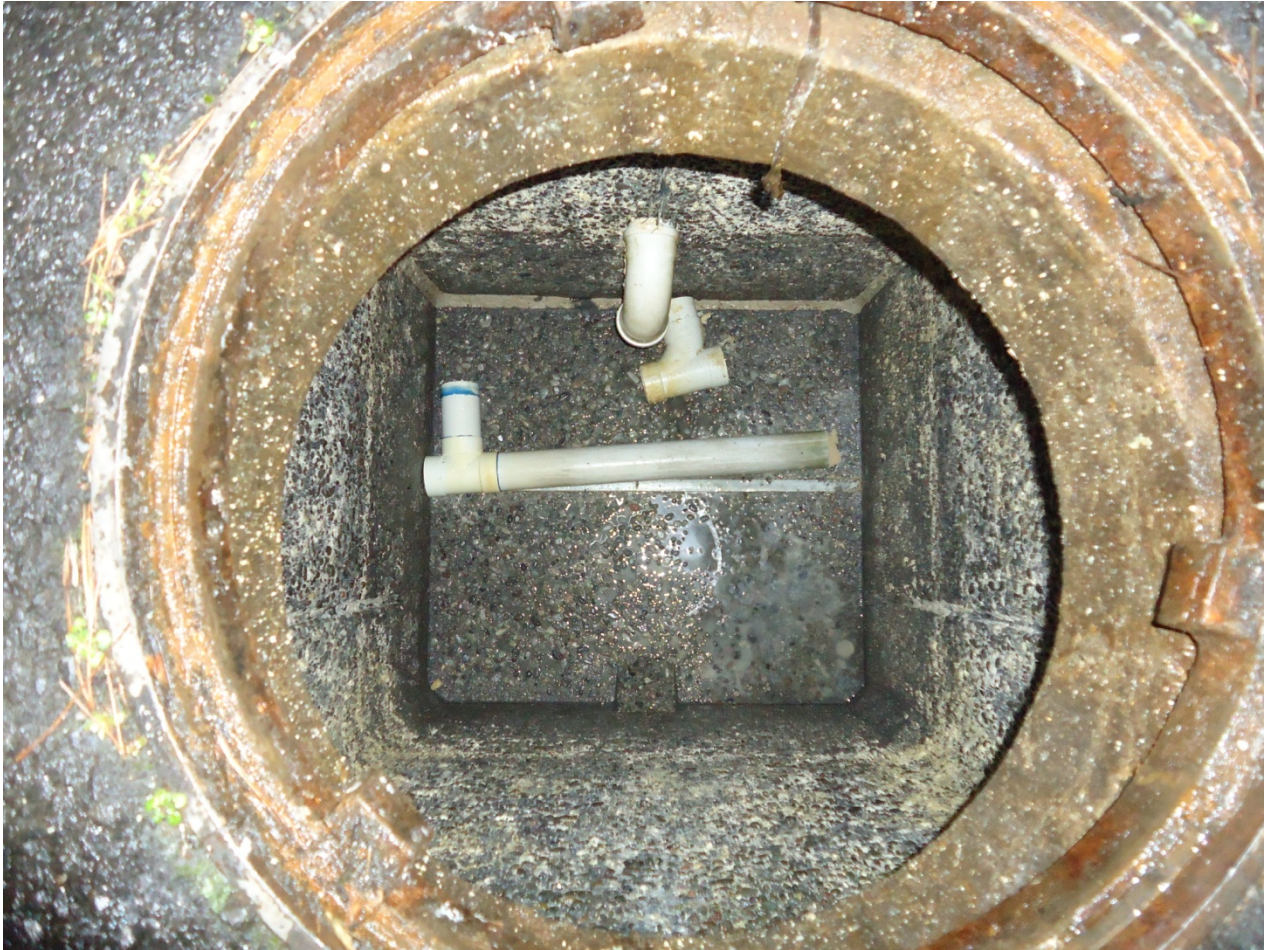
- Drivers all have class A CDL
- Limited to the number of hours per day
- Limited to the number of hours per week

Things to consider

Another set of rules we follow are OSHA safety rules particularly regarding confined space entry

- A grease interceptor is a confined space
- Confined space entry requires at least two properly trained people
- Confined space entry requires the proper safety equipment

Things to consider



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Things to consider

Confined space entry starts at approximately \$1,000

All repairs inside the interceptor require confined space entry

- Including attaching inlet Tee and tailpiece

Things to consider

Interceptors with manhole stacks are difficult to clean and thorough cleaning requires a confined space entry

Interceptors with exposed aggregate can be repaired

- Repairs require a confined space entry and seem to be holding up well
- Can delay the cost of replacing an interceptor

Thank you

Any questions?