

FOG Program Enforcement

- Do you have adequate legal authority for enforcement action?
 - Sewer Use Ordinance, FOG Ordinance, FOG Mgt. Policy
- Types of Enforcement Action
 - Onsite Issued Noncompliance Notifications
 - Normally 30 day response required
 - NOVs
 - Normally 45 day response required
 - Compliance Schedule
 - Penalties, Fines, Administrative Orders

Food Service Establishment Enforcement Response Guide

- Functions in same way that an Industrial User Enforcement Response Guide does
- Allows consistent enforcement actions to be taken with FSEs, no favoritism
- Can be referenced in SUO, FOG Ordinance or FOG Mgt. Policy

Notices: Letters vs. Onsite Notifications

- 240 notification letters were sent to FSEs from April 2003 to September 2004. Main reasons:
 - No Grease Control Equipment installed (55%)
 - No maintenance, or GCE needs repair (45%)
 - Letters took longer to process, time and money
- In September 2004 we started onsite noncompliance notifications.

Review Noncompliance Notification handout

Noncompliance Notification Summary

	Sept 2004-August 2005		Sept 2005-August 2006		Sept 2006-August 2007		Sept 2007-August 2008	
<i># of FSEs issued:</i>	201		255		221		125	
1. GI Eff T not attached or not acceptable	45	11%	42	6%	36	6%	18	5%
2. GI Eff T not visible or accessible, estimated as FOG discharge potential	28	7%	42	6%	24	4%	18	5%
3. GI walls indicates deterioration	5	1%	16	2%	17	3%	14	4%
4. GI FOG layer and food solids layer est. at >25%	44	10%	42	6%	63	11%	62	17%
5. FOG in downstream manhole from FSE	77	18%	183	28%	179	30%	95	26%
6. FSE has no GCE installed	16	4%	25	4%	10	2%	10	3%
7. No records of GI or trap maintenance	117	28%	176	27%	156	26%	80	22%
8. Sewer cleanout covers need to be replaced	49	12%	55	8%	38	6%	17	5%
9. FOG on ground/Stormwater impact	44	10%	68	10%	67	11%	48	13%
Total Deficiencies noted:	425		649		590		362	
Total FSEs issued:	201		255		221		125	
FSEs with responses submitted	201		255		221		111	

Escalation in Enforcement Action

- Cause a SSO event
- Chronic FOG discharge to sewer system, causing weekly or monthly cleaning
- Cause sewer line blockage or back-up that affects sewer customers
- No response to previously issued noncompliance notices or NOVs
- DOCUMENT enforcement actions and follow-up on all to ensure adequate response received.

Way to Identify Problems and Initiate Corrective Action: Grease Control Equipment Certification Program

- Review handouts

- Grease Interceptor Certification (Form A)

- Grease Trap Certification (Form B)

Grease Waste Haulers and Plumbers attend the Grease Control Equipment Certification Class, view Powerpoint presentation and take a short 15 question test, then are issued Certification Cards.

Certification Program for interceptors and traps has been very successful for the cities that have implemented it. It makes grease waste haulers and plumbers responsible for identifying and reporting any problems with FSE grease control equipment.

PERFORMANCE INDICATORS

- What is going to be your standard or measure of how well the grease (FOG) management program is working?
- What difference did the FOG management program make in 6 months? One year? 2 Years? 5 Years?

Performance Indicators

- # of SSO events
 - Identify Primary Cause of the SSO
 - FOG or was Roots the primary cause
 - FOG or was it debris/gravel
 - May need CCTV to confirm cause
 - Keep SSO Tracking spreadsheet
- # of collection system maintenance calls due to FOG blockage
 - Many POTWs do not currently have good records for maintenance calls

Performance Indicators Collection System records

- The reason for blockage in the sewer may not be given or it is not considered to be high priority. Make sure maintenance and cleaning personnel know that the proper category is essential for determining performance and more importantly, to let you know where grease problem is located.
- Establish a list of most frequently cleaned areas in collection system. Monitor responses.



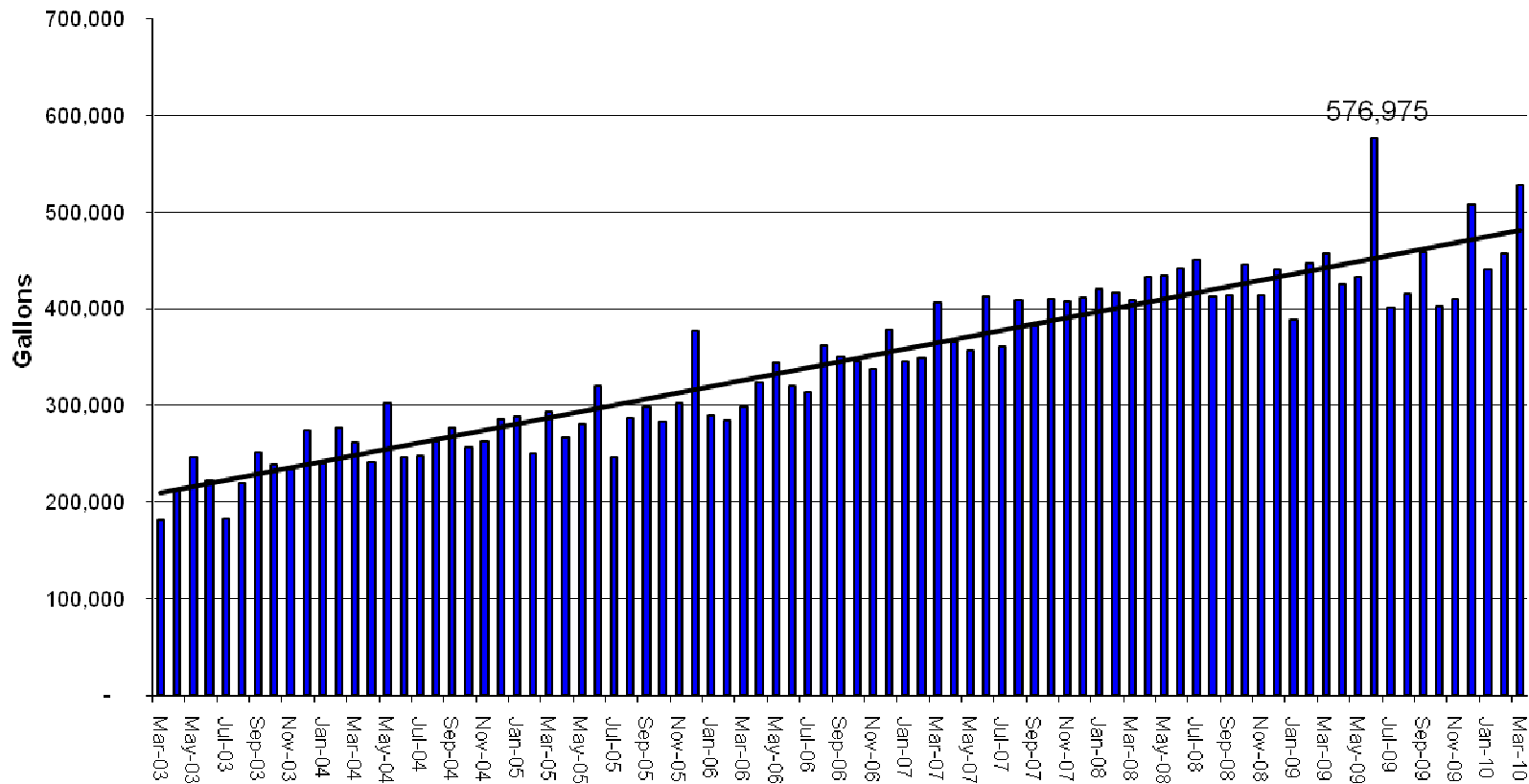
Performance Indicators

- # of Food Service Establishments
 - # of FSE inspections completed
 - # with grease control equipment
 - # maintaining their grease control equipment
- Records of FOG volume removed
 - Reports from Grease Waste Haulers
 - Reports on amount of grease received for treatment or disposal
 - Reports from private treatment facilities on volume of grease treated from your sewer jurisdiction

Total FOG volume pumped from Grease Control Equipment

Metro Nashville Total Grease Pumped & Disposed

(Before FOG program: 2002 monthly avg = 178,500 gallons)



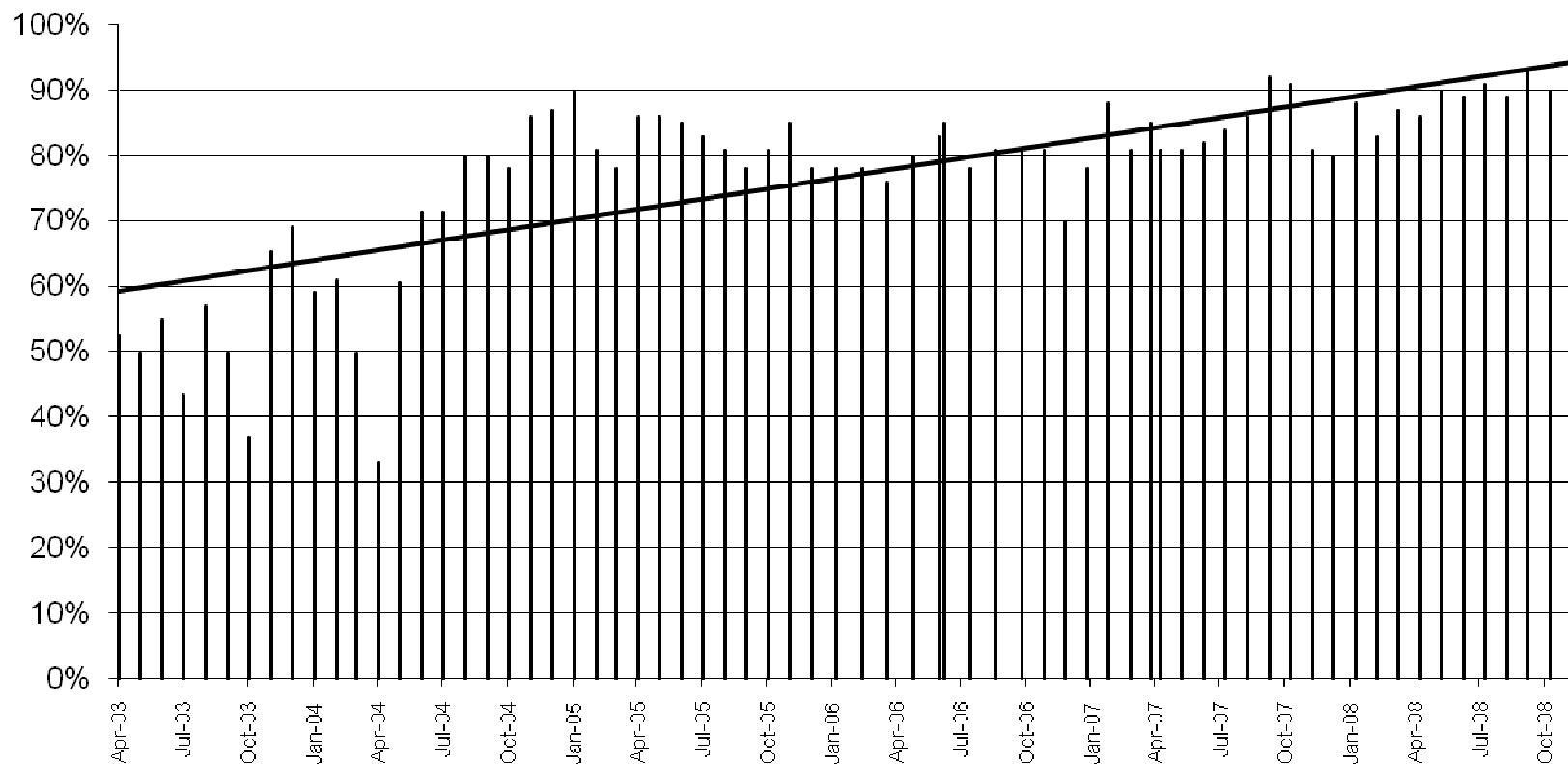
Municipal vs. Private Treatment of FOG

Metro Central FOG Volume vs. Private FOG Volume



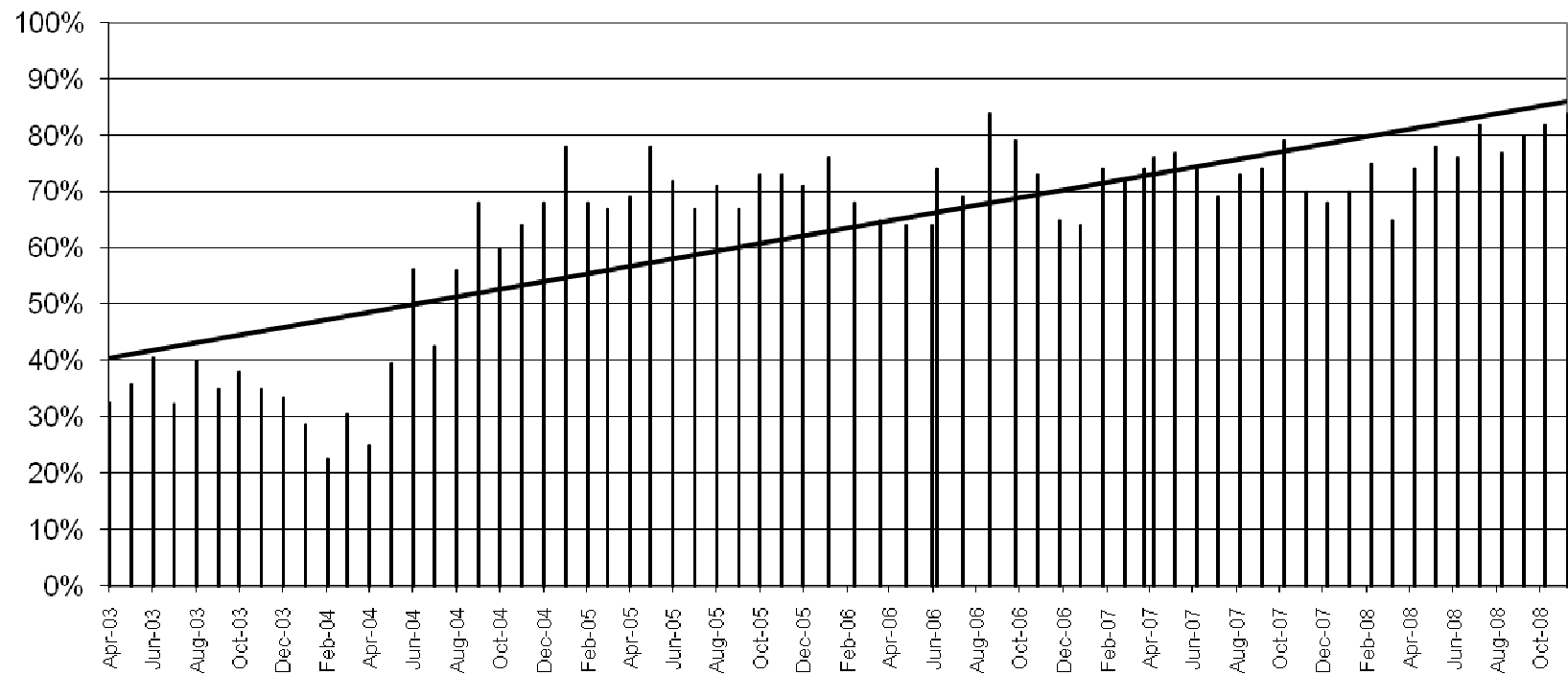
Interceptor maintenance improvement

Interceptors Maintained
Metro Nashville



Trap maintenance improvement

Traps (undersink, floor) Maintained
Metro Nashville



Track the number of FSEs that have installed new grease interceptors.

Reason for new install can be:

- *Leaking or deteriorated tank
- *Inadequate grease control equipment, with FOG in the downstream sewer line

Nashville TN has 320 new grease interceptor installations since 2004.

Performance Indicators

- FOG at the SPS stays on top of the wet well and does not allow oxygen transfer
- Track odor problem areas to determine if odors decrease as the GMP progresses



Sewer Pump Station FOG



Performance Indicators

- Monitor Sewage Pumping Stations for grease problems
 - Establish list of worse SPSs
 - Monitor grease depth and rate of build up
- WWTP Influent impact
 - O&G concentrations
 - Visual evidence at clarifiers

Performance Indicators

- Corrosion and Odor Problem Areas
 - FOG in the collection system creates conditions that favor the formation of hydrogen sulfide. FOG coats sewer pipes and makes anaerobic barrier layer where the pH decreases and bacteria breakdown the sulfates to sulfide.



Performance Indicators

- FOG financial impact
 - Establish baseline cost for response to FOG related problems in collection system & SPSs
 - Man Hours
 - Vehicle / Vactor Truck / Equipment Cost
 - Materials Cost for sewer repair
 - SPS pumps, repair
 - Establish baseline cost for FOG related problems at the WWTP
 - Pumps, Motors
 - Belt Filter Press parts replacement
 - Cleaning/Maintenance- Man Hours related to FOG

Sewer Maintenance Costs related to FOG – sewer line cleaning, CCTV, public and private back-ups

Mt. Juliet Public Works Department Sewer Maintenance Cost related to FOG

