



2020-8541

Discuss and consider action to authorize the City Manager to approve a professional services agreement with Freese and Nichols Inc. for services relating to establishing an Industrial Pretreatment Program (IPP) and Fats, Oils, Grease (FOG) standard in the amount of \$399,509.



# Industrial Pretreatment Program

## Need for Pretreatment Program

### Publicly Owned Treatment Works (POTW)



*“Protect POTW from toxic or non-conventional pollutants from industrial wastewater discharges”*

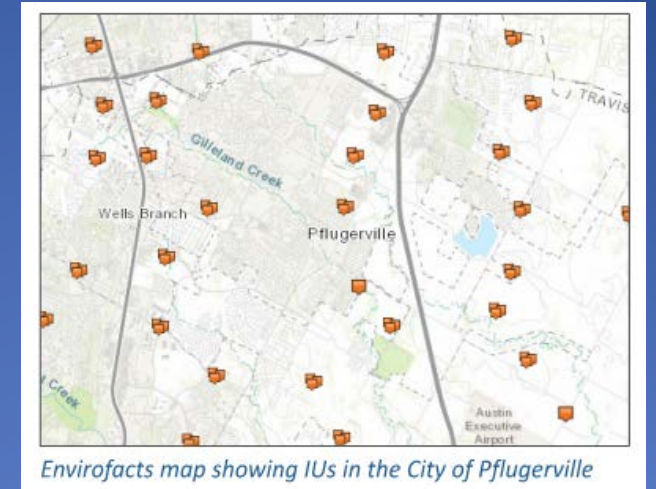
### Objectives:

- Prevent POTW interference (inhibition or upset of wastewater treatment process)
  - ✓ *Protect investment made on the new biological treatment process at Central WWTP*
- Prevent pass-through of pollutants
  - ✓ *Maintain discharge permit compliance at all times*
- Improve opportunities to recycle and reclaim municipal wastewater and sludge
  - ✓ *Maintain quality of treated effluent and biosolids*
- Equitable distribution of cost of treatment
  - ✓ *Revenue from high strength wastewater dischargers (surcharge program)*



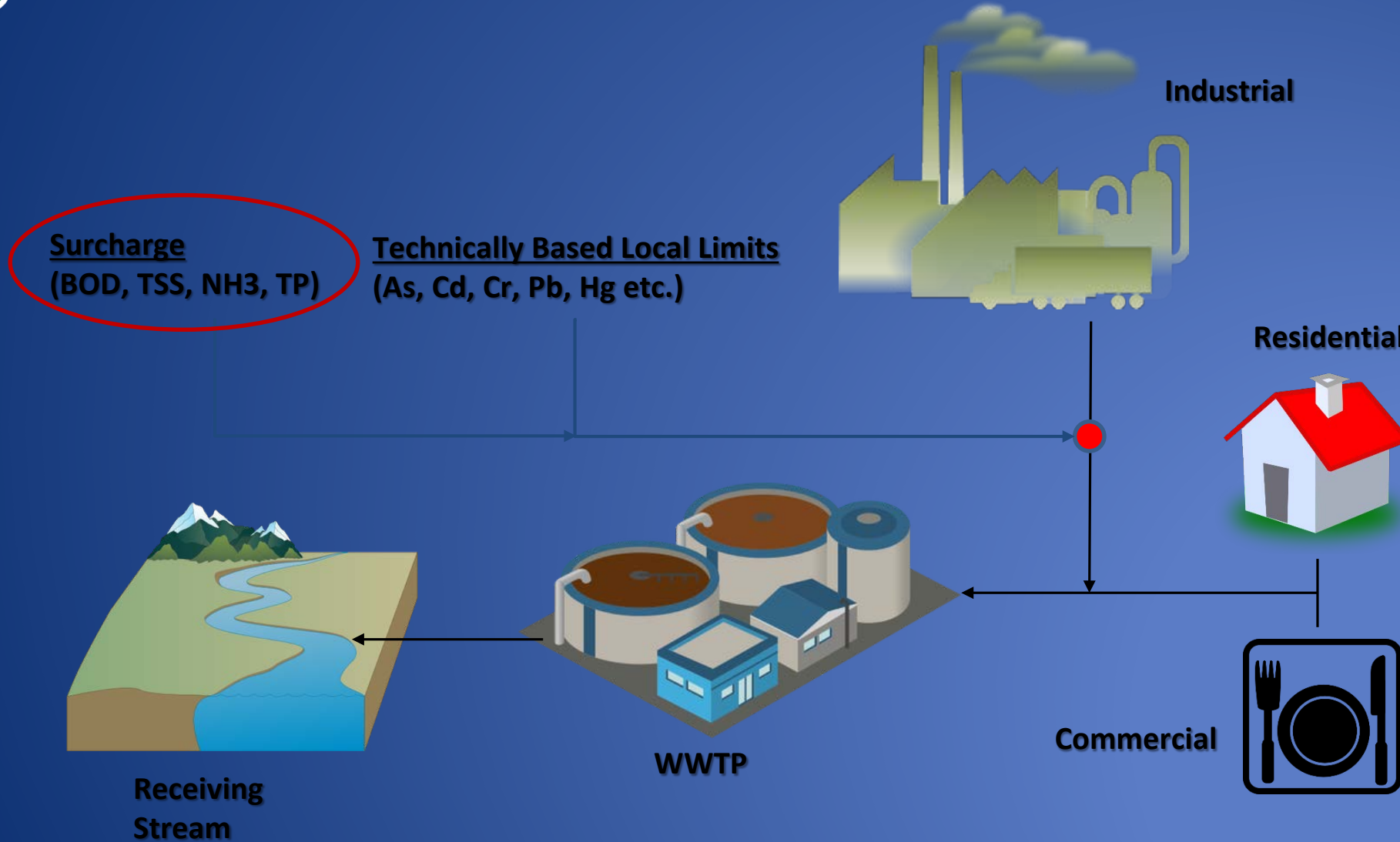
# Pretreatment Program Concepts

- i. Industrial User Survey (IUS)
- ii. Sewer Use Ordinance (SUO)
- iii. Enforcement Response Plan (ERP)
- iv. Standard Operating Procedures (SOP)
- v. Pretreatment Forms
- vi. Technically Based Local Limits (TBLLs) Development
- vii. Surcharge Program
- viii. Fats, Oils, and Grease (FOG) Program





# Surcharge Program







# Surcharge Program

Surcharge Fee = Cost of Treatment

## Need for Surcharge Fees:

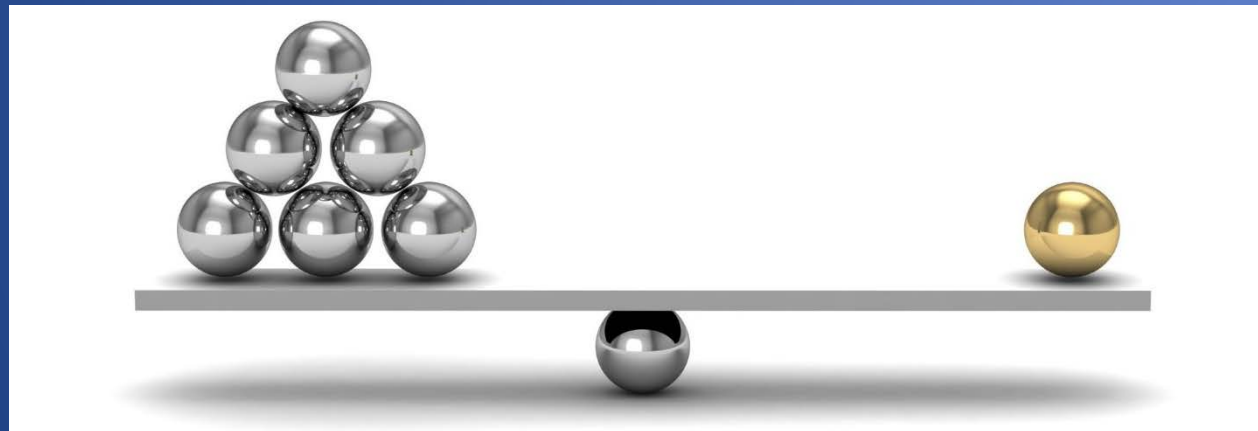
- Equitable distribution of cost of treatment at WWTP
- Revenue from industries discharging high strength wastewater
- Encourage industries to implement pre-treatment

SURCHARGE FEES =

*f* (TYPES OF POLLUTANTS,

“DOMESTIC” OR BASELINE POLLUTANT LEVELS,

COST OF TREATMENT FOR POLLUTANTS)



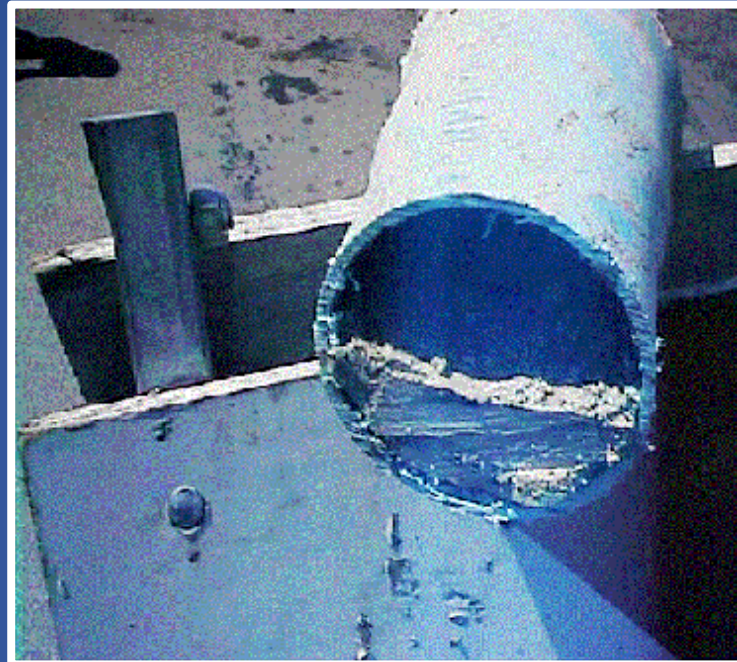


# Fats, Oils and Grease (FOG) Program

## FOG Causes Damage to the Sewer System



**Grease on walls of a sewer pipe**



## Sewer Blockages due to FOG





# Fats, Oils and Grease (FOG) Program

## Sewer Overflows Can Impact Our Community

- Sewer back-up affects people and businesses
- Sewer overflows cause:
  - Sewer line cleaning & flushing
  - Containment, removal, & disposal of spill & contaminated materials
  - Traffic Control
- Fine & Penalties
- Fish-kills
- Violation of State and Federal Laws





# Fats, Oils and Grease (FOG) Program

- Establish criteria for proper sizing of grease traps, installation, cleaning and maintenance
- Food Service Establishments (FSEs) survey and inventory
- FOG Ordinance
- Standard Operating Procedure (SOP) for implementation of FOG program
- Separate from Pretreatment ordinance

## An Effective FOG Program will:

- Protect collection system
  - Reduce damage to manholes, sewer pipes, and sewer pump stations
- Prevent expensive sewer overflows
  - Avoid regulatory fines and penalties
- Prevent sewer back-ups
  - Homes and businesses, avoid “bad” public relations
- Protect public health, safety, and environment
  - Reduce exposure to disease and potential for fish-kills
  - Protect drinking water





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