

Grease...

The Final Frontier.



Neal Klimek

Industrial \ Commercial Waste Inspector

Collection System Grease Blockages

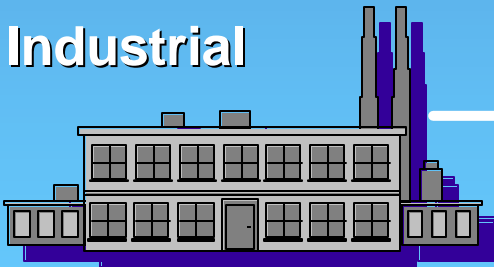
Commercial



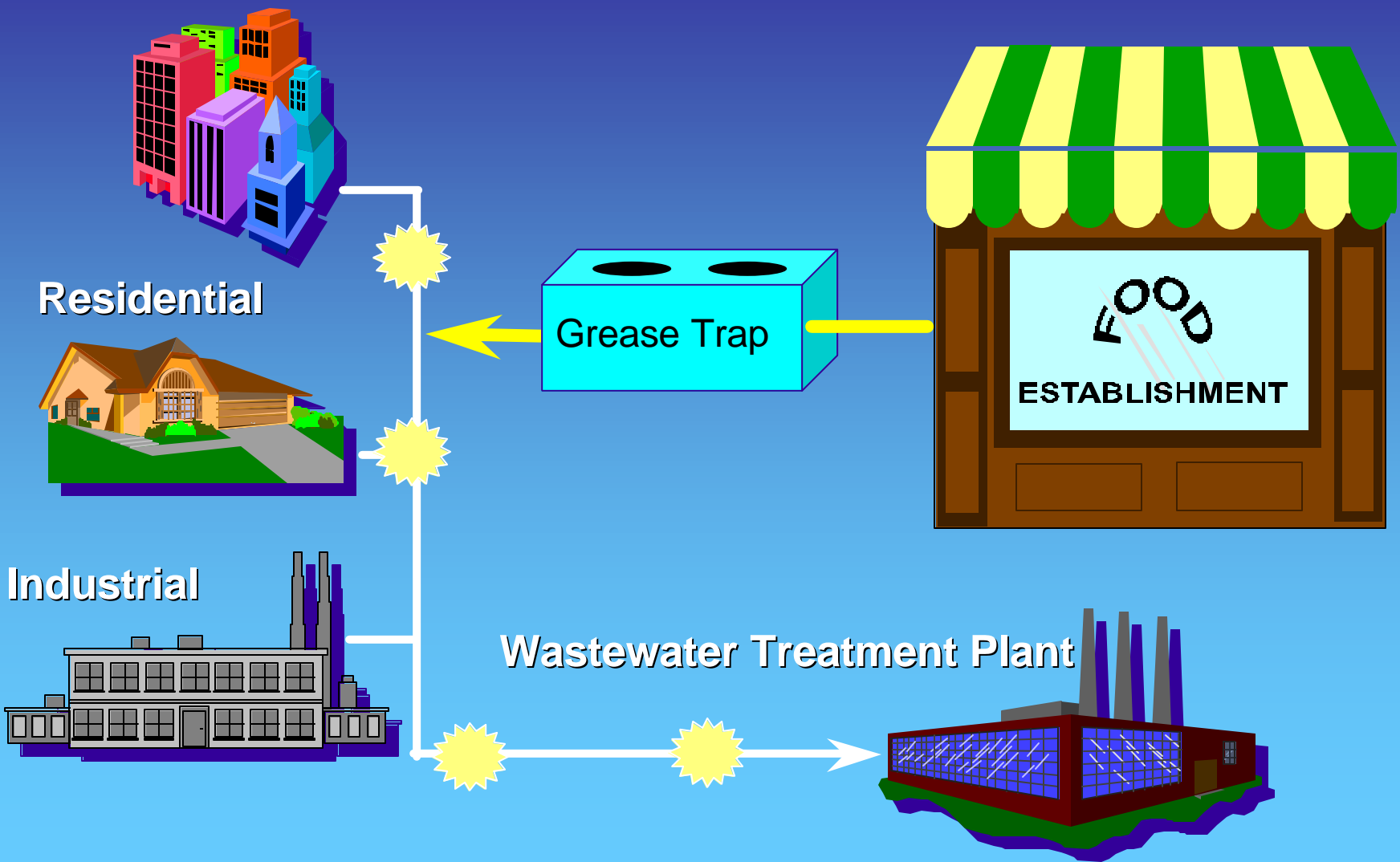
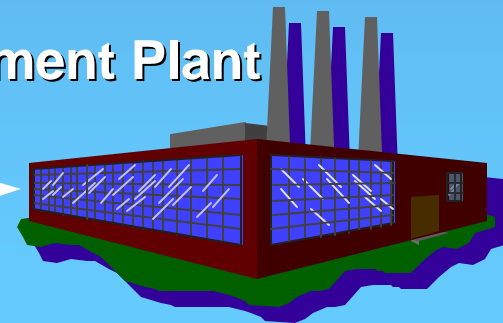
Residential



Industrial



Wastewater Treatment Plant



Grease Concerns



- ◆ *Collection System Grease Blockages*
- ◆ *Excess Repair & Maintenance Cost*
- ◆ *Lack of Concern for Collection System*
 - Grease Trap / Interceptor Operation
 - Kitchen Drainage System Maintenance

MSD Action Plans

- ◆ *Send initial contact letter to >600 Food Establishments*
- ◆ *Conduct **thorough** Site Visits*
 - Food Handling Procedures
 - Proper Disposal of Oil/Grease
 - Grease Trap/Interceptor
 - Pumper/Hauler Records
 - Immediate Downstream Manhole
- ◆ *Investigate Grease Blockages*
- ◆ *Send Follow-up letter & Information*



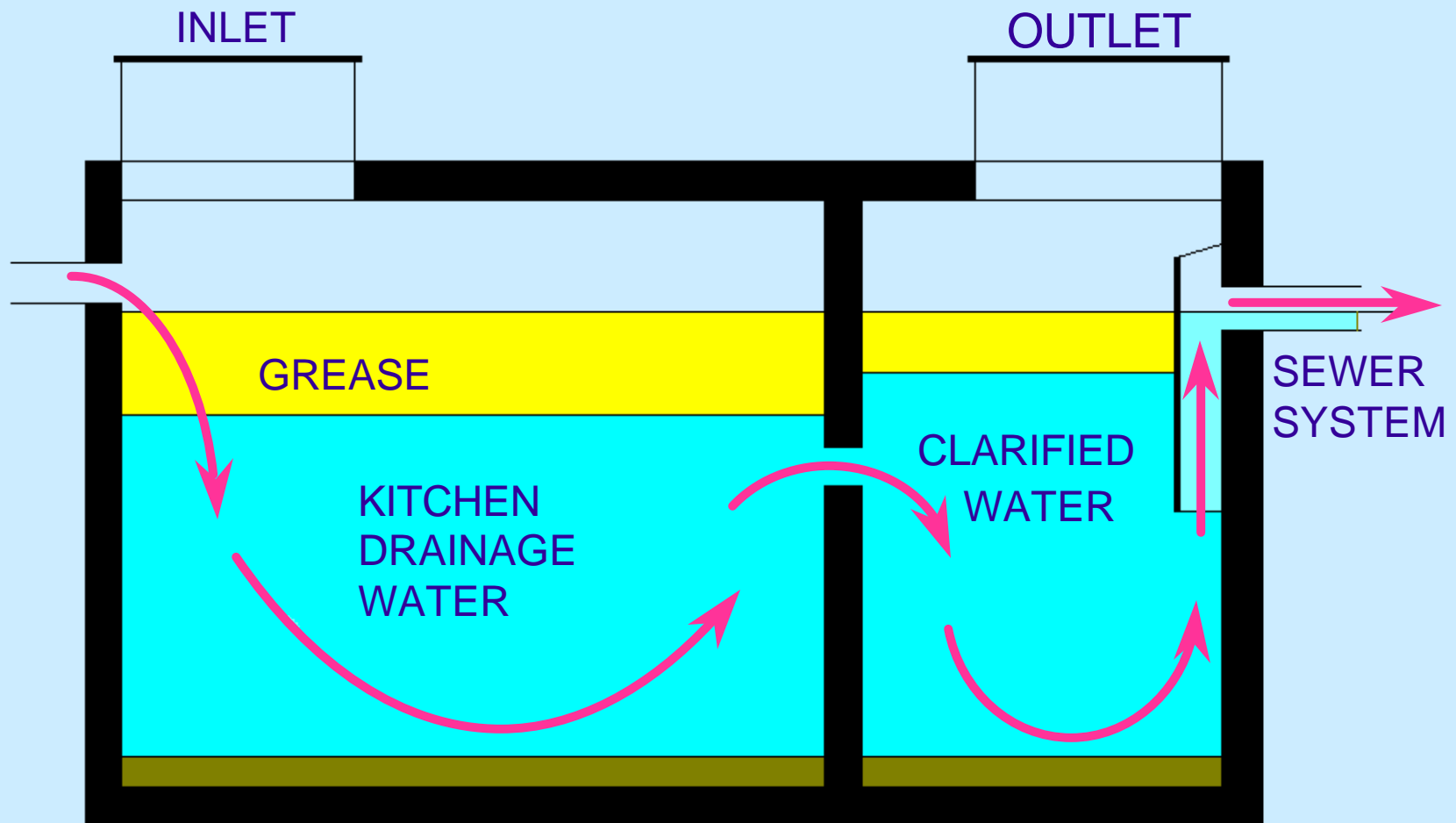
What Is a ...
GREASE TRAP ?



How Does It ...
WORK ?

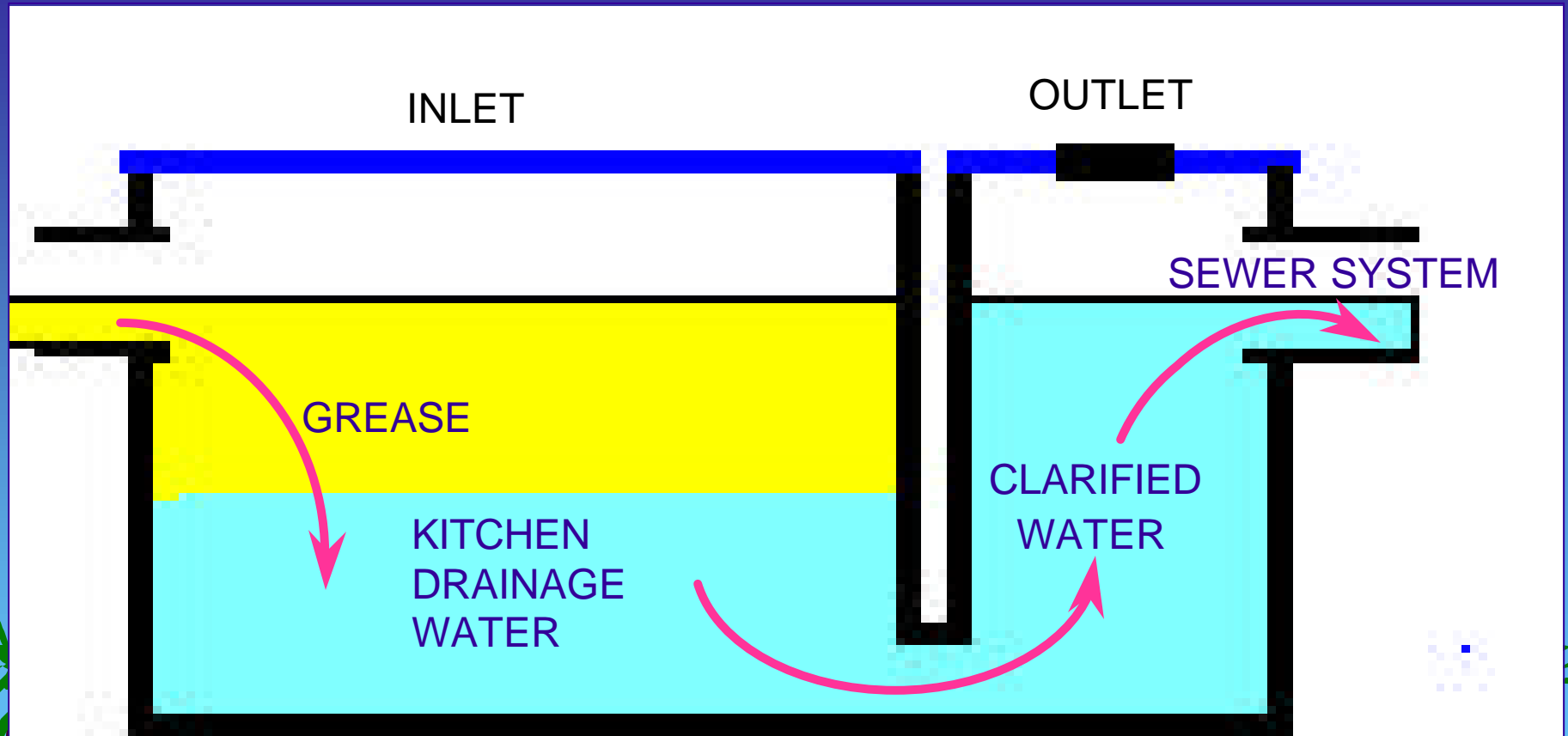


Grease Interceptor



Concrete Outdoor In-Ground Interceptor

Grease Trap



“Under-the-Counter” Steel / Iron Model

Compliance Determination

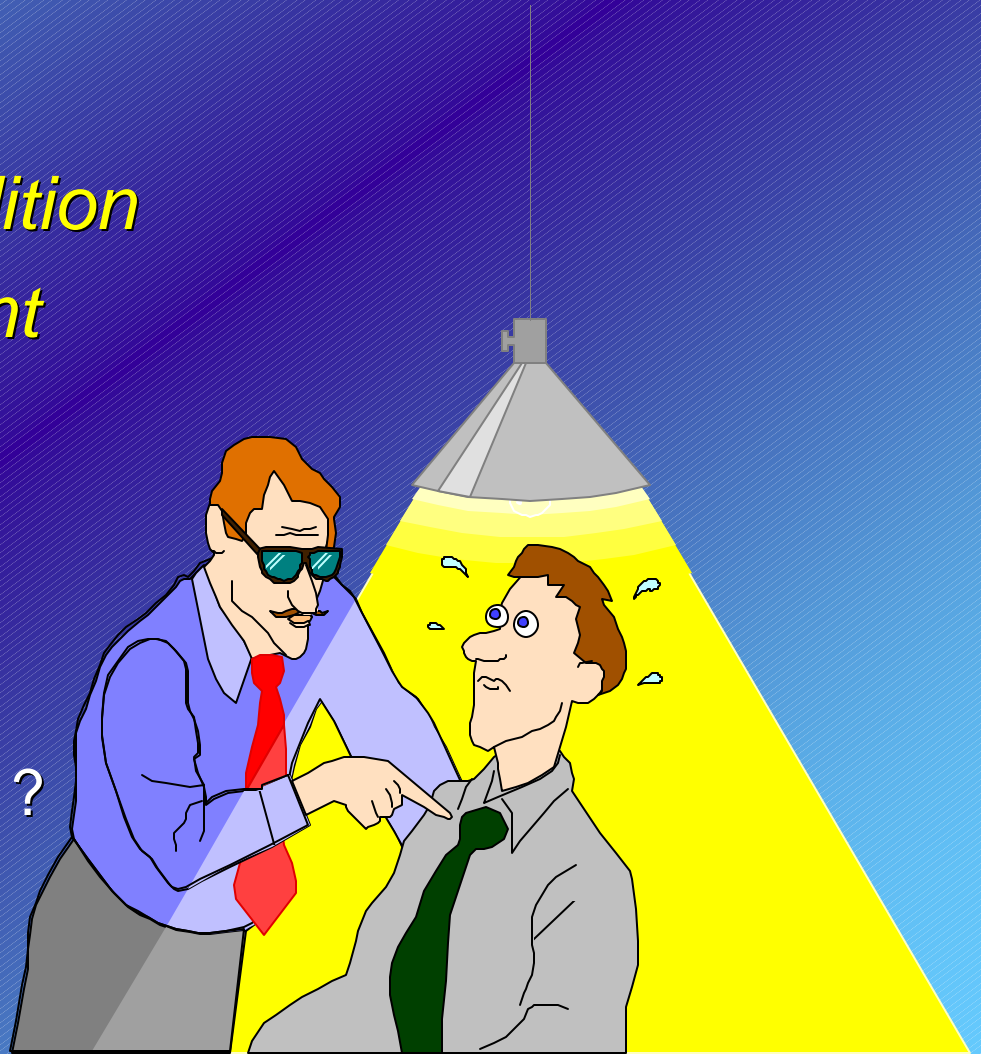
☞ *Vessel Structural Condition*

☞ *Outlet Chamber Effluent*

- Clear ?
- Floating Oil/Grease ?

☞ *Maintenance*

- Pumping Frequency ?
- Confirm Pumper/Hauler ?



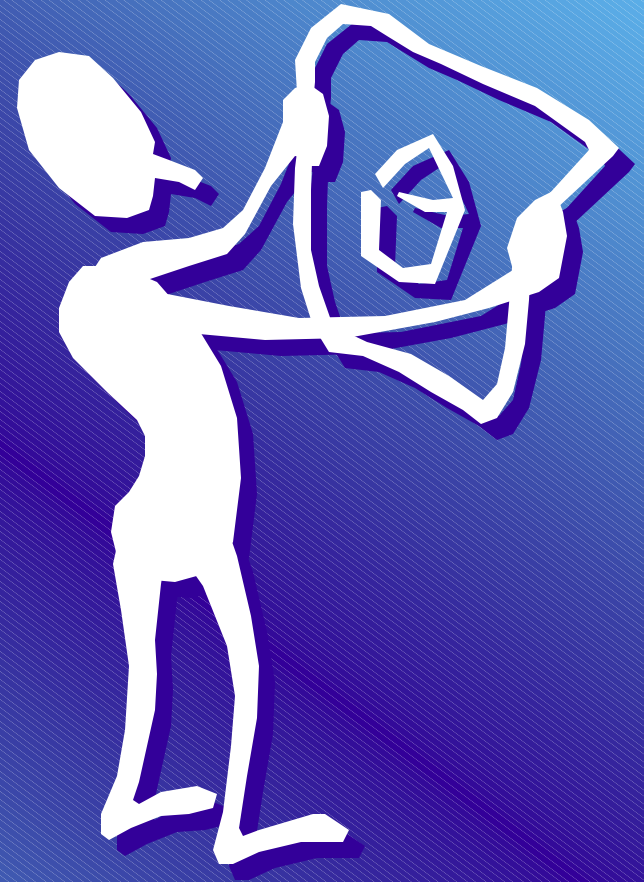
Common Structural Problems

- ◆ *One Access Port*
- ◆ *“Straight Pipe”*
- ◆ *Broken Sanitary-Tees*
- ◆ *Unaware of Grease Vessel*
- ◆ *“Backward Installation”*



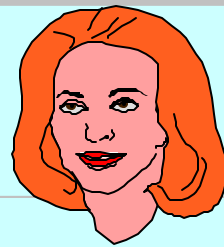
Tools of the Trade: EDUCATION

- ♦ *Reliable “Workable “ Database*
- ♦ *Manufacturer’s Drawings*
- ♦ *Grease Trap/Interceptor Maintenance Log*
- ♦ *Grease Reduction Guidelines*
- ♦ *Authorized Pumper List*
 - Grease
 - Septage
- ♦ *Reliable Plumbers List*

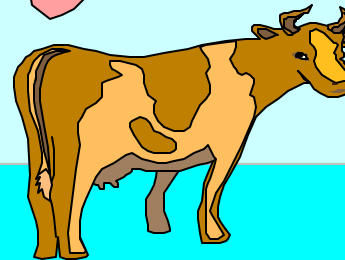


Trap & Fryer Grease ... It's Recyclable !

20% Make-Up, Candle's,
Food Grade Lubricants

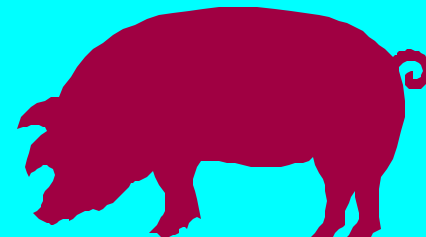
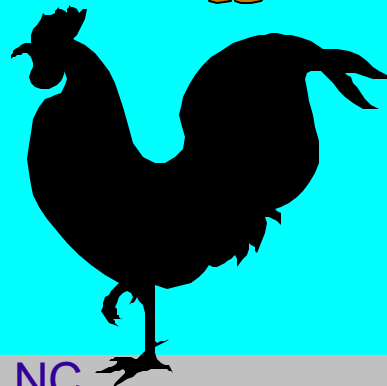


20% Cattle Feed, Dog & Cat Food



60%

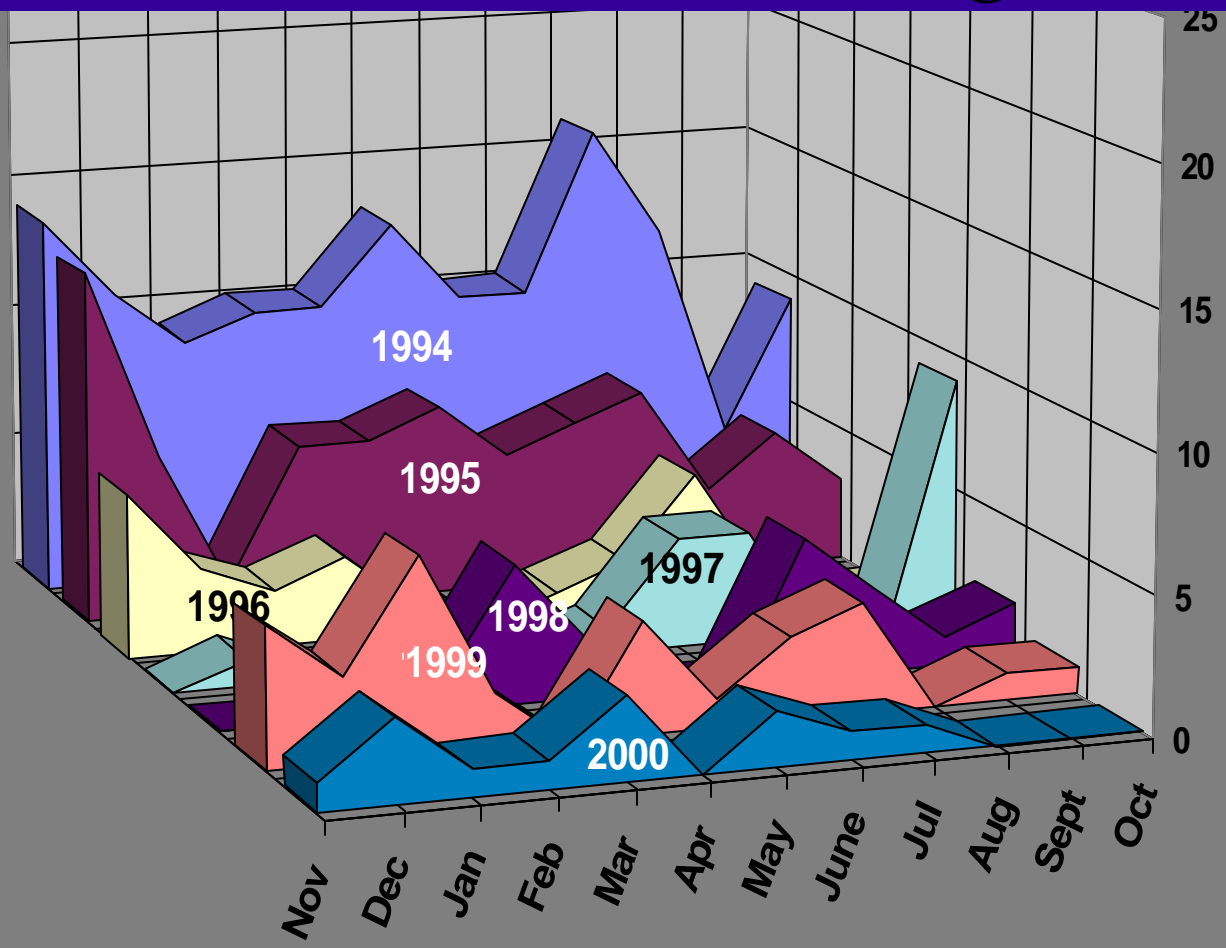
Poultry Feed, Pork Feed



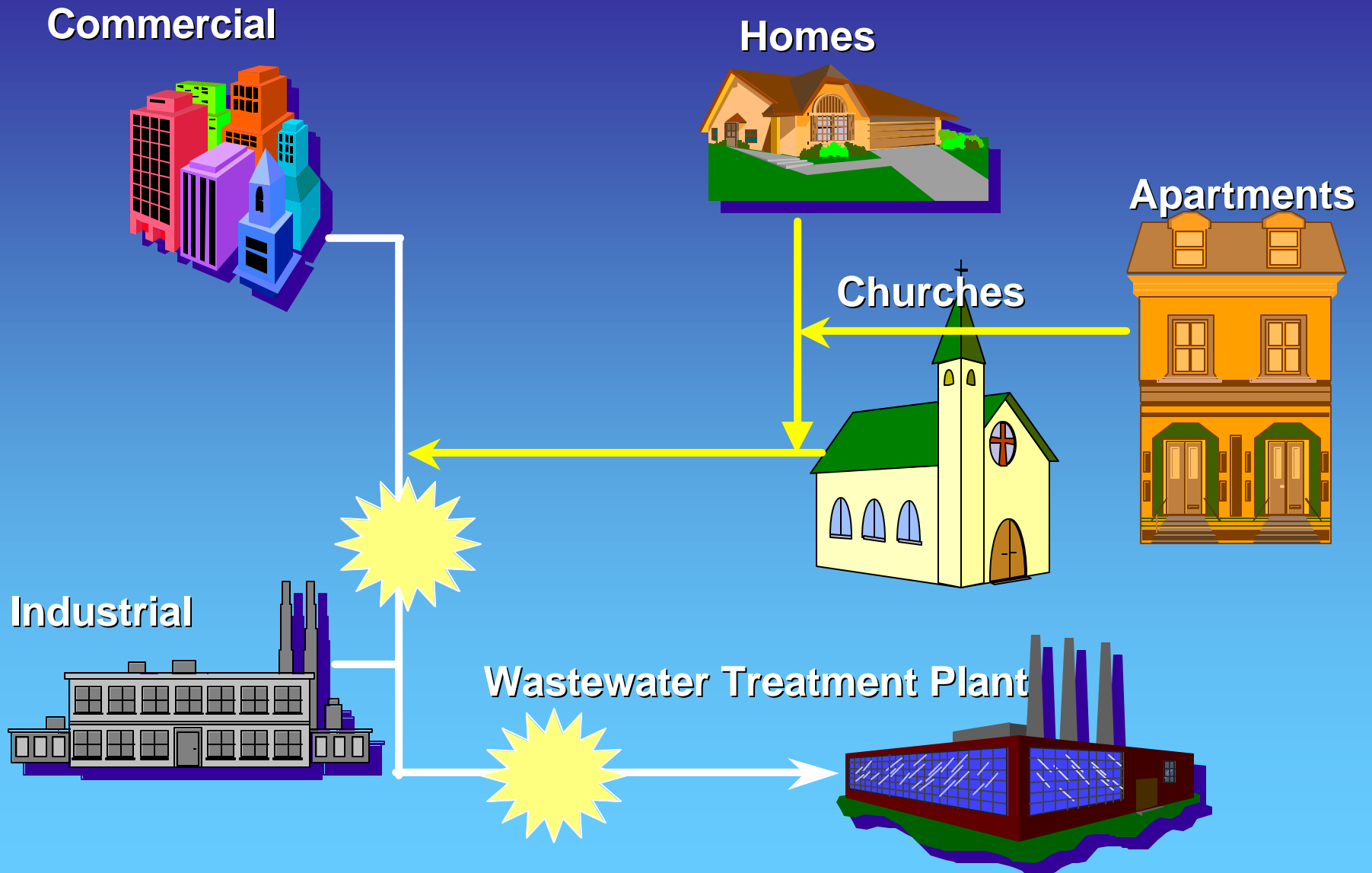
*Carolina By-Products, Greensboro NC

Grease Incidences

November 1993 - August 2000



Residential Grease Blockages



Residential Door Flyer



The MSD needs your ***HELP!***

**We are experiencing problems
with the sewer lines in your area...**

Turtle Creek Apartments

All efforts to **reduce grease** and **oil**
from going down the drain are being encouraged.

Please place ***all*** cooking grease and oils in a sealed container
and dispose in the ***trash.***

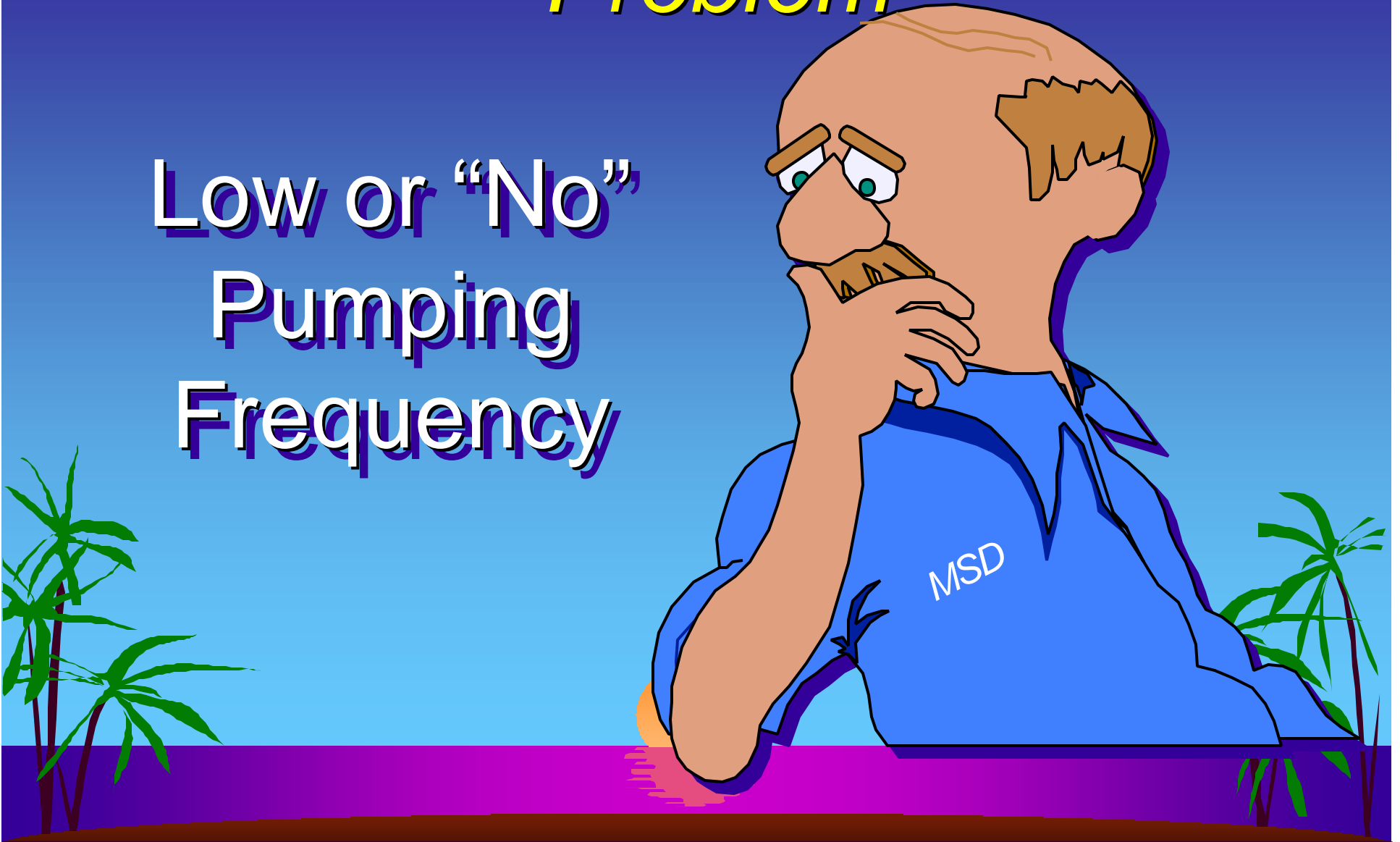
This will help to keep things *flowing!*

Thanks for Your Help

Metropolitan Sewerage District of Buncombe County (828) 252-7342

Common Reoccurring Problem

**Low or “No”
Pumping
Frequency**



Grease Reduction Program

Suggestions

- ♦ *Study & Understand Grease Vessel Detail Drawings*
- ♦ *Review & Approve New installations **BEFORE** construction*
- ♦ *Focus on People*
 - *Identify Concerns*
 - *Offer Recommendations*
 - *Render Assistance*





**Metropolitan Sewerage District of
Buncombe County**

**2225 Riverside Drive
Asheville, NC 28804**

Neal Klimek

***Industrial / Commercial Waste Inspector
Pretreatment Program***

***nklimek@msd.buncombe.nc.us
(828) 252-7342 Ext. 25***