



# ▶ PRETREATMENT LOCAL LIMITS

## WHAT IT MEANS TO INDUSTRIES

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STATE OF

Kentucky



# WHAT ARE LOCAL LIMITS & WHY ARE THEY IMPORTANT?

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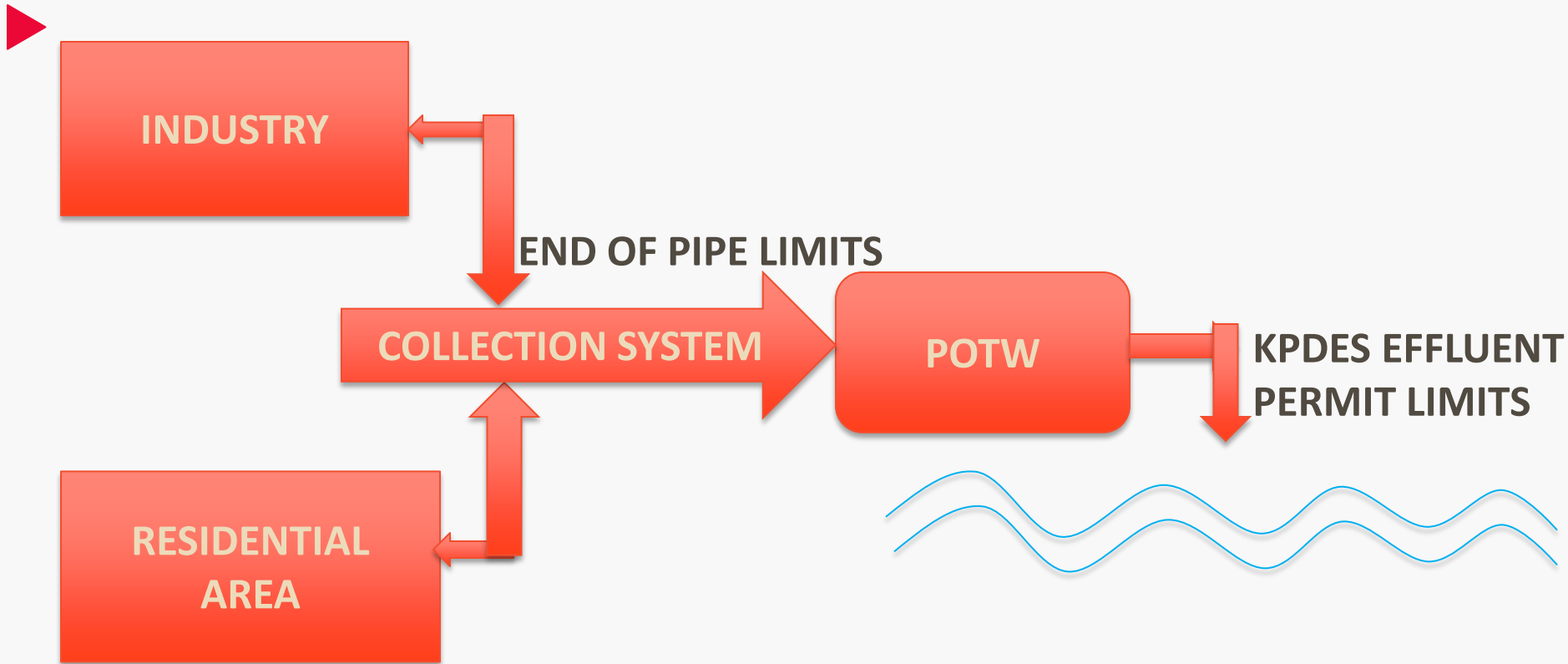
# WHAT ARE LOCAL LIMITS?



## ▶ What are Local Limits?

- Wastewater limitations that apply to Categorical or Significant commercial and industrial facilities that discharge to a publicly owned treatment works (POTW).
- Local limits are developed to meet the pretreatment program objectives and site specific needs of the local POTW and the receiving stream.
- Local limits control the pollutants in the wastewater discharges from commercial and industrial facilities and apply at the end of pipe from the facility.

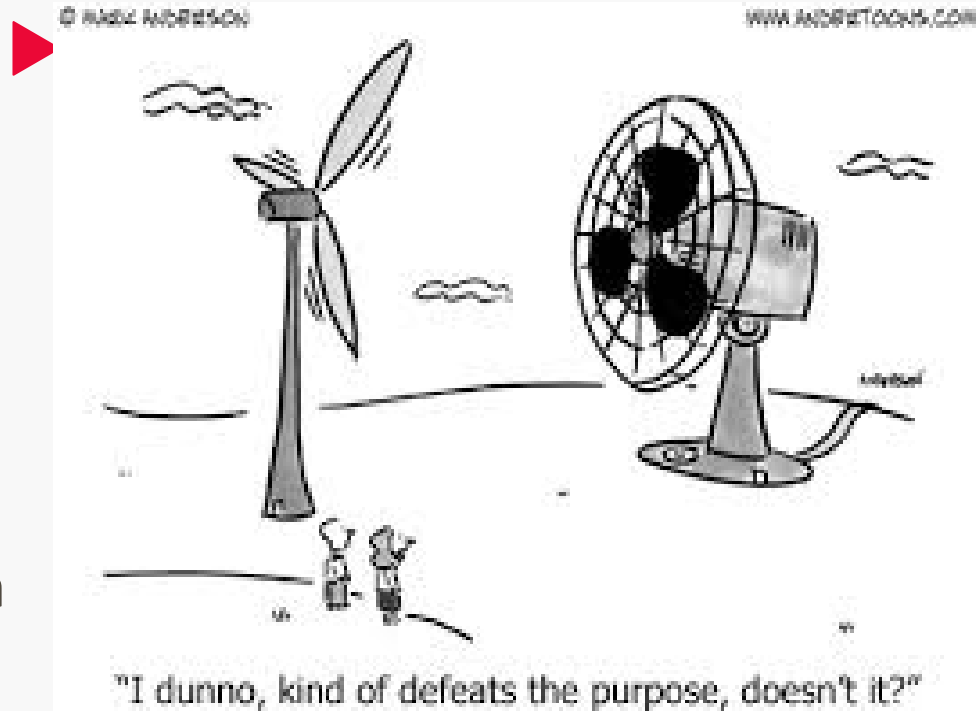
# WHAT ARE LOCAL LIMITS?



# WHY ARE LOCAL LIMITS IMPORTANT?

## ▶ Purpose

- To protect the POTW's operations; and
- To ensure that discharges from the POTW comply with State and Federal requirements.



# WHY ARE LOCAL LIMITS IMPORTANT?



## ▶ Operational Impact

- Financial (surcharges)
- Lower effluent limits
- Increased monitoring & reporting requirements
- Require the installation of more expensive control equipment
- Require changes of raw materials
- Limit plant expansion



# WHY ARE LOCAL LIMITS IMPORTANT?

## ▶ It's the law...POTWs are required to establish local limits

CFR Citation	Description
40 CFR 403.2	Objectives of the General Pretreatment Regulations are to prevent pass through, interference, and improve opportunities to recycle and reclaim wastewater and sludge.
40 CFR §403.5(c)(3)	Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.
40 CFR 403.3(I)	Pretreatment Standard means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with section 307 (b) and (c) of the CWA, which applies to Industrial Users. This requirement includes prohibitive discharge limits established pursuant to § 403.5 and Best Management Practices.

# WHY ARE LOCAL LIMITS IMPORTANT?

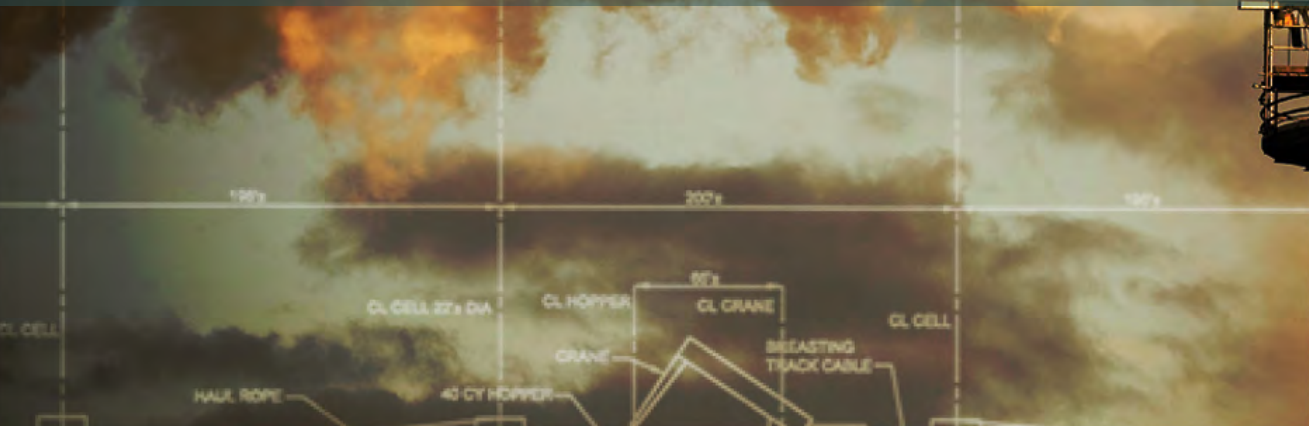


CFR Citation	Description
40 CFR 403.5(c)(1)	Each POTW shall continue to develop local limits as necessary and effectively enforce the limits.
40 CFR 403.8(f)(1)(iii)(C)	Permits must contain effluent limits based on applicable categorical standards, local limits, and State and local law.






# ▶ WHEN ARE LOCAL LIMITS DEVELOPED?



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# WHEN ARE LOCAL LIMITS DEVELOPED?

A small red triangle pointing to the right is located on the left side of the slide.

**A permit?**  
When there is a problem  
with treatment plant or  
with industries...???



# WHEN ARE LOCAL LIMITS DEVELOPED?

## ▶ Local Limits are developed when the city:

- has an approved Pretreatment Program;
- receives wastewater from a Significant Industrial User;
- receives wastewater from other non-domestic sources that have had:
  - Pass through of pollutants at the POTW's treatment system and result in violation of effluent limitations or receiving water standards;
  - Interfere with POTW's collection or treatment works, such that regulatory compliance or operating costs are significantly affected;
  - Sludge pollutant levels limiting biosolids use/disposal;
  - Toxic gases, vapors or fumes causing worker health and safety concerns.

# WHEN ARE LOCAL LIMITS DEVELOPED?



## ▶ Other factors that trigger local limits

- POTW experiences a significantly different influent flow or pollutant characteristics;
- Modification to treatment plant or processes;
- Changes To KPDES permit discharge limitations;
- New sludge disposal practices;
- New Water Quality standards for receiving stream;
- New or increased industrial discharges to POTW; or
- KPDES discharge or sludge disposal violations.

# ARE LOCAL LIMITS REVIEWED/REVISED?

## ▶ Local limits can be reviewed and revised

- POTWs must review/revise limits under 40 CFR 403.5(c)(1), **following permit issuance or reissuance”** [ 40 CFR 122.44(j)(2)(ii)].
- EPA recommends that the adequacy of local limits be reviewed if:
  - Current wastewater treatment plant performance fails or will fail to attain applicable NPDES;
  - Changes occur in state, or local permit requirements or other operational objectives, including water quality objectives of receiving waters; or
  - The performance shortcomings may be reasonably attributed to pass through or interference caused by a Pollutant of Concern (POC).



# ▶ WHEN CAN YOU GET INVOLVED?



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# WHEN CAN YOU GET INVOLVED?

## ► Opportunities for involvement...

- **Anytime!** Communicate with your local POTW Pretreatment Coordinator on a regular basis and before public notices of local limits
- When the city adopts/revises their **Sewer Use By-Laws/Ordinance**
- When changes are made to **Industrial User Permits**
- Through other **notifications** (newspaper notices, direct mailings, etc.) to individual users.
- When there are changes to the POTW's **KPDES Permit**

# WHEN CAN YOU GET INVOLVED?

## ▶ Put your company & program in an anticipatory mode!

- Understand the basics of the local limit/pretreatment programs;
- Understand the operational limitations of the POTW;
- Meet on a regular basis with your POTW Operator and Pretreatment Coordinator;
- Make sure your POTW Operator knows in advance of any modifications to your operation;
- Notify your POTW Operator if you have emergency discharges/releases from your operations;
- Ask questions!! Stay involved!!





# TYPES OF INDUSTRIES SUBJECT TO ▶ LOCAL LIMITS & CATEGORICAL STANDARDS

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# TYPES OF INDUSTRIES SUBJECT TO LOCAL LIMITS & CATEGORICAL STANDARDS



## ▶ Categorical Standards

- Uniform, technology-based, and applicable nationwide.
- Developed by EPA, they apply to specific categories of Industrial Users and limit the discharge of specified toxic and non-conventional pollutants to POTWs.
- Expressed as numerical limits and management standards, the categorical standards are found at 40 CFR 405 through 471.
- They include specific limitations for 35 industrial sectors.
- Limits are different depending on whether the industry is “NEW” or “EXISTING”

# CATEGORICAL STANDARDS FOUND AT 40 CFR CHAPTER I SUBCHAPTER N 405-471



## **PART 405—DAIRY PRODUCTS PROCESSING POINT SOURCE CATEGORY**

### **Subpart A—Receiving Stations Subcategory**

#### **Sec.**

- 405.10 Applicability; description of the receiving stations subcategory.
- 405.11 Specialized definitions.
- 405.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 405.13 [Reserved]
- 405.14 Pretreatment standards for existing sources.
- 405.15 Standards of performance for new sources.
- 405.16 Pretreatment standards for new sources.
- 405.17 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

### **Subpart B—Fluid Products Subcategory**

- 405.20 Applicability; description of the fluid products subcategory.
- 405.21 Specialized definitions.
- 405.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 405.23 [Reserved]
- 405.24 Pretreatment standards for existing sources.
- 405.25 Standards of performance for new sources.
- 405.26 Pretreatment standards for new sources.
- 405.27 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

- 405.35 Standards of performance for new sources.
- 405.36 Pretreatment standards for new sources.
- 405.37 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

### **Subpart D—Butter Subcategory**

- 405.40 Applicability; description of the butter subcategory.
- 405.41 Specialized definitions.
- 405.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 405.43 [Reserved]
- 405.44 Pretreatment standards for existing sources.
- 405.45 Standards of performance for new sources.
- 405.46 Pretreatment standards for new sources.
- 405.47 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

### **Subpart E—Cottage Cheese and Cultured Cream Cheese Subcategory**

- 405.50 Applicability; description of the cottage cheese and cultured cream cheese subcategory.
- 405.51 Specialized definitions.
- 405.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 405.53 [Reserved]
- 405.54 Pretreatment standards for existing sources.
- 405.55 Standards of performance for new sources.
- 405.56 Pretreatment standards for new sources.
- 405.57 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

# TYPES OF INDUSTRIES SUBJECT TO LOCAL LIMITS & CATEGORICAL STANDARDS



## ▶ Pretreatment Requirements Apply to:

- All non-domestic sources of wastewater that discharge to a Publicly Owned Treatment Works (POTW);

## There are additional requirements for:

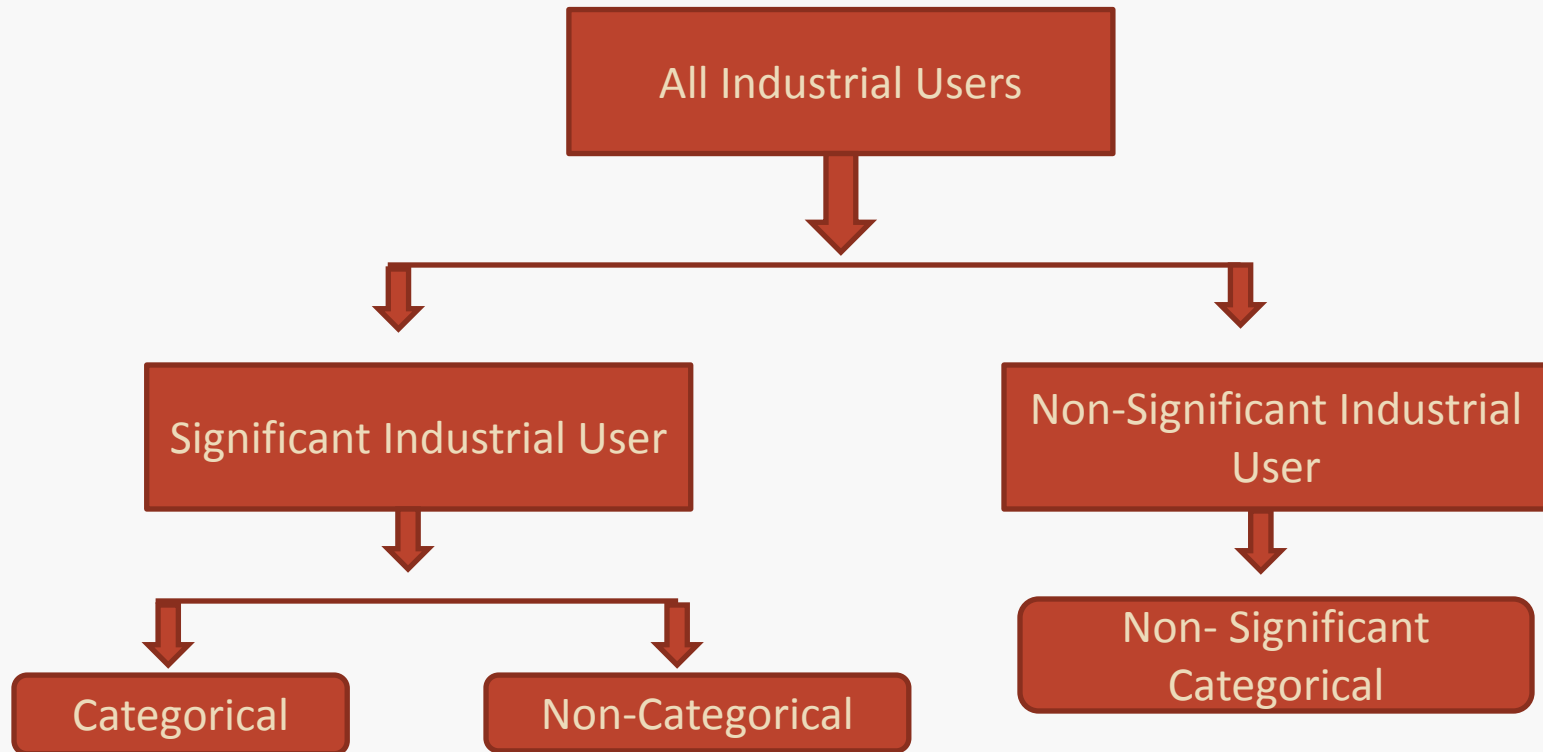
- All Significant Industrial Users (SIUs),
- Certain requirements only apply to Categorical Industrial Users (CIUs).

\*As categorical standards differ from locally developed limits, categorical industries must comply with whichever limits are more stringent.

# TYPES OF INDUSTRIES SUBJECT TO LOCAL LIMITS & CATEGORICAL STANDARDS



## ► Types Of Industrial Users



# TYPES OF INDUSTRIES SUBJECT TO LOCAL LIMITS & CATEGORICAL STANDARDS



## ▶ Significant Industrial Users:

- Categorical Industries
- Industrial Users:
  - Any industry which discharges an average of  $\geq 25,000$  gpd of process wastewater to the sewer system (excluding sanitary, contact cooling and boiler blowdown wastewater)
  - Any industry which is designated by the city on the basis that the industrial user has a reasonable potential for adversely affecting the operation of the collection system or treatment plant, or violating any pretreatment requirement.
- Non-Categorical Industrial Users, which are not categorized under Categorical Pretreatment Standards

# TYPES OF INDUSTRIES SUBJECT TO LOCAL LIMITS & CATEGORICAL STANDARDS



## ▶ **Non-Significant Categorical Industrial Users:**

- Subject to Categorical Pretreatment Standards
- Never discharges >100 gpd of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the pretreatment standard)
- Industrial User, prior to the city's finding, has consistently complied with all applicable Categorical Pretreatment Standards and requirements
- User annually submits the certification statement required in 403.12(q)
- Never discharges any untreated wastewater

# CATEGORICAL STANDARDS Vs. LOCAL LIMITS



	Categorical Standards	Local Limits
<b>Developed by</b>	EPA	POTW
<b>Objective</b>	Uniform national control of Industrial Users	POTW/Receiving Water Protection
<b>Regulated</b>	Industries specified in CWA	All non-domestic dischargers
<b>Pollutants</b>	Priority Pollutants (toxic & non-conventional only)	Any Pollutant
<b>Basis</b>	Technology based	Technically based on site-specific factors
<b>Applicability</b>	End of regulated process(es)	Depends on development method





# ▶ KPDES PERMIT LIMITS



## ▶ Permit requirements for the pretreatment program:

- Issued to city **every five years**
- Contains pretreatment program requirements based on the city's evaluation of the industrial users that discharge to the treatment plant.
- Implementation of Local Limits is part of the Pretreatment Program requirement
- During their permit period, cities submit DMRs of influent and effluent sampled according to permit conditions
- Also an Annual scan summary of Metals, Volatiles and Semi-Volatile parameters will be submitted at the time of applying for a permit

## ► Kentucky DOW's Analysis:

- KY analyzes the city's data to determine the reasonable potential for **metals; volatile; & semi-volatile parameters** based on Water Quality Standards and the treatment plant performance reported on monitoring reports.
- Standard limits are imposed in the permit (BOD, suspended solids etc.).
- Based on the analysis, additional limits are imposed for metals, volatiles and semi volatiles.
- Additional limits imposed by the state affect the stringency of local limits.



# ▶ DEVELOPMENT OF LOCAL LIMITS

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# DEVELOPMENT OF LOCAL LIMITS

- ▶ ➤ Identification of initial list of pollutants of concern
- Collect and Analyze data
- Run Calculations
- Decide on form of local limits that are to be adopted
- Draft local limits ordinance and briefing documents
- Submit it to the state for its review and approval
- Make the proposed local limits available for public comment and individual notice to the affected parties
- Once comments are addressed and accepted by the state, local limits are adopted and implemented

## DEVELOPMENT OF LOCAL LIMITS

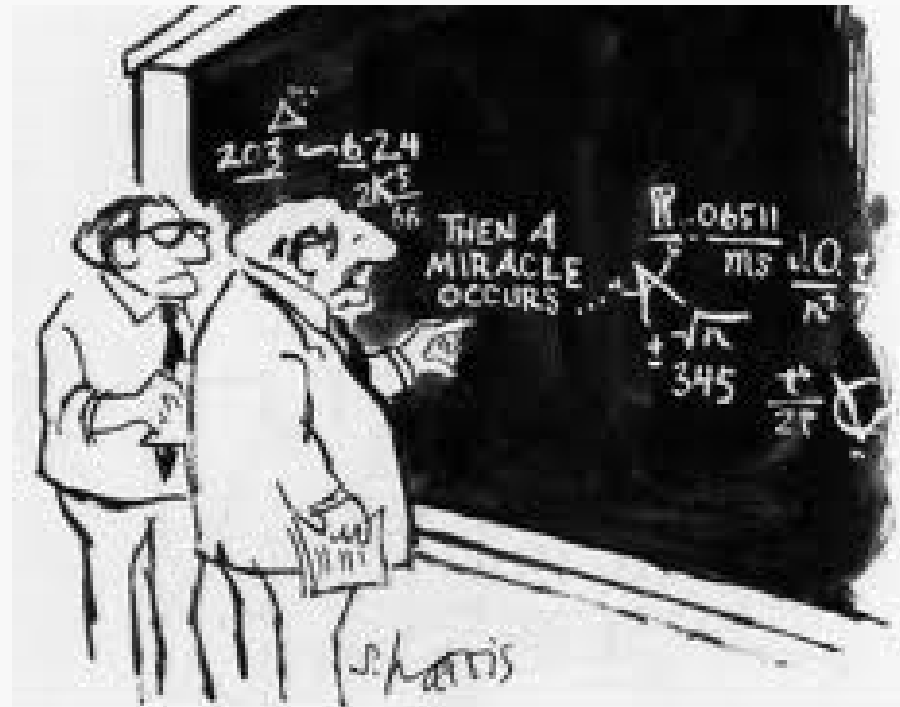
### ▶ Local limits are developed based on:

- Average flow from the industries;
- Total average flow that is entering POTW;
- Removal efficiency (in percentage) of pollutants of concern;
- Domestic concentrations ;
- KPDES Permit Limits;
- Analysis performed by the State (SSTWAM) to test the reasonable potential to impose limits on pollutants

# DEVELOPMENT OF LOCAL LIMITS

## ► Factors affecting local limits calculations: ►

- Flow from industries
- Concentration of pollutants discharged by industries
- Discharge concentrations to the stream which affects the KPDES permit limits
- Water Quality Standards of streams to which treatment plant is discharging



"I think you should be more explicit here in step two."

from *What's so Funny about Science?* by Sidney Harris (1977)



# ▶ QUESTIONS INDUSTRY SHOULD ASK

BOOK 551 PAGE 500

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## QUESTIONS INDUSTRY SHOULD ASK

- ▶  If you discharge <25,000 gpd what is the basis of designating your industry as a Significant Industrial User?
- What is the basis of my sampling frequency?
- What is Kentucky's position requiring additional sampling to determine compliance?
- What does the treatment facility receive in terms of domestic and non-domestic flow?
- Did the receiving stream Water Quality Standards impact my permit?
- Are the local limits allocated uniformly to all industries? If not, why and what are your limits?

## QUESTIONS INDUSTRY SHOULD ASK

- ▶  What is the public participation procedure in your city?
- Can I look at Discharge Monitoring Reports (DMRs) and annual pretreatment reports submitted by the city to the state?
- Did the city's stormwater issues impact my permit?
- Are there any new industries coming in? If so, how does it impact my limits?
- Can a contractor be used to administer the Industrial Pretreatment Program? Are there any qualifications required?



# ▶ HOW CAN YOU HELP YOURSELF?

BOOK 551 PAGE 500  
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# HOW CAN YOU HELP YOURSELF?

## ▶ Regularly check:

- ✓ Your effluent numbers
- ✓ Your discharge flow
- ✓ Lab reports
- ✓ Your treatment process
- ✓ Alternatives to decrease flow and concentration discharging to the treatment plant
- ✓ Effluent numbers discharging from the City



## HOW CAN YOU HELP YOURSELF?

- ▶ Obtain data submitted by POTW on Local Limits
- Review conditions in your Industrial User Permit
- Have a copy and review City's Sewer Use Ordinance
- Have a copy of the city's KPDES Permit and understand the applicable limits in the Permit
- Comment on Local Limits, during the Public Notice



# IMPORTANT POINTS TO BE NOTED

- ▶ ● Local Limits re-evaluation and implementation schedule ▶
- To address the issues that arise from chronically occurring Sanitary Sewer Overflows, Division of Water may require Cities to develop and implement a Sanitary Sewer Overflow Plan(SSOP)

## *Elements of SSOPs:*

- Sewer Overflow Response Protocol (SORP);
- Capacity, management, Operation and Maintenance Program (CMOM);
- Or other actions deemed necessary by Division of Water



# QUESTIONS??





▶ **THANK YOU**  
from Smith Management Group

[www.smithmanage.com](http://www.smithmanage.com)

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A decorative banner at the bottom of the slide. It features a red background with a white wavy pattern. On the left, the text "STATE OF" is visible in white, followed by the word "Kentucky" in a red, cursive script. To the right, there are faint, stylized black and white silhouettes of industrial structures, possibly oil rigs or power lines.