



## SAMPLING OF NON-SIGNIFICANT INDUSTRIAL USERS

### Introduction

On August 8, 2019, at the Region VI Pretreatment Association (RVIPA) workshop, the Texas Commission on Environmental Quality (TCEQ) Pretreatment team presented an interpretation of 40 CFR §403.8(f)(2)(v) that is different than how TCEQ has interpreted this provision previously. It was apparent from materials presented at the workshop that TCEQ is expecting that the effluent of all Industrial Users (IU) to be randomly sampled and analyzed. TCEQ presented a PowerPoint that indicated new focus areas for audits that stated:

#### **Texas State Breakout Session PowerPoint<sup>1</sup>**

*“Auditors will look for documentation demonstrating IUs in the service area, including non-significant IUs are sampled and analyzed randomly to ensure all wastewater contribution is properly characterized. Industrial waste survey (IWS) should include consideration of all non-domestic sources.”*

The WEAT Pretreatment Knowledge Committee (Committee) believes that TCEQ’s expectations for Control Authorities (CAs) to sample all IUs (specifically non-significant IUs) is not an appropriate interpretation of 40 CFR §403.8(f)(2)(v). The Committee believes this regulatory citation requires a CA to establish and implement procedures that enable the CA to randomly sample and analyze the effluent of an IU as part of its program responsibilities. The Committee does not believe this means the effluent of all IUs need to be randomly sampled and analyzed on a routine basis. However, the Committee agrees that a CA needs to have procedures that would enable them to randomly sample any IU to determine if the IU needs to be classified as a significant industrial user (SIU) and regulated through the pretreatment program to ensure compliance with applicable Pretreatment Standards. The rationale for this interpretation is presented in the following:

- The Purpose of the Industrial Waste Survey (IWS)
- Interpretation of 40 CFR §403.8(f)(2)(v)
- Impacts of Sampling all Industrial Users
- Other Information that Indicates the Need to Identify and Locate Industrial Users

Finally, a requirement to sample all IUs in a CA’s jurisdiction would require an inordinate amount of resources and manpower not only at the local government level, but also at the State level. The Committee’s position is that the IWS procedure is the most efficient and cost-effective way for identifying

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<sup>1</sup> Texas State Breakout Session, Texas Commission on Environmental Quality (TCEQ), 35<sup>th</sup> Annual RVIPA Workshop, Denton, Texas, 2019



and locating IUs that could cause pass through, interference, or contaminate sewage sludge. Identified IUs that have the potential to be problematic would be regulated as SIUs.

### **The Purpose of the Industrial Waste Survey**

As detailed in 40CFR §403.1(a), the purpose of the general Pretreatment Regulations is to establish the responsibilities of Federal, State, and local government, industry and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works (POTWs) or which may contaminate sewage sludge. The federal regulations at 40 CFR §403.8(f)(2)(i) require POTWs to have procedures to identify and locate all IUs that might be subject to the pretreatment program. The following excerpts from two Environmental Protection Agency (EPA) guidance documents demonstrate how the IWS is used to identify IUs subject to Pretreatment Standards and should be controlled through the pretreatment program to meet the purpose of the pretreatment regulations.

#### **EPA Guidance Manual for POTW Pretreatment Program Development<sup>2</sup>**

*“The information gathered during the IWS is essential in developing your pretreatment program because it provides the basis for most other activities. By identifying these industries and what they discharge, you can logically identify sources of known (or suspected) treatment plant problems, develop local limits for problem dischargers, determine sampling and analysis needs (both at the industries and in the treatment plant itself), and estimate manpower and equipment needs.”*

#### **EPA Introduction to the National Pretreatment Program<sup>3</sup>**

*“Once the IUs are identified, the POTW must classify them to determine whether pretreatment standards and requirements apply to any of the facilities (40 CFR 403.8(f)(2)). Typically, the POTW develops and distributes an industrial waste survey (IWS) questionnaire to the identified IUs. The IWS questionnaire requests information regarding IU activities and the nature of wastes discharge... The IWS must identify facilities that are subject to categorical standards (i.e., CIUs) or otherwise have the potential to affect the POTW (i.e., SIUs).”*

Many POTWs have found that certain types of businesses that typically do not pose a reasonable potential to violate any pretreatment standards (general and specific prohibitions or local limits) and therefore should not be included as part of the IWS (i.e. commercial businesses). The following EPA Guidance document supports a basis as to why CAs do not need to consider certain IUs in the evaluation of the IWS.

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<sup>2</sup> EPA Guidance Manual for POTW Pretreatment Program Development, 833B83100, October 1983 page 2-1

<sup>3</sup> EPA Introduction to the National Pretreatment Program, EPA-833-B-11-001, June 2011, page 4-2



#### **EPA Guidance Manual for POTW Pretreatment Program Development<sup>4</sup>**

*“POTWs with current industrial information may find it feasible to eliminate particular industries or groups of industries from survey efforts if the industry is:*

- *A manufacturing operation which does not generate wastewater (dry manufacturing process)*
- *A direct discharger*
- *A discharger of sanitary wastewater only*

*If your master list of potential industrial users includes theaters, beauty shops, barber shops, or retail sales firms, such businesses can usually be eliminated prior to contacting the firms. These businesses can be eliminated because their discharges typically do not contain the volume or type of significant pollutants that concern the POTW.*

*Other listings may be classified as industries but are actually offices or warehouses, with no nondomestic wastewaters discharged. Thus, they also may be eliminated from the master list. Hotels, motels, restaurants, and gas stations may be removed as well if they do not contribute to problems in the collection system or the treatment plant involving oil and grease or other discharged substances.”*

Based on the above guidance documents, the Committee believes that the goal of the IWS is to identify IUs that need to be classified as a SIU and regulated through the pretreatment program to ensure compliance with applicable Pretreatment Standards. Therefore, the next step is for those SIUs to comply with 40 CFR §403.8(f)(2)(ii) to (v).

#### **Interpretation of 40 CFR §403.8(f)(2)(v)**

In addition, the Committee believes that 40 CFR §403.8(f)(2)(v) does not require all IU effluents to be randomly sampled and analyzed. This is supported in the preamble for the 1990 General Pretreatment and National Pollutant Discharge Elimination System Regulation final rule. EPA presents their interpretation of 40 CFR §403.8(f)(2)(v) as follows:

#### **Federal Register EPA 40 CFR Parts 122 and 403 General Pretreatment and National Pollutant Discharge Elimination System Regulation; Final Rule<sup>5</sup>**

*“The existing regulations (40 CFR 403.8(f)(2)(v)) require that POTWs with approved pretreatment programs must be able to randomly sample and analyze the effluent from their industrial users and conduct surveillance and inspections to identify noncompliance with pretreatment requirements.*

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<sup>4</sup> EPA Guidance Manual for POTW Pretreatment Program Development, 833B83100, October 1983 pages 2-2 and 2-3

<sup>5</sup> Federal Register EPA 40 CFR Parts 122 and 403 General Pretreatment and National Pollutant Discharge Elimination System Regulation; Final Rule, Vol. 55, No. 142, 1990, page 30117



*However, these regulations do not specify how often such POTWs must perform the sampling analysis and surveillance. In the 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance," the Agency recommended that POTWs conduct at least one inspection and/or sampling visit annually to all "significant industrial users."*

*"In order to facilitate implementation of existing requirements by specifying a standard for how often POTWs must inspect and sample the effluent of their significant Industrial users, EPA proposed on November 23, 1988 to modify 40 CFR 403.8(f)(2)(v) to require POTWs with approved pretreatment programs to inspect and sample all "significant industrial users" at least once every two years. EPA believes that inspection and sampling of these users at least this often should help POTWs avert pass through and interference by keeping better track of the more significant industrial dischargers into their treatment and collection systems (especially dischargers of toxic and hazardous pollutants). The proposed revisions should also provide a uniform program requirement that EPA can readily enforce if necessary."*

Further, the preamble for the 1990 General Pretreatment and National Pollutant Discharge Elimination System Regulation final rule provides support that EPA has allowed regulatory flexibility and discretion for non-SIUs sampling. The document states the following:

**Federal Register EPA 40 CFR Parts 122 and 403 General Pretreatment and National Pollutant Discharge Elimination System Regulation; Final Rule<sup>6</sup>**

*"The Agency, in its 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance" recommended that Control Authorities conduct at least one inspection and/or sampling visit annually for all significant industrial users. This recommendation has also been made during pretreatment inspections and program audits. By specifying a minimum compliance monitoring frequency, the Agency is establishing uniform program requirements to assist in program oversight and which can be readily enforced if necessary. In addition, the Agency points out that this requirement applies **only to significant industrial users**. EPA has allowed considerable flexibility and discretion for nonsignificant industrial users with regard to effluent sampling and other regulatory requirements."* [emphasis added]

The statements by EPA in this Preamble help to clarify that, with the exception of SIUs, there is no frequency requirement identified in the Pretreatment regulations for sampling IUs that is enforceable. Further, EPA is identifying a specific class of IUs (i.e. the SIUs) that are controlled through the pretreatment program. The Committee believes the CA should only be required to sample and inspect SIUs at the frequency specified in 40 CFR §403.8(f)(2)(v). The sampling frequency for non-SIUs is not defined in the

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<sup>6</sup> Federal Register EPA 40 CFR Parts 122 and 403 General Pretreatment and National Pollutant Discharge Elimination System Regulation; Final Rule, Vol. 55, No. 142, 1990, page 30118



regulation, however, the rules provide that a CA has the legal authority and procedures that allow the CA to sample non-SIUs should a need arise.

### **Impacts of Sampling all Industrial Users**

TCEQ's interpretation of 40 CFR §403.8(f)(2)(v) as presented at the workshop in which they are expecting that the effluent of all IUs to be randomly sampled and analyzed will significantly impact the resources of POTWs. It is the opinion of the Committee that this theoretically could mean all IUs would have to comply with reporting requirements in 40 CFR §403.12, and the IUs must be identified on annual reports. The number of IUs that would have to be sampled will increase by more than 5,000 to 10,000 for the large CAs similar in size to Dallas, Houston, the San Antonio Water System, and the Trinity River Authority. This will translate into increased manpower, time, resources and budget that will be unsustainable. The CAs currently have limited budget to run the pretreatment programs and will not be able to justify such an astronomical increase in costs and resources. The CA management will also question why changes in the interpretations of the pretreatment regulations have occurred when there have been no changes in the pretreatment regulations.

Additionally, since the TCEQ is the CA for POTWs without an approved pretreatment program, the same impact would apply to TCEQ. TCEQ, theoretically, would have to be prepared to sample, analyze, and review monitoring data from the POTW that it has responsibility as CA.

### **Other Information that Indicates the Need to Identify and Locate Industrial Users**

CAs with approved pretreatment programs have established IWS procedures and procedures for updating the IU inventory list. In addition, CAs already are required to collect regular influent and effluent samples at the treatment plants. The data obtained through routine influent and effluent monitoring enables the CA to identify if there are any changes to the pollutants entering the treatment plants. Increases in the headworks loading is an indication that the CA may need to investigate new sources of a pollutant that may adversely impact the POTW.

### **Conclusion**

The Committee believes the IWS procedure is the most efficient and cost-effective way for identifying and locating IUs that could cause pass through, interference, or which may contaminate sewage sludge. The Committee recommends that TCEQ verify that each CA has conducted an in-depth IWS and has procedures in place to update the list of IUs in their jurisdiction that are subject to the pretreatment program.



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