# CITY OF PHOENIX INDUSTRIAL PRETREATMENT COMPLIANCE ACADEMY



**Wastewater Discharge Permit** 



Thank you for attending the City of Phoenix Compliance Academy!

### **Instructors**

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- > Gita Kothari, Senior Water Quality Inspector

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- \*WQI Water Quality Inspector
- \*SWQI Senior Water Quality Inspector
- \*PET Principal Engineering Technician
- \*WSPP Water Services Projects Planner
- \*PCC Pretreatment Compliance Coordinator
- \*ESS (CWQI) Environmental Services Supervisor (Chief Water Quality Inspector)

# **Registration Information**

### **Link for registration:**

https://www.phoenix.gov/waterservices/envservices

**Next Class is:** 

**Wastewater Compliance Sampling** 

On March 27, 2024 at 9:00 a.m.

Registration opens about a month prior to the course. Contact our PET Jesse Flores at Jesse.Flores@phoenix.gov for registration information.

### **Webinar Rules**

- Mute
- Chat Function/Roll Call
- Recording
- Booklet



- 1. Please respect the other attendees and speakers by keeping yourself muted during the webinar presentation
- 2. Please type your name/affiliation into the chat function to assist with roll call. If we do not see everyone who enrolled, we will call out the names of those who we haven't seen (virtually). This is for attendance/credit purposes
- 3. We may be recording the webinar for accessibility on our website if you do not want your image (web camera) recorded, you can turn off that function
- 4. Please access our booklet on the green booklet tab at the Compliance Academy website:
  - https://www.phoenix.gov/waterservices/envservices/indpretreatmentprog/compliance-academy

# **Syllabus**

- > Definitions
- > Pretreatment
- > Wastewater Permits
- Permit Specific Requirements
- > Permit Standard Conditions
- What to Expect When You're Inspected
- > TOMP and SCP
- > 2024 Updates
- > Quiz

Be sure to stick around for "2024 Updates" and contact Chelsey Mc Cluskey with any questions.

### **Definitions**

- Categorical Limits
- Local Limits
- > Pollutants of Concern
- Compliance Sample
- > TTO
- Slug

<u>Categorical Limits</u> –Standards promulgated by the U.S. Environmental Protection Agency (EPA) under the authority of the Clean Water Act that apply to a specific category of industrial user based on the processes that are performed at the user's facility.

Local Limits – Wastewater discharge limits developed by the City to protect;

- · Health and safety of the public and sewer treatment plant workers,
- The biological wastewater treatment plant processes,
- · The quality of biosolids so that they can be beneficially used, and
- The environment where the treatment plants discharge their effluent

#### <u>Pollutants of Concern</u> – Include pollutants that:

- Have an applicable technology-based effluent limit
- Have a total maximum daily load waste load allocation
- Have water quality-based effluent limits
- Are present in the effluent through monitoring
- Are expected to be present in the discharge

#### **Compliance Sample** – A wastewater sample that is:

- Collected from the Permit authorized compliance sampling point,
- Collected using proper sampling methods,
- Is analyzed using EPA-approved analytical methods in accordance with 40 CFR 136

#### TTO - Total Toxic Organics

<u>Slug</u> – Any untreated discharge of a non routine, episodic nature, including but not limited to an accidental spill or a non customary batch discharge.

### **Definitions**

- > IU
- > SIU
- > NSCIU
- Categorical SIU
- Non-categorical SIU
- Special Dischargers

- IU "Industrial User" Non-residential sewer user
- **SIU -** "Significant Industrial User" Operates a federally regulated process, or, discharges > 25,000 gpd process wastewater
- An SIU is regulated by the City under the Industrial Pretreatment Program and holds a Class A Wastewater Discharge Permit. Compliance status must be reported to the EPA and ADEQ.
- **NSCIU** An industrial user subject to categorical pretreatment standards that the Director determines has an industrial discharge that does not cause or have the reasonable potential to cause harm or damage to the POTW...the IU never discharges either at all, or more than 100 gallons per day of total categorical wastewater
- **Categorical SIU -** An SIU that operates any one of the more than 60 different manufacturing processes such as Metal Finishing, Electroplating, Aluminum Forming, Copper Forming, etc., for which the EPA has established performance criteria, i.e., numeric effluent limits (see page 2 of your permit). All Categorical industries are SIU's.
- **Non- categorical SIU -** An SIU that does not operate one or more of the manufacturing processes for which the EPA has established performance criteria.
- **Special Discharger** An IU that is not classified as an SIU. These IUs may be zero discharger (NSCIU), users which discharge the equivalent strength of 25,000 gallons per day of domestic waste as measured by BOD and TSS, or users that discharge remediated groundwater. The IU in this category will be required to obtain a "Class B" or "Class C" permit.
- (These definitions may also appear within the Standard Permit Conditions or Phoenix City Code Chapter 28 "Sewers".)

### What is the IPP?

- The City of Phoenix Industrial Pretreatment Program
- Ensures that industrial discharges are pretreated and compliant

§ 403.2 Objectives of general pretreatment regulations.

By establishing the responsibilities of government and industry to implement National Pretreatment Standards this regulation fulfills three objectives:

(a) To prevent the introduction of pollutants into POTWs which will interfere with the operation of a POTW, including interference with its use or disposal of municipal sludge;

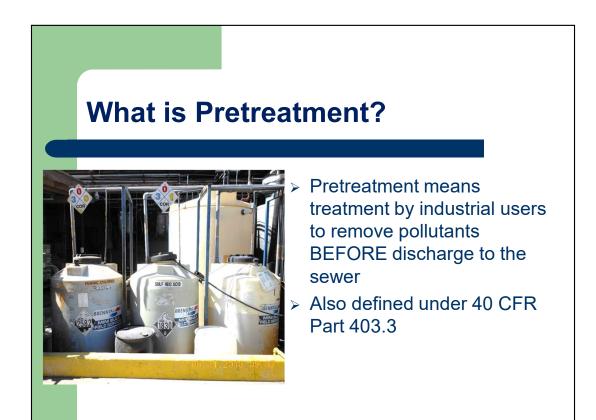
(b) To prevent the introduction of pollutants into POTWs which will pass through the treatment works or otherwise be incompatible with such works; and

(c) To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

Basically, it's a program to control and/or limit certain pollutants discharged from industrial sources before they enter the City's POTWs. POTWs are designed to remove harmful organisms and other pollutants typically found in typical domestic (household) sewage, not what may be present in wastewater generated by industrial and commercial sources such as silicon manufacturers or dry cleaners.

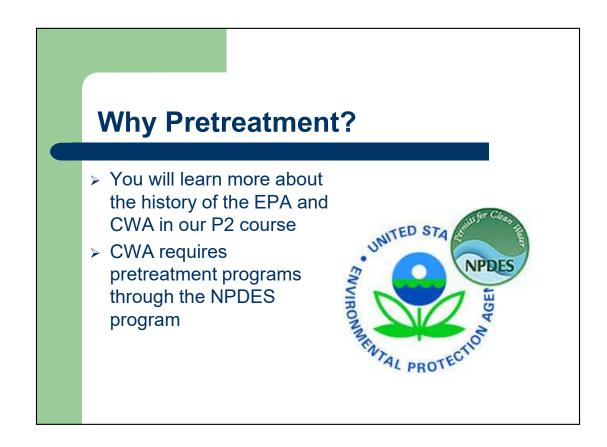
The City of Phoenix's 91st Avenue WWTP delivers treated wastewater to the Tres Rios Flow Regulating Wetlands. The wetland complex removes additional nutrients and metals from the treated water. Reclaimed water from the plant is also currently delivered, via the Salt and Gila rivers, to the Buckeye Irrigation Company (BIC) for agricultural use, and via pipeline to Arizona Public Service's Palo Verde Nuclear Generating Station which uses this water for cooling purposes.

All of the discharge from the 91<sup>st</sup> Avenue WWTP is regulated under an National Pollutant Discharge Elimination System (NPDES) permit. As such, if you maintain compliance, we can maintain compliance.



Pretreatment is enforced in Phoenix by IPP (for Industrial Users) and the Commercial Group (for Commercial Users) – commercial concentrates most heavily on Fats, Oils and Grease (FOG).

Although most pretreatment is aimed at Industrial Users, technically, commercial pretreatment (such as grease interceptors) is part of the same program/ law.



The EPA was established on December 2, 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. (EPA.gov/history)

The 1972 Clean Water Act (CWA) regulates pollution discharge to Waters of the United States (WOTUS). The CWA requires a permit for point source pollutant discharges to WOTUS and is the basis for IPP's pretreatment permitting process.

CWA requires that the City of Phoenix have and follow permits (NPDES and AZPDES) to discharge to the Salt and Gila River systems - the national pretreatment program is a component of the NPDES program. ADEQ regulates our AZPDES permit which requires our pretreatment program as well – it's designed to protect the POTWs infrastructure and reduce pollutant levels discharged to the Sewer and the environment (https://www.epa.gov/npdes/national-pretreatment-program)

The City of Phoenix requires that industrial users have and follow a permit (or permits) to discharge to the city's sewer system. Industrial User permits are part of how the City of Phoenix makes sure it meets CWA permit requirements.

### **IPP Goals**

- Protect public and worker health and safety
- > Protect POTW infrastructure
- Prevent introduction of pollutants that will interfere with POTW operation or sludge disposal
- Prevent introduction of pollutants that will pass through OR are incompatible with the POTW
- Improve opportunities to reuse and recycle municipal AND industrial wastewater and sludges
- > Protect the environment
- 1. Certain pollutants create fumes or are toxic and can harm the public, City employees and the environment.
- 2. Corrosive and explosive pollutants can damage the sewer infrastructure and treatment plant components.
- 3. Certain pollutants generated by industrial or commercial activities can cause POTW treatment processes to not work, work inefficiently in such a way the more electricity or chemicals are required for successful treatment, or in the case of excessive heavy metals result in sludge that cannot be land applied.
- 4. Certain pollutants such as solvents, pesticides, drugs, and detergents will pass through the treatment plant.
- 5. If pollutants are limited, it allows for beneficial wastewater reuse to support places like the Tres Rios Wetland Recreation area and the Palo Verde Nuclear Power Plant cooling structures, and land application of sludge as fertilizer for farming instead of being dumped into a landfill.

## **Permit Characteristics**

# An <u>enforceable control mechanism</u> which must contain:

- 1. A Statement of duration (in no case more than 5 years) and Non-Transferability
- 2. 40 CFR and local limits
- 3. Self-monitoring, sampling, reporting, notification, and recordkeeping requirements
- 4. Statement of applicable civil and criminal penalties for violations
- 5. Requirements to control Slug Discharges, if determined by the POTW to be necessary.

City of Phoenix Local Limits are found in the City of Phoenix Municipal Code Chapter 28-8(A)(12) & 28-8(B).

Local limits are necessary to meet state and local limits on POTW effluent and to accomplish wastewater reclamation objectives.

# **Legal Authority**

City of Phoenix (POTW)'s legal authority to apply and enforce the Federal Categorical Pretreatment Standards is in the Phoenix City Code, Chapter 28, entitled "Sewers".



POTW, must have legal authority to implement a pretreatment program. Legal authority usually is based on state law and local ordinances. State law authorizes the municipality to regulate industrial users of municipal sewage systems. The municipality, in turn, establishes a local ordinance that sets forth the components of its pretreatment program and identifies a person empowered to implement the program.

- a. The legal authority granted by state and/or local law must authorize the POTW to limit the pollution levels in discharges from industrial users of the sewage system.
- b. It must be authorized to enforce national pretreatment standards and to implement local limits in addition to or in excess of the federal standards.
- c. It also must be empowered to issue permits to industrial users which set forth all applicable pollution control requirements.
- d. Finally, the POTW's legal authority must include the right to inspect and monitor industrial facilities without prior notice, and to take enforcement action against violators.
  - a. Right to inspect includes photography.
  - b. Designating information as "Confidential Business Information" speaks only to Public availability of information and does not affect inspector's right to inspect or obtain information.

# **City of Phoenix Permits**

- > Specific to the Permittee
- > Permit Standard Conditions apply to all Permittees

- 1. Permits are issued to a specific permittee, and are individualized to the permittee. May include special conditions, only apply to the specific permittee (Ex: Permittee must submit plans for oily waste pretreatment by February 14, 2024).
- 2. Permit standard conditions are the same for all permittees (Ex: No discharge of explosive materials to the sewer.)

## **Cover Page**

- > Citation to Legal Authority
- > Name & Address of Permittee
- Duty to Comply
- > Effective Period
- > Petition for Review

### **CITATION TO LEGAL AUTHORITY**

Ex. In compliance with the provisions of the Clean Water Act, (33 U.S.C. 1251, et seq.), the General Pretreatment Regulations (40 CFR Part 403), the federal Aluminum Forming Regulations (40 CFR 467, Subpart C-Extrusion Subcategory-467.35), and Chapter 28 of the Phoenix City Code, and any amendments or supplements thereto, the City of Phoenix, Water Services Department, Environmental Services Division authorizes

# <u>NAME & ADDRESS OF PERMITTEE-</u> mailing will be listed if different than physical address

#### **DUTY TO COMPLY**

in accordance with the effluent limitations, sampling requirements, and other conditions set forth in this Permit and in the *City of Phoenix Permit Standard Conditions* dated February 14, 2022.

#### **EFFECTIVE PERIOD**

This Permit replaces all previously issued Permits and becomes effective at 12:00 a.m. 2/1/2024 and expires at 11:59 p.m. on 1/31/2029.

#### PETITION FOR REVIEW

A Petition for Review of the conditions and limitations contained in this Permit may be filed with the Environmental Services Division within twenty (20) days of the receipt of this Permit as provided by Section 28-46.1 of the Phoenix City Code.

# **Discharge Limits**

- > Next Section(s) are Discharge Limits
- > Two types:
- Prohibited Discharges CANNOT be discharged
- Allowed Discharges
   CAN be discharged (within limitations)
- Permits may have one or the other, or both Why would a Permittee have both?

### **Prohibited Discharges**

What you CANNOT discharge based upon regulatory requirements, the Permittee's operations specified in the application, or both.

### **Allowed Discharges**

What you CAN discharge (within limits)

# **Prohibited Discharges**

- > CANNOT discharge
- > Examples:
  - Wastewater or waste streams generated from the following sources:
  - · Hexavalent Chrome Coating
  - · Waste streams resultant from:
  - Result in ZERO DISCHARGE of [categorical] process wastewater into the City of Phoenix sanitary sewer as certified by the Permittee in the Industrial Wastewater Permit Application for this Permit
  - Are prohibited for discharge into the City of Phoenix sanitary sewer.

### **Prohibited Discharges**

Not in all permits

Identifies what you CANNOT discharge

Restricted depending on different reasons >> may need a permit classification change, added wastestream, additional pretreatment, or it may not be allowable <u>at all</u> per regulations

#### More language in the permit:

- Require the Permittee to obtain an amended Class A Wastewater Discharge Permit PRIOR TO THE DISCHARGE OF ANY AMOUNT of categorical process wastewater in accordance with Chapter 28, Sections 28-44 and 28-45 of the Phoenix City Code.
- <u>OR</u> Require the Permittee to install a Compliance Sampling Point (CSP) and receive an amended Class C Permit prior to the discharge of 1-100 gallons per day OR install a CSP and obtain a Class A Wastewater Discharge Permit prior to the discharge of greater than 100 gallons per day of total categorical process wastewater in accordance with Chapter 28, Sections 28-44 and 28-45 of the Phoenix City Code.

# **Allowed Discharges**

- > In ALL permits
- > What you CAN discharge (within limits)
- > Example:
  - Wastewater generated from the following sources is allowed for discharge into the City of Phoenix sanitary sewer under the conditions of this permit and Chapter 28 of the Phoenix City Code.

Sanitary wastes
Boiler blowdown
Semiconductor manufacturing operations
Photolithography

### **Allowed Discharges**

Specified in all permits

What you CAN discharge (within limits)

 Oftentimes this will include domestic or non-process discharges i.e. chiller bleedoff or RO reject >> dilute flows (if also discharging through the CSP)

# **Limits, Sampling & Monitoring**

Discharge Limits and Sampling (Monitoring) Requirements
Compliance Sampling Point 00000.01

- Effluent limits and sampling for the Permittee apply at Compliance Sampling Point № 00000.01, described as the 0.5-foot H-flume located outside at the Southeast corner of the building.
- Wastewater generated from the following sources result in discharge through Compliance Sampling Point No 00000.01:

Sanitary wastes
Boiler blowdown
Production and office floor cleaning activities
Colostrum and/or food supplement manufacturing
Colostrum and/or food supplement laboratory wastes

- Permittee must limit and sample the allowed discharges of the sources specified above in accordance
  with the table below; wherein the most stringent of the limits apply as indicated in bold, and wherein
  all parameters are "Totals" limited in concentration units of milligrams per liter (mg/L) unless otherwise
  noted
- The sampling frequency shown is the minimum required; Permittee may sample more often than
  required, but must report the results of any extra samples collected using approved laboratory
  procedures from the Compliance Sampling Point.
- Discharges through the compliance sampling point average 10,000 gallons per day and are not
  expected to exceed 25,000 gallons during any single day.

The Discharge Limits (Sampling and Monitoring) Requirements section of the permit specifies the sampling point for flow monitoring and collection of compliance samples. It also specifies which industrial (and sometimes non-industrial) operations create the wastewater which flows through the compliance sampling point ("CSP"). Redirecting wastewater flows to discharge through any other location other than what has been specified in the permit is a violation.

Note, not all "Allowed Discharges" are required to discharge through the CSP and sometimes we <u>do</u> <u>not</u> want them mixing with other wastestreams (Categorical regulated facilities particularly due to combined wastestream formula calculations to account for dilution).

This statement does NOT specify a limit for flow volume, but provides information about the Permittee's normal flow volumes:

Discharges through the compliance sampling point average 4,650 gallons per day and are not expected to exceed 13,000 gallons during any single day.

This statement DOES specify a limit for flow volume and flow rate:

Discharges through the compliance sampling point average 150,000 gallons per day. Flow rate and total flow per day is limited: Permittee SHALL NOT EXCEED a discharge flow rate of 625 gallons per minute (gpm) NOR EXCEED a maximum of 900,000 gallons per day.

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											_	
			Daily Minimum			Daily Maximum				Monthly Average		
	Minimum Sampling	Sampling	FINAL	PSNS	Local	FINAL	PSNS	CWF	Local	FINAL	PSNS	CWF
Parameter	Frequency	Method	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit
Arsenic	1 per 6 Months	Composite	-	-	-	0.13	-	-	0.13	-	-	
Cadmium	1 per Month	Composite				0.047	0.11	0.10	0.047	0.06	0.07	0.06
Chromium	1 per Quarter	Composite	-			2.50	2.77	2.50		1.55	1.71	1.55
Copper	1 per Quarter	Composite				1.5	3.38	3.06	1.5	1.90	2.07	1.90
Cyanide	1 per 6 months	Grab	-			1.08	1.20	1.08	2.0	0.59	0.65	0.59
Lead	1 per Quarter	Composite				0.41	0.69	0.63	0.41	0.39	0.43	0.39
Mercury	1 per 6 Months	Composite	-	-		0.0023	-	-	0.0023	-		
Molybdenum*	1 per Quarter	Composite				-	-	-	-	-	-	
Nickel	1 per Quarter	Composite				3.60	3.98	3.60		2.15	2.38	2.15
pH*	1 per Week	Grab	5.0	5.0		10.5	-	-	10.5	-	-	
Selenium	1 per Quarter	Composite			١.	0.10	-	-	0.10	-		
Silver	1 per Quarter	Composite	١.		٠.	0.39	0.43	0.39	1.2	0.22	0.24	0.22
TTO-433*	1 per 6 Months	Composite				1.93	2.13	1.93	-	-	-	
Zinc	1 per Quarter	Composite	<del>                                     </del>		<del></del>	2.36	2.61	2.36	3.5	1.34	1.48	1.34
	1	P										

The bolded limit number in blue is the permit limit you must meet. **The most stringent permit limit is the one that must be met.** 

Daily maximums are usually Local limits

Monthly averages are ALWAYS Federal limits

This is why the monthly limits may be lower than the daily limits and vice versa

Includes pollutants of concern, federal and local categorical limits.

PSES-Pretreatment Standards for Existing Sources

PSNS- Pretreatment Standards for New Sources

**CWF- Combined Waste stream Formula** 

## **Sampling and Analysis Notes**

#### NOTES:

- The standard for pH is an Instantaneous Effluent Limitation of 5.0 – 10.5 standard units. Analysis of the effluent sample for pH must be performed at the facility immediately, following sample collection, and in accordance with 40 CFR 136 methods Table 1B for Hydrogen Ion (pH), pH units.
- Weekly, monthly, quarterly and 6-month sampling period dates are included to prompt you when your first sampling periods end during the Permit.
- (New) Continuous pH monitoring and recording equipment must be capable of measuring and recording data at least once every two minutes.

### Notes may include the following language:

- Unless otherwise specified, all samples are required to be taken as Flow Proportional Composite samples. See the City of Phoenix Permit Standard Conditions dated February 14, 2022, for definitions.
- Permittee is required to implement chemical substitution via use of Molybdenum-free chemicals in sterilizers, cooling towers, and closed-loop chillers to achieve the Local Limit target concentration of 0.38 mg/L in accordance with the June 2005 SROG Best Management Practices Technical Memorandum - Molybdenum BMP.
- Federal regulations require monitoring once every 6-months (semi-annual) for Total Toxic Organic (TTO) compounds reasonably expected in the wastestream for specific industry classifications. Applicable list(s) of TTO parameters are contained in the section titled Total Toxic Organic Compound List in this permit. Permittee has an approved Toxic Organic Management Plan (TOMP). Therefore, Permittee may submit TOMP Implementation Certifications, in lieu of monitoring for TTO compounds. If the Permittee fails to implement the TOMP or to submit the TOMP Implementation Certification once per month as specified in the Reporting section of this permit, the Permittee is required to monitor for TTOs at the frequency specified. Changes to the approved TOMP must be submitted to the City for approval 30-days prior to enacting the changes.
- Refer to your Permit for an example of the combined waste stream formula (CWF)
  calculation.

# **Reporting Requirements**

#### > Reporting Requirements

Permittee is required to submit a compliance monitoring report [Self Monitoring Report (SMR)] no later then the 28<sup>th</sup> day of every calendar month.

### > Each SMR should indicate, for the prior calendar month:

- The measured maximum and average daily flows
- The measured total monthly flow
- The frequency and result value of all pollutants analyzed under this permit
- Measured calibration checks of pH meter(s) used for compliance sample analysis
- Measured calibration checks of secondary flow meter(s)
- Maintenance of compliance sampling point(s)
- Zero discharge statement ONLY if there has been no discharge, for your monitoring requirements. (pH, Cyanide, TTOs, ...etc..)

#### Note:

- Continuous pH Measured max and min pH for each day of the month for which there was discharge (2-min increment data should be available upon request)
- Continuous pH any suspected or known excursion even during low flow events needs to be reported within 24 hours and only valid excursions should be included in the SMR.
  - \*\*See Sections G & H as well for notification policies
- Class B Zero Discharger (now Class C) Twice a year certification statements in lieu of sampling or additional reporting

## **Special Conditions**

### **Special Conditions (a few examples):**

- > Compliance Schedules
- > Industrial User Management Practices
- > Special Monitoring Requirements
- > Slug Control Plan (more on this later)
- Toxic Organic Management Plan (more on this later)

#### **SPECIAL CONDITIONS EXAMPLES:**

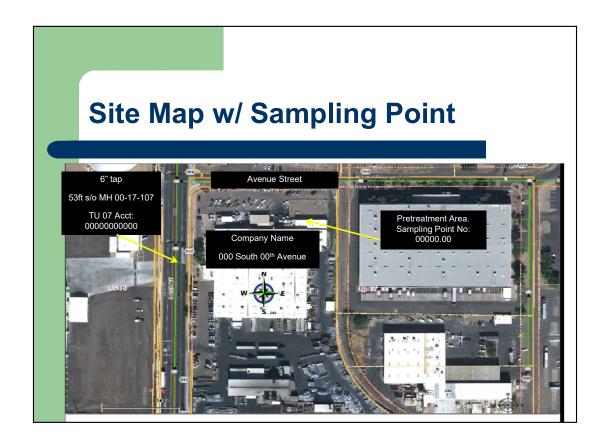
<u>Hauled Waste</u> Each hauled liquid waste load presented at the facility for treatment must be sampled and screened to establish a correlation with its manifest description. Permittee shall implement and comply with its existing approved screening procedures designed to establish manifest correlation. Any failure to follow the approved procedures shall constitute a violation of this Permit.

Acceptance and Disposal Off-site Permittee shall not accept hazardous wastes as defined in Title 40 of the Code of Federal Regulations Part 261.3 (40 CFR 261) for treatment. Permittee shall not accept for treatment and discharge any wastewater applicable to the Federal Centralized Waste Treatment Point Source Category pursuant to 40 CFR 437, i.e., industrial metal-bearing wastes, oily wastes, and organic-bearing wastes received from off-site. Acceptance and temporary on-site storage of oily wastes is permitted provided that oily waste is stored within the specially constructed roll-off containers stored in the secondary containment pit located at the east side of the facility, and that documentation of proper treatment and/or disposal off-site is kept for a minimum of three years.

### **Compliance Schedules**

Permittee is required to submit a compliance schedule as agreed upon to detail actions and timeframes associated with installation of additional pretreatment for solids removal no later than DATE.

Permittee must install the agreed upon additional pretreatment for solids removal no later than DATE.



### **SITE DRAWING MINIMUM INFORMATION**

\*Now all permits have this, not just dischargers

Aerial Image

Sewer Tap Size w/ Stationing

Water Account Numbers Applicable to type user (TU) 07 (industrial users holding permits)

Permittee Name

**Facility Address** 

Compliance Sampling Point Number, Type, Size (if applicable)

**Street References** 

Compass or Direction Indicator

## **Zero Dischargers (NSCIU)**

- Semi Annual Zero Categorical (NSCIU)
   Wastewater Discharge Certification
   Statement
- Certifications due by January 28 and July 28 each year
- > Defensible with records

Class B Zero Discharge (migrating over to Class C) Facilities receive permits as well. These permits also list limits and parameters that must be sampled if discharge ever did occur from that facility.

The Class B Zero Dischargers (migrating to Class C) have different reporting requirements than discharging facilities:

They must submit <u>Semi Annual Zero Categorical Wastewater Discharge</u>

<u>Certification Statements (now Non-Significant Categorical Industrial User</u>

<u>Semi-Annual Certification Statements for most prior Class B Zero companies)</u>

- official documents stating that for the time period of 6 months, the industry has not discharged any categorical associated rinses. At least 3 years of records must be available and/or submitted which support and defend the zero discharge statements. This document must be signed by an official signatory that is on file with the company. For the time period of July 1- December 31 of the same year, the Certification Statement is due on January 28<sup>th</sup>. For the time period of January 1-June 30 of the same year, the Certification Statement is due on July 28<sup>th</sup>.

The Zero Discharge Certification must be supported by records. (Waste manifests, hauling records, etc.)

# **Permit Standard Conditions**

- > Terms and Conditions that apply to all Permittees.
- Newest version approved February 14, 2022, updated from 2021 version.

Permit Standard Conditions are valid for all users.

### A. Standard Definitions

- Approved Laboratory Procedures
- Aware Date
- Daily Maximum Effluent Limitations
- Flow Proportional Composite Samples
- Grab Sample
- > Instantaneous Effluent Limitation
- Monthly Average Effluent Limitation
- > Representative Sample

Note: These are summarized selected definitions. For complete definitions, READ YOUR PERMIT.

- **1. Approved Laboratory Procedures:** Measurements, tests and analyses of wastewater, in accordance with Title 40, Code of Federal Regulations, Part 136, as revised, done in a laboratory licensed by the State of Arizona pursuant to A.R.S. Section 36-495 et seq.
- 3. Aware Date: The date a permittee learned of test results, based upon:
- a.) Date and time recorded on laboratory analysis written report(s);
- b.) Date and time that field analysis for pH was completed, as recorded on the original hardcopy log or record; and/or
- c.) The date and time recorded by an electronic continuous monitoring data logger.
- **9. Daily Maximum Effluent Limitations:** Maximum allowable daily discharge of a pollutant. If expressed as a concentration, it is the arithmetic average measurement derived from all measurements taken during the sampling day. City of Phoenix and Self Monitoring measurements cannot be averaged for this number.
- **12. Flow Proportional Composite Sample:** A combination of individual samples obtained at regular intervals over a sampling day. The volume of each individual sample shall be proportional to the flow rate during the sampling day. A sampling day is any consecutive period of time that represents Permittee's discharge occurring during a normal operating day.
- **14. Grab Sample:** An individual sample collected in less than fifteen (15) minutes without regard to the amount of flow or the time of day.
- **15. Instantaneous Effluent Limitation:** The maximum allowable concentration in the discharge at any time as measured in a grab sample.
- **16. Monthly Average Effluent Limitation:** The maximum average from daily discharge values, over a calendar month; calculated as the sum of all daily discharge results measured during a calendar month, divided by the number of days for which monitoring was performed. The monthly average result may be derived from a single analytical result. City of Phoenix and Self Monitoring measurements cannot be averaged for this number. Monthly Average Discharge Limitations are required under specific Categorical Standards.
- **22. Representative Sample:** A sample which mimics the volume and nature of discharge reflecting the normal process or operating cycle of the facility, collected from a designated compliance sampling point using techniques specified in 40 CFR 136.3.

## A. Standard Definitions (Newer)

- Show Cause Proceeding
- > Temporary Increase in Self-Monitoring (TISM)
- Week
- Continuous (Upcoming)

### Note: We added some definitions to assist our Permittees w/compliance

#### 26. Show Cause Proceeding

A formal enforcement action during which an Industrial User will be presented with the facts that IPP staff believe demonstrate noncompliance and will be asked to "show cause" as to why The City of Phoenix should not seek monetary penalties or initiate additional enforcement actions which may include additional formal actions and/or discontinuation of sewer service, as referenced in Q. Criminal Penalty and R. Civil Penalty.

#### 28. Temporary Increase in Self-Monitoring (TISM)

If an Industrial User has one or more violations of any effluent limit, the Industrial User shall be notified that it is required to sample for all parameters that were violated once per day, week, or batch for four consecutive days, weeks, or batches to commence within seven days of receipt of the notice or as otherwise required. If an Industrial User has repeated pH violations, a 24-hour continuous pH study for four consecutive days may be required in lieu of four grab pH samples.

#### 30. Week

A period of time referring to a calendar week from Sunday through Saturday, not to be confused with a 7-day rolling period of time.

<sup>\*</sup>Continuous pH will be defined in upcoming revisions

### **B.1 Sewer Prohibitions**

- > No dilution to avoid pretreatment
- No pollutants which create a fire or explosion hazard
- No fats, oil, or grease
- > No toxic, radioactive, poisonous substances
- No waters with a temperature >150° Fahrenheit (66° Centigrade)
- > No waters with a pH of <5.0 or >10.5
- Effluent limitations
- Prohibited substances
- No Stormwater or inflow to sewer, stormwater should be retained onsite (Also in section B.2 of Permit Standard Conditions)

#### Note: These are summarized prohibitions. For complete prohibitions, READ YOUR PERMIT.

- B. 1. Permittee shall not discharge:
- a.) Any storm water, or waters that may constitute inflow.
- b.)Pollutants which create a fire or explosion hazard to the POTW.
- c.) Solid or viscous pollutants, animal fats, oils and grease, petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that may cause interference or pass through.
- d.)Any waters or wastes containing a toxic, radioactive, poisonous or other hazardous substances.
- e.) Any waters with a pH less than 5.0 Standard Units (SU) or greater than 10.5 SU.
- f.) Any waters with a temperature greater than 150 degrees Fahrenheit (66 degrees Centigrade)
- g.) Any water or wastewater that has in any way been diluted as a substitute for adequate pretreatment to achieve compliance with the limitations contained in the Permit.
- h.)Any water or wastewater that could cause a violation of any categorical standard or pretreatment requirement.
- i.) Transported wastewater septic, chemical waste (unless written consent given)
- j.) Any pollutant(s) which might cause POTW Pass Through or Interference with POTW operations.
- I.) Any waters or wastewater exceeding the following Instantaneous Effluent Limitations, expressed in units of micrograms per liter (ug/L):
  - Benzene 35 ug/L Chloroform 2000 ug/L
- m.)Any of the following prohibited substances:
  - 4,4' –DDE BHC-gamma (Lindane) 4,4' –DDT Heptachlor Aldrin Heptachlor Epoxide BHC-alpha Polychlorinated Biphenyl Compounds (PCBs) BHC-beta

### **B.1 Sewer Prohibitions (newer)**

- Noxious, malodorous liquids, gases, solids, other wastewater that can cause a public nuisance or hazard to life, etc.
- Wastewater that imparts color that can't be removed
- Sludges, screenings, other residuals from pretreatment of industrial waste
- Medical wastes
- Detergents, surface-active agents, substances that cause excessive foaming in the POTW
- Wastewater that causes the WWTP to fail toxicity testing

#### Note: These are summarized prohibitions. For complete prohibitions, READ YOUR PERMIT.

- B. 1. Permittee shall not discharge:
- n.) Noxious or malodorous liquids, gases, solids, or other wastewater that, either by itself or through interaction with other wastes, is sufficient to create a public nuisance or hazard to life or prevent entry into the sewers for maintenance or repair.
- o.)Wastewater that imparts color which cannot be removed by the treatment process, such as, but not limited to, dye waste and vegetable tanning solution, which consequently imparts color to the treatment plant's effluent thereby violating a NPDES or AZPDES permit issued to the City.
- p.)Sludges, screenings, or other residuals from the pretreatment of industrial wastes.
- q.)Medical wastes, except as specifically authorized by the Director in an individual wastewater discharge permit.
- r.) Detergents, surface-active agents, or other substances that result in excessive foaming in the POTW.
- s.) Wastewater causing, alone or in conjunction with other sources, the treatment plant effluent to fail toxicity testing.

## C. Reports and Oral Notifications

- Primary contact will vary based on facility (Tarun, Gita/Milton, or Joel)
- Unless otherwise specified, oral notifications of slug discharges and 24hour oral notifications may be phoned during business hours to:

IPP Chief WQI Desk: 602-495-5926 ESD Main Desk: 602-262-1859

> Unless otherwise specified, original, signed, hardcopies of all reports should be addressed to :

City of Phoenix Water Services Department Environmental Services Division 2474 South 22<sup>nd</sup> Avenue Phoenix, Arizona 85009

#### **Reports and Oral Notifications**

Unless otherwise specified, oral notifications of slug discharges and 24-hour oral notifications of known or suspected violations can be made during normal business hours (8:00 am - 4:30 pm) by telephone to either of the following:

IPP Chief WQI Desk: 602-495-5926 ESD Main Desk: 602-262-1859

After business hours, oral notifications of slug discharges are to be made by telephone to ALL of the following:

91st Ave WWTP: 602-495-7754 23rd Ave WWTP: 602-262-1866 Water Switchboard: 602-261-8000 IPP Chief WQI Desk: 602-495-5926

After business hours, 24-hour oral notifications of known or suspected violations to the IPP are to be made by telephone to ALL of the following:

IPP Chief WQI Desk: 602-495-5926 ESD Main Desk: 602-262-1859

Unless otherwise specified, original, signed, hardcopies of all reports required by the Permit shall be delivered during normal business hours (8:00 am - 4:30 pm) addressed to:

City of Phoenix Water Services Department, Industrial Pretreatment Program, 2474 South 22<sup>nd</sup> Avenue, Building 31, Phoenix, Arizona 85009-6918

NOTE: Electronic document submittals via e-mail or facsimile cannot be accepted, except preliminary to hardcopy submission. The City of Phoenix Industrial Pretreatment Program does not have an approved electronic document receiving system pursuant to Title 40 Part 3 – Cross-Media Electronic Reporting, Subpart D §3.1000. When notified by the Director, Permittees shall submit all reports electronically via the City's online portal.

Electronic submittals may be submitted to "stop the clock" for reporting but must be followed up no later than 10 days with the hard copy of the document.

Each submitted report must be signed in accordance with the requirements set forth in Part I of these Standard Conditions

## **D.1 Sampling**

- > Sample as required by your permit
- Representative of the volume and nature of the sampled discharge (flow proportional)
- Sample at the Compliance Sampling Point, described in the permit e.g.: The 2" Parshall Flume located in the vault North of Building 2
- > 40 CFR 136 procedures & ADHS licensed labs

- 1. Samples and measurements taken as required by the permit shall be representative of the volume and nature of the sampled discharge.
- 2. All compliance samples must be taken at the compliance sample point specified in the permit
- 3. The analysis of all samples required under the permit shall be performed using APPROVED LABORATORY PROCEDURES.
- 4. It is the **RESPONSIBILITY OF THE I.U.** to verify their contract laboratory is state certified to perform the wastewater sample analysis.
- 5. Permittee shall measure the daily maximum and monthly average flows discharged through the compliance sampling point(s) described in the Permit and include these results in Permittee's monthly compliance monitoring report.

### **D.1 Flow Measurement**

- Flow MUST BE MEASURED
- Flow MUST BE REPORTED in the SMR
- Permittee must measure daily flows
- Permittee must determine daily maximum flow
- Permittee must calculate average daily flow
- Permittee must calculate total monthly flow



#### **Average Daily Flow**

The total volume of wastewater flowing through each compliance sampling point during a calendar month, divided by the number of days in that month for which there was a process wastewater discharge through the compliance sampling point and expressed in gallons per day (GPD).

Total Gallons of Wastewater Discharged through Compliance Sampling Point: T

Number of days in the month there was a Compliance/ Process Discharge: N

Average Daily Flow: A

T/N: A

Your calculation is: T= 800 N=8 = 800/8= 100 A= 100

Your average daily flow was 100 Gallons per Day

To calculate the **monthly average daily flow**, add the daily flows for every day during the month during which there was a compliance/ process wastewater discharge and divide by the total number of compliance/ process wastewater discharge days in the month.

D1, D2, D3, etc.: Number of Gallons of compliance/ process wastewater discharged for each discharge day

December 1 2 3 4 5 6 7 8 9 10

Gallons 100 0 100 100 100 100 0 100 100 100 = 800

Your Totals are: Number of days (N): 8

Do not divide by the number of days in the calendar month unless there was process wastewater discharge on each and every day.

### **D.1 Flow Measurement**

- Flow must be measured at the compliance sampling point(s) in the Permit
- Appropriate flow measurement devices and methods must be selected and used
- Devices must be calibrated and maintained to ensure accuracy
- Devices must measure flows with deviation of less than 10 percent from true discharge rates
- Failure to correctly measure or report flows is grounds for a Notice of Violation
- d.) Permittee shall measure the daily flows, monthly average daily flow, and total monthly flow discharged through the compliance sampling point(s) described in the Permit and include these results in Permittee's monthly compliance self-monitoring report.
- i) Appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, operated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.
- ii) Permittee may request written permission from the Industrial Pretreatment Program to be allowed to estimate daily maximum flows, monthly average daily flow, and total monthly flow. Requests must include a full description of the procedures and mathematic formulas to be used to calculate flow estimates to be considered for approval. Approval to estimate flows may be revoked should estimates fail to represent actual measured flows or the Permittee fails to provide documentation or calculations supporting estimated flows.

NOTE: NOT REPORTING FLOWS WHEN YOU HAD A DISCHARGE IS A PERMIT VIOLATION. ESTIMATING FLOWS WITHOUT WRITTEN PERMISSION IS ALSO A PERMIT VIOLATION.

## **D.2 Self Monitoring**

### Reports for Self Monitoring (from Section D) must :

- SMRs MUST be sent in to the City by the 28<sup>th</sup> of each month. Not the 29<sup>th</sup>, not the 30<sup>th</sup>. The 28<sup>th</sup>.
- > SMRs must be correct
- SMRs must meet method and reporting criteria from Section D
- SMRs cause many avoidable violations. If in doubt, contact your inspector, BEFORE you submit the SMR.

### 2. Monitoring Records

- a.) Records of sampling information shall include:
- i) The date, exact place, time, methods of obtaining samples and measurements, and sample preservation techniques or procedures;
- ii) Who performed the sampling and measurements;
- iii) The date(s) analyses were performed;
- iv) Who performed the analyses;
- v) The analytical techniques or methods used;
- vi) The results of such analyses;
- vii) Original handwritten records or logs; and
- viii) Unadulterated raw data downloaded from electronic data recorders.
- b.) Records shall demonstrate legally defensible custody of all samples obtained and submitted for analyses.
- c.) Permittee shall maintain records of equipment calibrations, maintenance activities and inspections. (for 3 years)

## E. Record keeping

- > 3-years on site
- Calibration and maintenance records
- Original strip chart and log recordings for continuous and grab monitoring
- Operation & Training Logs
- > All data used to complete the application
- > Hazardous & Nonhazardous Waste Manifests
- Records pertaining to special orders or enforcement

#### E. Records

- 1. Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the Permit, and records of all data used to complete the application for the Permit, for a period of at least three years from the date of the sample, measurement, report or application.
- Permittee shall maintain records pertaining to the disposal of solids, sludges, filter backwash, or other pollutants removed from Permittee's facility. Permittee shall retain such records for a period of at least three years from the date of disposal or removal from the facility.
- All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Phoenix shall be retained and preserved by the Permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

### F. Proper Operation/Maintenance

> Includes all facilities, pretreatment system, chemicals, plumbing, flow meters, etc.

Includes, but is not limited to:

- > Performance
- > Funding
- > Staffing and training
- > Laboratory and process controls
- > Back-up or auxiliary facilities

### F. Proper Operation and Maintenance

- Proper Operation and Maintenance at All Times. Permittee shall at all times properly operate and maintain all facilities, systems of pretreatment and control. This includes having adequate supply of pretreatment chemical onsite.
- 2. Adequate and Qualified Operating Staff. Permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to ensure compliance with the conditions of the Permit.
- 3. Operation Exceeding Design Flow Rate is Prohibited.

### **G: Noncompliance (Updates)**

- > Section G Noncompliance
  - ▶ 24-Hour Notification, Known or Suspected
  - ➤ 30-Day Automatic Resampling
  - > TISM
  - > Enforcement Action

#### G. Noncompliance

 Notification of Noncompliance: Permittee shall notify the IPP within 24 hours of the aware date of a discharge that is known or suspected to be in violation of any effluent limitation or provision of the Permit.

#### 2. Automatic Resampling

- a.) If a violation has occurred, Permittee must repeat the sampling and pollutant analysis and submit the results in writing within 30-days of the aware date of the violation.
- b.) Permittee is not required to resample if the City obtained a sample at the same discharge point for the same pollutant between the time Permittee performed its sampling and the time Permittee receives the results of the sampling.
- c.) Permittee may be subject to increased monitoring through a **TISM** requirement as a result of selfmonitoring violations or violations discovered during City sampling events.

#### 3. Enforcement Action

In the event of noncompliance with any requirements of the Permit, the Industrial Pretreatment
Program may use a wide range of enforcement actions, ranging from informal to formal actions.
The City of Phoenix uses a progressive enforcement philosophy. Problems are addressed at the lowest level and with the least formality possible, when appropriate, such as issuing a Notice of Concern. Continued non-compliance may result in escalated enforcement, such as a **Show**Cause Proceeding. These procedures are defined in the approved Enforcement Response Plan.

### H: Slug/Accidental Discharge

- ➤ Section H Slug Discharge
  - Discharge of a non-routine, episodic nature (spill, non-customary batch discharge)
  - ➤ Report Details within 5 Calendar days
    - \*\*Follow onsite SPCC or SCP\*\*
  - Permittee Provides Protection
  - Permittee Provides Notification NEW

#### H. Slug Discharge; Accidental Discharge

1. A Slug Discharge is any discharge of a non-routine, episodic nature.

#### 2. Permittee Provides Protection

- a.) Permittee shall control slug discharges and provide protection from accidental discharges of prohibited materials or other wastes regulated by this Permit.
- b.) All discharge points where a hazardous or prohibited substance could potentially be discharged into the Permittee's plumbing system shall be labeled to warn and prevent personnel from the discharge of such substances.
- c.) Permittee shall make available to their employees copies of this Permit together with such other information and notices that may be furnished by the City from time to time for the purpose of improving and making more effective water pollution control.
- d.) Permittee shall furnish and post a notice on Permittee's bulletin board advising employees who to call in case of an accidental discharge.

#### 3. Permittee Provides Notification (NEW)

- a.) Permittee shall notify the City immediately of any changes at its facility affecting potential for a Slug Discharge.
- b.) Permittee shall notify the City immediately of all discharges that could adversely impact the POTW, including any slug loadings, as referenced under **B. General Prohibitions** and in Section 28-8 of the Phoenix City Code.

### **H: Report Contents**

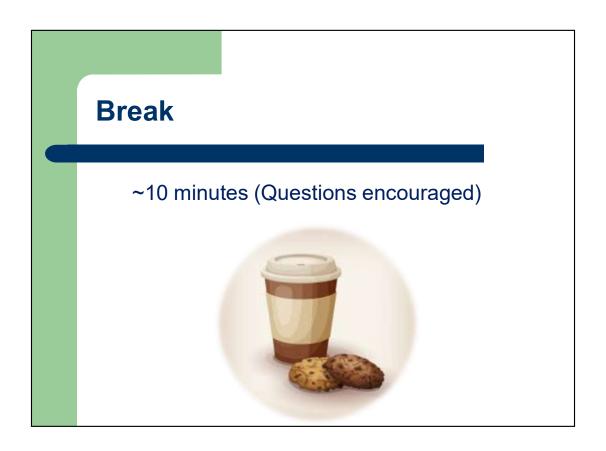
- Date and time violation occurred
- Sampling location
- Analytical sampling results and related sampling information
- Volume & duration of discharge
- Corrective actions taken
- Certification statement
- Authorized signature



### 3. Written Report on Noncompliance Resulting from a Slug Discharge

Within five calendar days of the aware date of a slug discharge that results in a violation of any limitation or prohibition specified in the Permit, Permittee shall submit a detailed written report to the Industrial Pretreatment Program. The detailed written report shall contain:

- a.) A description of the cause(s) of the violation. If the cause of the incident has not been definitively determined, the report shall propose a detailed plan and schedule describing the steps to be taken to determine the cause;
- b.) The location of discharge, type, concentration, and volume of discharge;
- c.) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur;
- d.) All steps taken or to be taken to reduce, eliminate, and prevent a recurrence of the noncompliance.

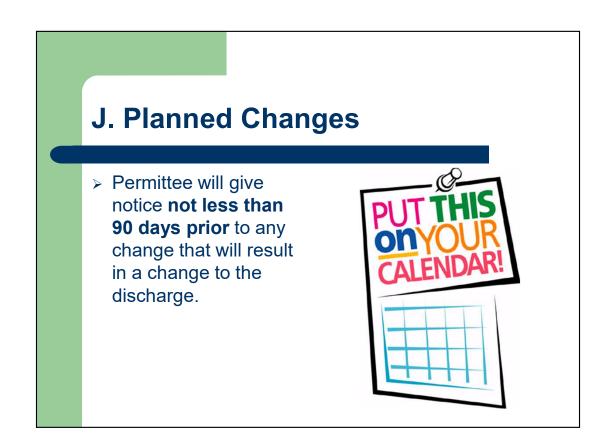


<sup>\*</sup>Questions encouraged\*

### I. Signatory Requirements

Permit applications, self-monitoring reports, and any other reports addressing permit noncompliance or required by any enforcement action taken by the City of Phoenix must be signed by the appropriate signatory or duly authorized representative, as follows:

- 1. By a responsible corporate officer
- 2. By a general partner or proprietor
- 3. By a duly authorized representative
- 40 § 403.12 Reporting requirements for POTW's and industrial users.
- (I) **Signatory requirements for Industrial User reports.** The reports required in this section shall include the certification statement as set forth in §403.6(a)(2)(ii), and shall be signed as follows:
- (1) By a responsible corporate officer, if the Industrial User submitting the reports is a corporation this means:
  - (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, any person who performs similar policy- or decision-making functions, or
  - (ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations.
- (2) By a general partner or proprietor if the Industrial User submitting the reports is a partnership, or sole proprietorship.
- (3) By a duly authorized representative of the individual designated in paragraph (I)(1) or (I)(2) of this section if:
  - (i) The authorization is made in writing by the individual described in paragraph (I)(1) or (I)(2);
  - (ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates; and
  - (iii) the written authorization is submitted to the Control Authority.
- (4) If an authorization under paragraph (I)(3) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (I)(3) of this section must be submitted to the Control Authority prior to or together with any reports to be signed by an authorized representative but in no less then 30 days after the change.



### **Planned Changes**

Permittee shall give notice to the Environmental Services Division not less than 90 days prior to any facility expansion, production increase, or process modifications which results or may result in new or increased discharges or in a change in the nature of the discharge.

## K. Duty to Halt or Reduce Activity

- > Stop if that's what it takes
- "We would have had to stop discharging to prevent violation"

is not a valid defense in an enforcement action



### **DUTY TO HALT OR REDUCE ACTIVITY**

Upon reduction, loss or failure of the treatment facility, Permittee shall, to the extent necessary to maintain compliance with its Permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced.

It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of the Permit.

# L. Adverse Impact

- It is the Permittee's responsibility to minimize or correct any adverse impact to the treatment plant.
- > Permittee's sole cost and expense

At Permittee's sole cost and expense, Permittee shall take all reasonable steps to minimize or correct any adverse impact to the POTW and the environment resulting from noncompliance with the Permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

## M. Bypass

- <u>Bypass</u> means the intentional diversion of waste streams from any portion of a treatment facility.
- Bypass is prohibited unless the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage.

If Permittee knows in advance of the need for a bypass, it shall submit prior written notice to the City, if possible at least ten (10) days before the date of the bypass.

Pretreatment

Permittee shall submit oral notice to the ESD of an unanticipated bypass that results in violations of the Permit within 24 hours from the time the Permittee becomes aware of the bypass. Permittee shall also provide a written notice of the bypass within 5 days of the time the Permittee becomes aware of the bypass. The written notice shall contain a description of the bypass and its cause, the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

## N. Inspection & Entry (Newer)

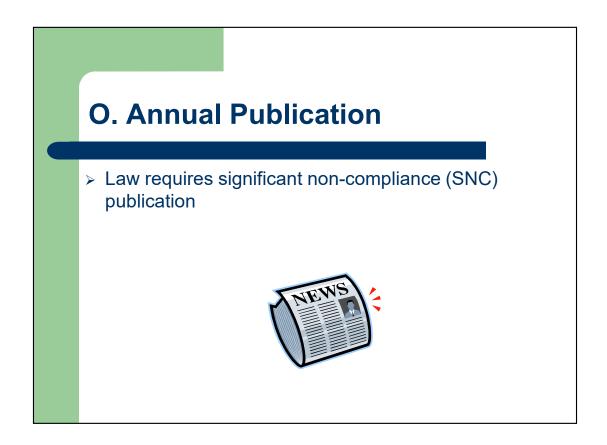
Permittee shall provide free access to any representative of the Environmental Services Division under safe and non-hazardous conditions with a minimum of delay.



### INSPECTION AND ENTRY

Permittee shall provide **FREE ACCESS** to any representative of the ESD. Free Access means the ability of City personnel to enter facilities under safe and nonhazardous conditions with a minimum of delay. The City shall be able to:

- 1. Enter at any time during normal hours of operation upon Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the Permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the Permit;
- 3. Inspect and document through photography, note-taking, or related means, at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Permit;
- 4. Sample or monitor any substances or parameters at any location for the purposes of determining Permit compliance; and
- 5. Inspect and document through photography, note-taking, or related means, any production, manufacturing, fabricating, or storage area where pollutants, regulated under the Permit, could originate or may be subject to regulation.



Significant Non-Compliance (SNC) with the terms and conditions of the Permit, will result in publication in a generally circulating daily newspaper and other forms of notification to inform the public as required by law.

A defined term, "significant noncompliance" (SNC) describes violations by the largest facilities that are considered to be more serious and significant to water quality under the EPA's current policy.

# P. Q. & R. Civil/Criminal Liability

- > Permit does not relieve Permittee from liability
- Violations = Class I Misdemeanor
- Criminal (non court): \$2,500 per violation per day or 6 months imprisonment.
- Civil (court): not to exceed \$25,000 per violation per day
- > Also any penalties imposed by the City



### P. Civil and Criminal Liability

Nothing in the Permit shall be construed to relieve the Permittee from civil and/or criminal penalties for noncompliance under Section 28 of the Phoenix City Code.

### Q. Criminal Penalty

Any person who violates any provision of Section 28 of the Phoenix City Code including any requirement of the Permit shall be guilty of a Class I misdemeanor and any such violation shall constitute a separate offense on each successive day the violation continues. The penalty shall not exceed \$2,500 per day for each violation and/or imprisonment of not more than 6 months.

### R. Civil Penalty

- 1. Any person who violates any provision of the Permit or any provision of the Phoenix City Code, Article II, entitled Use of Public Sewers and Limitations, Article VI, entitled Industrial User and Pretreatment Requirements, and/or Article VII entitled Accidental Discharge, shall be civilly liable to the City for a sum not to exceed twenty-five thousand (\$25,000) dollars per day for each violation. For continuing violations, each day may constitute a separate offense.
- 2. In addition to any civil penalty imposed on the Permittee, the Permittee shall be liable for any civil penalty imposed on the City as a result of the Permittee's violation.

# S. Recovery of Cost Incurred

- Permittee shall be liable to the City for any expense, loss, or damage caused by such violation noted in Section Q & R.
- Permittee shall be liable for any charges assessed by the Director to recover extra costs incurred by the City.



# T. & U. Actions & Rights

> Section T - Permit Action

City can modify, revoke, or terminate Permit for good cause. Discharge to POTW is a privilege not a right.

Section U - Property Right

Permit does not convey property rights or right to incur property

Notes:

#### T. Permit Action

The City may modify, revoke, or terminate the Permit for good cause, including, but not limited to, the following:

\*19 different reasons listed

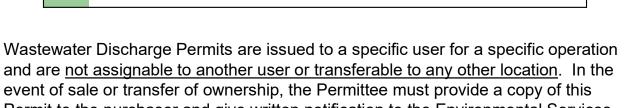
### **U. Property Right**

The issuance of the Permit does not convey any property right of any sort, or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

### V. Permit Not Transferable

- > Permit is issued to a specific owner
- Permittee must notify ESD of change of ownership prior to sale
- > New owner must obtain a new permit





event of sale or transfer of ownership, the Permittee must provide a copy of this Permit to the purchaser and give written notification to the Environmental Services Division prior to the effective date of sale or ownership transfer.

THE PURCHASER MUST OBTAIN A PERMIT IN ORDER TO DISCHARGE INDUSTRIAL WASTEWATER TO THE SANITARY SEWER.

### W. Duty to Reapply

- > Permittee must reapply (Not Automatic)
- Permit remains in full force SO LONG AS application is received 60-days prior to expiration
- > We will send a reminder letter via mail

### **DUTY TO REAPPLY: Automatic Extension of Existing Permit**

If Permittee wishes to continue to discharge industrial wastewater that is regulated by this Permit after the expiration date of this Permit, Permittee MUST APPLY FOR AND OBTAIN A NEW PERMIT. The application must be submitted to the Environmental Services Division at least 60 calendar days BEFORE the expiration date of this Permit, unless written permission for an extension of time is timely requested and the Environmental Services Division grants the request.

Subject to the Director's right to modify, revoke or terminate the Permit, it shall continue to remain in full force and effect after the date of expiration if the Permittee has applied for a new Permit in accordance with the timeframe required by this section, and a new Permit is not issued prior to the expiration date of the Permit.

# X. Y. & Z. Info/Severability/Appeals

- Section X Duty to Provide Information
- Section Y Severability
- > Section Z Permit Appeals Process

(Section 28-46.1, Phoenix City Code)

### Section X-

**Duty to Provide Information-** Permittee shall provide any information that the ESD may request to determine compliance with the Permit, or to determine whether cause exists for modifying, revoking, or terminating the Permit.

#### Section Y-

**Severability-** The Provisions of the Permit are severable. If any provision of the Permit, or the application of any provision of the Permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of the Permit, shall not be affected thereby.

#### Section Z-

**Permit Appeals Process-** Once received, Permittee has 20 days to review Permit. Failure to submit a timely petition for review shall be deemed to be a waiver of the administrative appeal. If the Director fails to act within 30 days from the receipt of the petition, it shall be deemed to be denied.

- What is the purpose of annual inspections?
  - The POTW is required to routinely inspect permitted SIUs in accordance with 40 CFR Part 403 as part of our NPDES and AZPDES Permits
  - Gathering information, verifying records and recordkeeping practices, identifying pollutants of concern, identifying changes to industrial processes, supporting enforcement actions, determine if previously identified problems have been resolved, etc.
- Additional reasons include: assessing BMPs, P2 opportunities, evaluating
  chemical and waste management practices, evaluating slug discharge control
  measures, evaluating the adequacy of wastewater treatment systems, evaluating
  the adequacy of compliance sampling points, responding to complaints or
  allegations of unauthorized activities, developing a relationship with the industry,
  establishing a regulatory presence, and to determine compliance with Phoenix
  City Code Chapter 28, "Sewers" and/or the Wastewater Discharge Permit.

- What is the typical inspection procedure?
  - Inspectors perform unannounced inspections as often as possible (and during normal operating hours)
  - We arrive, present photo ID and review the Notice of Inspection Rights Form
  - Review changes, enforcement, compliance, etc.
     with the Permittee

• Occasionally we will schedule out and announce inspections prior to the date if the site is not regularly staffed (groundwater remediation) or as a courtesy to certain types of operations (hospitals).

- Typical inspection procedure (cont'd)
  - Take a facility tour with particular attention to process flow and areas with wastewater generation, pretreatment, chemical usage & storage, waste storage & disposal, etc.
  - Records review (waste disposal manifests, maintenance of pretreatment system, waste hauling, training, etc.)
  - Closing interview (review observations, requirements, findings, etc.)
- Note: inspectors may discover a violation or issue needing attention after reviewing notes, photographs, further compliance history upon returning to the office. You may see additional requirements on the inspection report than you initially inspected – if you have any concerns about the items, talk with your inspector or the Chief

- When should I expect my report?
  - Within 30 days of the inspection
- What other inspection types are there?
  - Complaint/Violation
  - Demand (construction, changes to pretreatment or processes, permitting)
- Does one inspector manage everything for my company?
  - No see notes
- The IPP currently has 1-2 Permit writer inspectors, 2 "scouts", 2 annual inspections inspectors and 3 compliance/enforcement inspectors. Ensure you have the contact information for the appropriate inspector although any inspector should be able to assist with questions regarding your Permit or an inspection.

# Are you one of the following categorical IU's?

- > 40 CFR 413: Electroplating
- > 40 CFR 433: Metal Finishing
- > 40 CFR 469: Electrical/ Electronic Components
- > 40 CFR 464: Metal Molding and Casting
- > 40 CFR 465: Coil Coating
- > 40 CFR 467: Aluminum Forming
- > 40 CFR 468: Copper Forming

Basically, this means that if you are permitted as one of the above, you must keep track of listed Toxic Organic Substances.

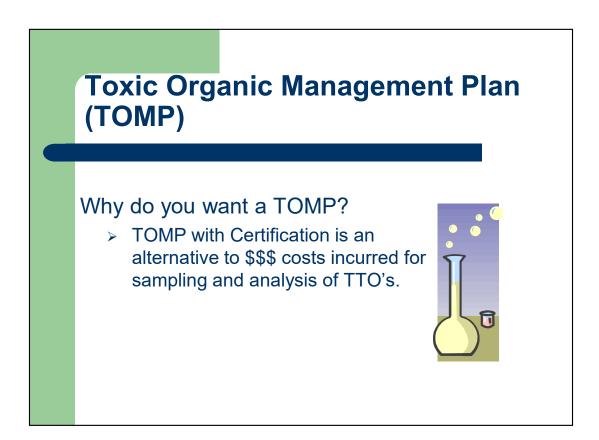
If you are one of the previous 7 categories:

- > Submit a TOMP to the City of Phoenix
- > Receive approval from the City of Phoenix
- Submit the total toxic organics (TTO) certification once a month with your SMR
- If you decide to sample for TTOs (and not submit a certification), sampling must be done every 6-months

<sup>\*\*40</sup> CFR Part 413, 433, 464, 465, 467, 468, 469\*\*

### Key elements of a TOMP:

- > List all toxic organic compounds
- Describe how toxic organics are used
- > Estimate amount of toxic organics used
- Describe method of disposal
- Describe procedures for preventing spills or leaks
- > Outline training program



Typical laboratory testing costs for organics (example only):

<u>Test</u>	<u>Lab A (2022)</u>	<u>Lab B</u>		<u>Lab C</u>
EPA 625	\$390	\$470		\$395
EPA 624	\$200-280 \$220-300		\$255-300	
EPA 608	\$200	\$260		\$180
Totals	\$790-870 \$795-875		\$985-1030	

#### **Attachment A:**

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan (TOMP) submitted to the City of Phoenix."

Signature:		Date:		
Printed Name:_	Title:_			

### >What is a SCP?

A SCP addresses measures to prevent accidental spills, leaks, or slug discharges from entering the sewer system.

### >What is a Slug Discharge?

Slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge.

• Effluent violation situations are not necessarily slug discharges >> if you are unsure whether a violation at your facility is considered part of a slug discharge incident, you can ask your inspector (or the PCC) for clarification

### Who benefits from a SCP?

Both the City and IU benefit from the implementation of a SCP by:

- > Increasing worker & public safety
- > Protecting capital investments
- > Avoiding soil and groundwater cleanup costs

### Who needs a SCP?

Everyone can benefit from a SCP but facilities that store large amounts of bulk chemicals, have chemical storage (even with protection) near drains or access to Sewer, or have the potential to discharge slug loads of concentrated chemicals or wastewater to the Sewer generally require one

The Environmental Services Division will make that evaluation and inform the IU if a SCP is needed

May be determined during permit renewal or during an inspection

### Elements of a SCP

- > Describe discharge practices
- > Describe stored chemicals
- Describe procedures for notifying the City
- Describe procedures to prevent adverse impacts of a discharge



# SLUG CONTROL PLAN GUIDANCE

Title 40 CFR 403.8(f)(2)(vi)



The Clean Water Act requires industrial facilities to have an emergency plan to prevent or mitigate a spill into waters of the US and into the Publicly Owned Treatment Works (POTW). The POTW includes both the sewer system and the wastewater treatment plant. Permitted discharges of wastewater into the POTW are required to have very low concentrations of pollutants. A Slug Control Plan is required to ensure that an industrial facility does not discharge or has a plan to mitigate the accidental discharge of a concentrated batch of strong, undiluted chemicals or other materials such as milk, oil, detergent, etc. into the POTW.

The complexity of the plan required to adequately address this topic must be determined on a case-by-case basis and should be evaluated periodically. At a minimum, <u>details</u> of the following elements should be included in the plan:

- Description of or changes to current discharge practices including non-routine batch discharges, particularly those affecting potential for Slug Discharge.
- Description of stored chemicals.
- Procedures for promptly notifying the City of Phoenix of slug discharges, or changes affecting potential for slug discharges, as defined under 403.5 (b), with procedures for follow-up written notification within five days.
- Any necessary procedures to prevent accidental spills including maintenance of storage areas, handling, and transfer of materials, loading, and unloading operations, and control of plant site run-off.
- Any necessary measures for building containment structures or equipment. Consideration should be given to requiring containment areas to be of sufficient capacity to contain the liquid capacity of the tanks which may potentially rupture.
- Any necessary measures for controlling toxic organic pollutants (including solvents).
- Any necessary procedures for emergency response which must include <u>immediate notification</u> to the appropriate Wastewater Treatment Plant (WWTP) and the Environmental Service Division should an accidental spill, leak, or slug load enter the sewer system.

	91 <sup>™</sup> Avenue WWTP	23" Avenue WWTP
Central Operations	602-495-7754	602-262-1866
Building 24-Hr	602-768-9789	602-316-8175
Supervisor	602-721-1734	602-495-5965

- A written summary of a Slug Discharge must also be provided to the Environmental Services Division within 5-days of the event.
- Any necessary changes follow-up practices to limit the damage suffered by the treatment plant or the environment.
- The following certification statement must be <u>included</u> and be <u>signed</u> by an officer of the company or manager responsible for overall plant operations:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the slug control measures in the Slug Control Plan (SCP), I certify that, to the best of my knowledge and belief, this facility is implementing the slug control plan submitted to the City of Phoenix. Furthermore, I certify that the slug prevention and control equipment installed at this facility will provide adequate protection from slug loading and will be used and maintained property."

Name and Title of Authorized Representative Signature of the Authorized Representative Industrial User or Company Name responsible for the Slug Control Plan Date



CITY OF PHOENIX WATER SERVICES DEPARTMENT ENVIRONMENTAL SERVICES DIVISION QUALITY RELIABILITY VALUE 2474 S. 22<sup>40</sup> AVE., BLDG. 31 | PHX, AZ 85009-6918

602-262-1859 or 602-495-5926 ## PHOENIX.GOV/ESD

## **Wastewater Discharge Permits**

Today's 2 most important take home messages are:

Read your Permit

Communicate with your inspectors

The two most important take home messages today are:

- 1. Read your Permit: The main way you'll understand what your permit requires
- 2. Communicate with the inspector: we currently have 1-2 Permit writer inspectors, 2 scouts, 2-4 inspection inspectors and 2 compliance/enforcement inspectors. We strongly encourage communication between inspectors and permittees.

### **Recent Updates**

- The Phoenix City Code Chapter 28 Sewers and the Enforcement Response Plan was approved October 7, 2020
- Permit Standard Conditions were updated February 14, 2022 (TBD 2024 update)
- General Permits are on hold
- > Permitting annual fee of \$1009 for all Permits
- You will be formally notified of anything that impacts your Permit!
- Updated ERP allows for more informal enforcement actions and gives IPP more flexibility with formal enforcement actions (i.e. Covid-19 and other variables or future pandemics)
- Many Chapter 28 changes are based on the 2005 Streamlining Rule (see <a href="https://www.epa.gov/npdes/npdes-pretreatment-streamlining-rule-fact-sheets">https://www.epa.gov/npdes/npdes-pretreatment-streamlining-rule-fact-sheets</a> for quick references)
- We have not adopted all of the streamlining changes; all required changes were adopted and several of the optional ones were adopted. ADEQ is still formalizing streamlining rule adoption state-wide.
- Some notable changes that are of interest to our Permittees: 45-day criteria for SNC; NSCIU definition and Class C Permit type; General Permits; BMPs are enforceable; SCP evaluation leniency
- Recently added to Conditions any potential for slug discharge needs to be reported + any discharges that could cause problems to the POTW

# **Questions?**

- > Any questions?
- You will receive certificates in the next week from Jesse Flores via email (or mail)
- > Hybrid format to continue (WebEx and in-person)

Feel free to stay after if you have any questions.

- My facility takes process control pH samples upstream of my Compliance Sampling Point (CSP) every hour. Does this need to be reported on my SMR?
  - a) Yes, all samples taken at the facility should be reported
  - b) No, only representative samples taken at the CSP should be reported

- 2. On what day is the December self-monitoring report (SMR) due (no later than)?
  - a) December 31st
  - b) January 31st
  - c) December 28th
  - d) January 28th

- 3. A self-monitoring effluent violation must be reported within 24 hours of becoming aware of the violation.
  - a) True
  - b) False

- 4. Which of the following is true of flow measurement:
  - You can't get a Notice of Violation for not measuring flow
  - b) You don't have to report flow, as long as you measure it and keep the records
  - c) Flow can be measured anywhere after pretreatment
  - d) A valid measurement must be entered for flow on your SMR

- 5. Compliance records must be kept for a minimum of how many years?
  - a) Three years
  - b) Four years
  - c) Five years
  - d) Ten years

- 6. When should ESD receive your Permit renewal application?
  - a) Sixty days prior to the expiration date
  - b) Six months before the expiration date
  - c) Sixty days after your permit expires
  - d) Ninety days before permit expiration

- 7. You are measuring pH continuously at your Compliance Sampling Point and a violation occurs on January 11 at 0800. However, the operator doesn't notice the excursion until January 12 at 0700 due to a faulty alarm. Which is considered a valid violation aware date/time?
  - a) January 12 @ 0700 c) January 11 @ 0800
  - b) January 12 @ 0000 d) January 11 @ 2359

- 8. The two signatories listed for my facility both recently resigned and the SMR is due tomorrow. I've just taken over what should I do?
  - a) Forge one of their signatures
  - b) Sign anyway and let the inspector know of the situation
  - c) Don't let the inspector know and sign anyway
  - d) Reach out to your inspector to obtain a new signatory form & ask for an extension on SMR front sheet (if needed)

- 9. All Permittees must develop a Toxic Organic Management Plan (TOMP).
  - a) True
  - b) False

- 10. How does a Permittee know if a Slug Control Plan is needed?
  - a) Refer to your Permit's Special Conditions
  - b) Ask your inspector
  - c) Everyone needs a SCP
  - d) Ask ADEQ or the EPA

## **Thank You For Joining Us!**



- Please don't forget to fill out the evaluation survey (in chat and/or email)!
- Thank you for your participation!



Water Services Department
Environmental Services Division
www.phoenix.gov/ESD
602-262-1859 (Front Desk)
602-261-8000 (WSD After Hours Emergency Contact)