

Pretreatment Audit Report

City of Westminster

CO-0024171

Westminster, Colorado

March 13, 2022 to March 16, 2023



Prepared by:

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Pretreatment Audit Summary Table
City of Westminster Pretreatment Audit Report
CO-0024171
March 13, 2023 to March 16, 2023

Pretreatment Audit Findings	Pretreatment Requirement and Corrective Action
<i>Section 4.0 – Municipal Ordinance and Intergovernmental Agreements</i>	
1. 40 C.F.R. § 403.8(f)(1) states, “The POTW shall operate pursuant to legal authority enforceable in Federal, State, or local courts, which authorizes or enables the POTW to apply and to enforce the requirements of sections 307 (b) and (c), and 402(b)(8) of the Clean Water Act (Act) and any regulations implementing those sections.” The City provided its Pretreatment legal authority found in Title 8; Chapter 10 – Industrial Pretreatment of the municipal ordinance for the EPA to review. Based on EPA’s review, the Pretreatment Regulations incorporated in Title 8; Chapter 10-Industrial Pretreatment of the municipal ordinance provide the City the framework to implement the Pretreatment Regulations in the POTW’s service area, with the following exception: • Local Limits Applicability Language [§8-10-2(D)(3)] – the current applicability language for local limits developed by the City states that “No person shall discharge wastewater containing in excess of the following maximum limits. These limits apply at the point where the wastewater is discharged to the POTW. The City Manager may impose mass-based limitations in addition to the concentration-based limits below:“ The phrase person needs to be replaced by SIU as defined in the municipal ordinance because the local limits were developed in 2012 using SIU regulated flows and therefore, only apply to SIUs, not persons. • Requirement to Control Slug Discharges [8-10-4(J)(2)(c)] – the current language in the ordinance states that following: “Requirements for the development and implementation of spill control plans or other special conditions, including management practices necessary to	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(1) <u>Corrective Action Item</u> Update Title 8, Chapter 10 – Industrial Pretreatment of the municipal ordinance to provide the City the legal framework to implement the Pretreatment regulations in the POTW’s service area. <u>Recommended Action Item</u> EPA recommends the City directly establish the authority to take digital photos as part of information gathering in the Right of Entry §8-10-7(A).

adequately prevent accidental, unanticipated, or nonroutine discharges.” The phrase nonroutine in this requirement needs to be replaced by Slug to ensure the Slug Discharge definition in the ordinance is implemented by this requirement.

- **Digital Photos** [8-10-7(A)] – EPA recommends the City directly establish the authority to take digital photos as part of information gathering in the Right of Entry section.

Section 5.0 – Local Limits

2. 40 C.F.R. § 122.44(j)(2)(ii) of the NPDES regulations require POTWs to provide a written technical evaluation of the need to revise local limits following permit issuance or reissuance. The technical evaluation is a detailed re-evaluation of data, criteria, conditions, and assumptions on which local limits are based to determine whether any significant changes affecting the local limits have occurred. Chapter 7 of the *Local Limits Development Guidance Manual*, EPA-833-R-04-002A, July 2004 provides guidance on completing the technical evaluation of local limits.

Part I.B.8(C) of the City’s NPDES permit issued by the CDPHE includes the following requirements for a technical evaluation of the local limits. The local limits requirements are as follows:

“The Permittee shall establish and enforce specific local limits to implement the general and specific prohibitions found in 40 CFR 403.5(a) and (b). The Permittee shall continue to develop these limits as necessary and effectively enforce such limits. Where the Permittee determines that revised or new local limits are necessary, the Permittee shall submit the proposed local limits to the Approval Authority in an approvable form in accordance with 40 CFR 403.18.

In accordance with 40 CFR 122.44(j)(2)(ii), the permittee shall submit to the Division and Approval Authority a technical evaluation of the need to revise or develop local limits in accordance with 40 CFR 403.5(c) and a local limits package if a technical evaluation reveals that development or revision of local limits is necessary. The evaluation shall include, but not be limited to, a consideration of any new or revised numeric and practice-based effluent

Pretreatment Requirements

40 C.F.R. § 122.44(j)(2)(ii)

40 C.F.R. § 403.5(C)(1)

40 C.F.R. § 403.8(f)(4)

Westminster CDPS permit #CO-0024171, Part I.B.8(C)

Corrective Action Item

Develop and submit updated local limits, as required in Part I.B.8(C) of the City’s CDPS Permit effective January 1, 2020. Provide EPA a submittal timeline for the updated local limits.

Recommended Action Item

Develop and provide a justification on the lower and upper pH limit established in §8.10.2(A)(2)(b) of the municipal ordinance.

EPA recommends the City evaluate the usefulness of developing MACLs during its local limits update.

limits in this permit.” In addition to the established technically-based local limits, the City has incorporated a lower and upper pH numeric ordinance limit of between a pH range of 5.5 to 10.0 in §8.10.2(A)(2)(b) of the municipal ordinance. Based on review of available records, it appears that the pH numeric ordinance limit is not site-specific and has not undergone the rigor of approval/public participation for the technically-based local limits.	
3. The City’s current local limits were public noticed on June 28, 2012 for a 30-day public comment period and approved by EPA on August 9, 2012. The City’s local limits are incorporated in §8.10.2(D)(3) of the municipal ordinance. The local limits applicability language in §8.10.2(D)(3) is as follows: “Daily Maximum Discharge Limits: No person shall discharge wastewater containing in excess of the following maximum limits. These limits apply at the point where the wastewater is discharged to the POTW. The City Manager may impose mass-based limitations in addition to the concentration-based limits below:” The 2012 local limits were developed by the City using SIU regulated flows located at the permitted monitoring points. As a result, the local limits are applicable to SIUs only and not person as defined in the City’s municipal ordinance. In addition, because the local limits were developed using SIU regulated flows at permitted monitoring points, the local limits apply at these monitoring points.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.5(C)(1) 40 C.F.R. § 403.8(f)(4) Westminster CDPS permit #CO-0024171, Part I.B.8(C) 2012 Local Limits Development Records <u>Corrective Action Item</u> Ensure the local limits applicability language is appropriately applied during the local limits update and incorporation into the municipal ordinance.
<i>Section 7.0 – Industrial User Inventory and Characterization</i>	
4. 40 C.F.R. §403.8(f)(2)(i-iii) of the Pretreatment Regulations states, The POTW shall <i>develop and implement</i> procedures to ensure compliance with the requirements of a Pretreatment Program. At a minimum, these procedures shall enable the POTW to: • “Identify and locate all possible Industrial Users which might be subject to the POTW Pretreatment Program. Any compilation,	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(2)(i-iii) <u>Corrective Action Item</u> Update the Industrial Waste Survey standard operating procedure to include notification to IUs of applicable Pretreatment Standards, as required in 40 C.F.R. § 403.8(f)(2)(iii).

index or inventory of Industrial Users made under this paragraph shall be made available to the Regional Administrator or Director upon request.” This requires a POTW to develop and maintain an inventory of IUs in the service area. • “Identify the character and volume of pollutants contributed to the POTW by the Industrial Users identified under paragraph (f)(2)(i) of this section. This information shall be made available to the Regional Administrator or Director upon request.” This requires a POTW to characterize the IUs in the inventory of the service area. • “Notify Industrial Users identified under paragraph (f)(2)(i) of this section, of applicable Pretreatment Standards and any applicable requirements under sections 204(b) and 405 of the Act and subtitles C and D of the Resource Conservation and Recovery Act. Within 30 days of approval pursuant to 40 C.F.R. 403.8(f)(6), of a list of significant industrial users, notify each significant industrial user of its status as such and of all requirements applicable to it as a result of such status.” These procedures must include the notification of IUs of applicable Pretreatment Standards and other applicable requirements. The City developed an Industrial Waste Survey standard operating procedure (SOP) that identifies methods and procedures used to identify and characterize IUs in the service area of its POTW. The Industrial Waste Survey SOP does not describe notification procedures for these IUs.	
<i>Section 8.0 – Control Mechanism (Permit) Evaluation and Permit Specific Issues</i>	
5. EPA evaluated the City’s permit template to ensure the City is incorporating the required permit conditions found in 40 C.F.R. § 403.8(f)(1)(iii)(B)(1-6) of the Pretreatment required Regulations and Section 8-10-4(J)(1) of the City’s municipal ordinance. Based on EPA evaluation, the SIU permit complies with the permit conditions found in the Pretreatment Regulations and	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(1)(iii)(B)(1-6) Municipal Ordinance, Section 8-10-4(J)(1) 40 C.F.R. § 403.12 Municipal Ordinance, Sections 8-10-6(D)(2),

incorporated in the City’s municipal ordinance, with the following exceptions: <i>[Note: The EPA’s evaluation of the City’s permit is included in the Westminster Permit Template Review.docx and embedded in the Permit Boilerplate-EPA.doc, attached to the audit report.]</i> • Pollutants Not Present [40 C.F.R. § 403.12(e)] – the process for seeking a waiver for pollutants not present incorporated in 8-10-6(D)(2) of the municipal ordinance is not established in the permit template. In addition, the pollutants not present certification statement incorporated in 8-10-6(N)(3) of the municipal ordinance is not established in the permit template. • Upset Provisions [40 C.F.R. § 403.12(e)] – the upset affirmative defense provisions and notification requirements incorporated in 8-10-13(a) of the municipal ordinance are not established in the permit template.	8-10-6(N)(3) and 8-10-13(a) <u>Corrective Action Item</u> Update the SIU permit template to include the permit conditions found in 40 C.F.R. § 403.8(f)(1)(iii)(B)(1-6) of the Pretreatment regulations and the notifications required by 40 C.F.R. 403.12.
6. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(ii) require the City to “Identify the character and volume of pollutants contributed to the POTW.” The SIU inspection reports include minimal descriptions of the facility’s unit operations. Facility inspection report need to include more detail regarding the SIU’s chemical storage/handling/transfer, process/unit operations, wastestream generation from these unit operations, wastestream management or wastewater treatment, sampling procedures to provide a current characterization, including an evaluation of slug discharge potential and process or treatment plant changes. This information is important to capture current conditions and determine if control such as an SIU permit or BMPs are necessary or if modifications to existing control mechanism or control plans such as slug discharge control plans or spill plans are necessary. During the audit, EPA provided compliance assistance and training on conducting facility inspections and generating inspections reports that gather information to capture current conditions at the facility that may impact categorical determinations, permit conditions, or control	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(2)(ii) <u>Corrective Action Item</u> Provide more detail in the SIU inspection reports to capture current conditions at the SIU, as discussed in the detail provided for each SIU to identify the character and volume of contributed pollutants.

documents such as the slug discharge control plan.	
7. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(1)(iii) require a POTW to “Control through Permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements.” • The Ball Aerospace fact sheet needs to include process line start dates to determine if Pretreatment Standards for New Sources are applicable. As described in §8.4.1(3) of this audit report, EPA recommends the City develop a fact sheet for Ball Aerospace that describes current conditions at the facility and adequately addresses appropriate permit conditions. • The City should justify in the fact sheet whether As, Mo, and Se are pollutants of concern at Ball Aerospace and why local limits established by the City for these pollutants are not incorporated in the Ball Aerospace permit.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(1)(iii) <u>Corrective Action Item</u> Modify the Ball Aerospace fact sheet to justify the applicable Pretreatment Standards, based on the facility’s start date and determine applicable pollutant limits.
8. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(1)(iii) require a POTW to “Control through Permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements.” Ball Aerospace was provided a monitoring waiver for cyanide, but it does not appear that the SIU meet the requirements for the Pollutants not Present provisions established in the Pretreatment Regulations at 40 C.F.R. § 403.12(e)(2)(v) and incorporated in the City’s municipal ordinance at §8-10-6(D)(2). • The SIU is required to provide the following: i. Sampling data and other technical factors demonstrating that the pollutant is not present in the discharge ii. Data from at least one sampling of the facility’s process wastewater prior to any treatment. EPA will provide the optional sampling waiver fact sheet. • In addition, the Ball Aerospace permit does not contain the required certification for the	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(1)(iii) 40 C.F.R. § 403.12(e)(2)(v) Westminster Municipal Ordinance at §8-10-6(D)(2). <u>Corrective Action Item</u> Ensure Ball Aerospace meets the criteria for the Pollutants not Present provisions, prior to incorporating the monitoring waiver in the permit. In addition, ensure the required certification statements for the Pollutants not Present provision is established in the permit.

pollutants not present provision, as incorporated in §8-6-10(N)(3) of the municipal ordinance.	
9. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(1)(iii)(B)(3) require a permit to consist of effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards, categorical Pretreatment Standards, local limits, and State and local law. The most stringent of these applicable limits need to be established as permit limits. • The Ball Aerospace permit does not incorporate the most stringent limits for Cd, Cu, and Ni between the applicable Metal Finishing PSNS and Local limits. The most stringent limit for Cd is the local limit of 0.10 mg/L, Cu local limit of 2.69 mg/L, and Ni local limit of 1.82 mg/L. The City needs to modify the permit to ensure it complies with the Pretreatment Regulations.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(1)(iii)(B)(3) <u>Corrective Action Item</u> Ensure the Ball Aerospace permit includes the most stringent limits for all applicable Pretreatment Standards.
10. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vi) require a POTW to evaluate whether each such Significant Industrial User needs a plan or other action to control Slug Discharges. A Slug Discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or Permit conditions. Based on EPA's review of the Pretreatment records, Ball Aerospace is not required to develop a slug discharge control plan that meets the requirements of the Pretreatment Regulations. The City states in the 2022 inspection report that the spill plan and TOMP are sufficient to protect the sanitary sewer from any slug discharges. Based on EPA's observations during the March 15, 2023 facility inspection at Ball Aerospace, the current spill plan does not address specific slug discharge potential at the SIU which include discharges that are non-routine, episodic nature, including, but not limited to, an accidental spill or a	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(2)(vi) Westminster Municipal Ordinance, §8-10-3(C). <u>Corrective Action Item</u> Ensure the Ball Aerospace current spill plan is updated to address slug discharge control provisions, as required in the Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vi) and incorporated in the City's municipal ordinance at §8-10-3(C).

non-customary batch discharges from the manufacturing operations. For example, the spill plan does not address management of spent chemical solutions in the printed circuit boards and tetra-etch labs.	
11. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(1)(iii) require a POTW to “Control through Permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements.” The Ball Technical Center permit issued on May 2, 2018 states the following: “This permit prohibits the discharge of any wastewater from the facility’s metal finishing line to the City of Westminster wastewater treatment system and requires compliance with other conditions so set forth herein. Discharge from the neck rinser equipment is allowed under this permit.” The permit allows wastewater from the neck rinsing process in the can-making operation to be discharged to the POTW. Based on the EPA’s review of the Pretreatment records, it appears that the Ball Technical Center is a can-making facility and not a metal finisher. The fact sheet for the Ball Technical Center permit states that the can-making facility is for product testing and development only, the federal categorical Coil Coating-Canmaking subcategory regulations (40 CFR Part 465, Subpart D) do not apply. The Canmaking Categorical Pretreatment Standards at 40 CFR 465, Subpart D do not specifically exempt research and development facilities. The exemption from categorical Pretreatment Standards is not based on commercial sales but on the unit operations, production methods, materials or other factors being materially different than those the EPA evaluated in developing the standards. In these situations, the wastewater quality or quantity may differ from the wastewater the EPA evaluated as the basis for the categorical Pretreatment standards and the facility would be exempt from the applicable Rule. The determination for applicability of the categorical Pretreatment Standards to research and development facilities was clarified by EPA in a 1995 letter to	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(1)(iii) 40 C.F.R. § 465, Subpart D <u>Corrective Action Item</u> Modify the Ball Technical Center permit to accurately describe the zero-discharge can-making unit operations. Determine if the Canmaking Categorical Pretreatment Standards apply to the discharge of wastewater from the neck rinsing operations.

Arias Research Associates, Inc.	
<i>Section 10.0 – Control Authority Compliance Monitoring</i>	
12. As required in 40 C.F.R. § 403.8(f)(2), the POTW shall “develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program.” The development and implementation of a sampling plan or procedures ensures the POTW is appropriately and consistently performing sampling or monitoring events, as well as providing enforceable data that is representative of the discharge conditions at the facility. The sampling plan should include the following: • purpose and objective of the sampling program, • specific sampling protocols at each facility sampling location to ensure representative sampling, and • appropriate QA/QC procedures to ensure legally defensible data. The City developed a sampling plan that identifies the pollutants of concern to sample at the SIUs. The sampling SOP needs to be updated to include SIU-specific sampling protocols that describes sampling techniques/procedures, equipment, and an identification of the sampling location to ensure consistent sampling that is representative for the production day. In addition, the sampling plan needs to be updated to incorporate QA/QC samples such as equipment blanks, trip blanks, sample duplicates, matrix spikes, control standards to ensure the sampling and analytical techniques are in control and compliance with 40 C.F.R. 136.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(2) 40 C.F.R. 403.8(f)(2)(vii) <u>Corrective Action Item</u> Update the sampling plan to include site-specific sampling protocols and appropriate QA/QC such as equipment blanks, trip blanks, sample duplicates, matrix spikes, control standards to ensure the sampling and analytical techniques are in control and comply with 40 C.F.R. 136.
<i>Section 11.0 – Enforcement</i>	
13. The City submitted its ERP to the EPA for review, prior to the audit. Based on the EPA’s review, the ERP needs to be updated to meet the requirements established in the Pretreatment regulations at 40 C.F.R. § 403.8(f)(5)(i-iv) and incorporated in the municipal ordinance: (Note: the EPA’s review of the City ERP and the EPA’s embedded comments in the City’s ERP are included as enclosures to the audit report). <i>Describe how the POTW will investigate instances</i>	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(5)(i-iv) Westminster Municipal Ordinance <u>Corrective Action Item</u> Modify the enforcement response plan to be in compliance with 40 C.F.R. § 403.8(f)(5)(i-iv) of the Pretreatment Regulations.

of noncompliance:

- Provide a summary of the IU Inventory/characterization and SNC procedures

Enforcement Response Guide:

The following anticipated types of violations are either absent or need to be modified:

- Failure to notify (24-hour, slug/potential problems, changed discharges, hazardous waste, upset, bypass)
- Tampering with monitoring equipment/manhole
- Recordkeeping
- Dilution

The ERG Tables are missing enforcement remedies for violations of Pretreatment Standards that result in SNC:

- Any other violation of a Pretreatment Standard or Requirement as defined by 40 CFR 403.3(l) that the POTW determines has caused Interference or Pass Through (including endangering the health of POTW personnel or the general public) (SNC Criteria # C)
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority (SNC Criteria # D)
- Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance (SNC Criteria # E)
- Reporting Violations that are over 30 days and/or result in SNC (SNC Criteria #F)
- Failure to accurately report noncompliance (SNC Criteria # G)
- Any other violation or group of violations, which may include a violation of Best Management Practices, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment program (SNC Criteria # H)

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1.0 Introduction

The U.S. Environmental Protection Agency, Region 8 (EPA) conducted an audit of the Pretreatment program, administered by the City of Westminster, CO (City) from March 13, 2023 through March 16, 2023. The Pretreatment audit started on March 13, 2023 at 8:00 a.m. with an opening interview. The closing conference was held on March 16, 2023 at 10:00 a.m. during which the EPA presented the preliminary observations, conclusions, and findings from the audit.

Participants in the audit included:

City of Westminster, CO

Tara Wilson	Pretreatment Coordinator
Tanner Kraft	Superintendent
Kelly Cline	Water Quality Administrator
Sarah Borgers	Director-Public Utilities (opening interview only)
Joe Elliott	Chief Plant Operator (closing conference only)

EPA

Al Garcia	Region 8 Pretreatment Coordinator
Julie Kinsey	EPA Region 8 Clean Water Emerging Contaminants Coordinator
Mai Denawa	EPA Region 8 Office of Regional Counsel (Pretreatment training)
Jeremy Sausto	EPA Criminal Investigations Division (Pretreatment training)
Christopher Ruybal	EPA Criminal Investigations Division (Pretreatment training)

The primary purpose of the EPA audit was to evaluate the Pretreatment program administered and implemented by the City. In addition, the audit served as a forum for the EPA and the City to discuss issues related to the implementation of the Pretreatment program, including PFAS requirements in the City's NPDES permit and for the EPA to provide outreach and training to the City.

The EPA Pretreatment audit consisted of an evaluation of the following:

- The City's legal authority codified in its municipal ordinance; Title 8, Chapter 10 - Industrial Pretreatment.
- Development and implementation of the City's local limits.
- The City's resources to implement the Pretreatment program in its service area.
- Implementation policies and templates developed by the City.
- Review and evaluation of the Pretreatment programmatic activities and records maintained for the permitted Significant Industrial Users (SIUs).
- Site inspection of selected SIUs and IUs in the service area to ensure the Pretreatment records reflect current conditions.
- Discussion of the Pretreatment Regulations and implementation.

The following sections of the report highlight the findings, corrective actions, and recommended actions of the audit. The action items to correct program deficiencies and meet regulatory requirements are identified in the Pretreatment Audit Summary Table, beginning on page 2 of this report. Specific actions to clarify and strengthen program implementation are provided as recommendations within the body of the audit report.

2.0 Publicly Owned Treatment Works (POTW) Information

The City owns and operates a Publicly Owned Treatment Works (POTW) located at 13150 N Huron Street, Westminster, CO 80234. The POTW serves the boundary of the City of Westminster. There are no outside contributing jurisdictions to the City. The service area for the POTW is shown in Figure 1, a POTW process diagram is shown in Figure 2 and the Google Earth view of the City's POTW is shown in Figure 3.

A site visit of the POTW was performed during the audit to develop an overview of the City's wastewater treatment plant operation and processes. The information regarding the Westminster POTW and tour was provided by Mr. Tanner Kraft, POTW Superintendent. The POTW receives wastewater from the service area via 3 interceptors:

- 54-inch Big Dry Creek
- 30-inch North Huron, pumped by lift station
- 30-inch South Huron, pumped by lift station

The three main interceptors enter the POTW and flows through a diversion structure, where the flow is measured through a Parshall flume primary flow monitoring device. The flow then flows through a 52-inch line to the Headworks. The Headworks enters two rack and pinion bar screens with ¼-inch spacing to remove large solids, rags and organic material. The screenings are washed, compacted and collected in a 10 cubic yard dumpster. The dumpster, when full, is transported to a landfill weekly. The wastewater flows to two vortex grit cyclones for grit removal. The removed grit is washed and collected in the 10 cubic yard dumpster, along with the screenings.

The headworks effluent enters an influent pump station where it is pumped to two anaerobic tanks to start the biological phosphorus removal cycle. The effluent from the anaerobic tanks flow by gravity to a splitter structure and split into the four aeration basins. Each aeration basin consists of four trains with a total of three passes/train. Each train has an approximate capacity of two million gallons and are separated by three zones, anoxic/aerobic/anoxic to promote the nitrification/denitrification cycle and encourage phosphorus removal by establishing an environment for the phosphorus accumulating organisms (PAO) to uptake phosphorus, then removing the PAOs. Internal recycle pumps within each aeration basin provide a mixed liquor recycle flow.

The effluent from the aeration basins enters a splitter structure and is split between four secondary clarifiers. Solids are allowed to settle in these clarifiers and are removed from the bottom. Activated solids are returned (RAS) at a volume of three x the flow or 3Q. The RAS is returned to the anaerobic tanks ahead of the aeration basins. The remaining solids are wasted (WAS) to the gravity belt thickener (GBT).

The secondary effluent flows to the UV disinfection building. The effluent flows through two channels that each have four modules, with 5 racks/module and 5 bulbs/rack. The channels are used based on flow. The disinfected effluent is sent to either the reclaim influent storage tank for non-potable reclamation or discharged to Big Dry Creek. According to Mr. Kraft, approximately 70 to 75% of the effluent is sent to the non-potable reclamation from April through November.

Solids –

The WAS is thickened in the GBT from a solids content of 3% to approximately 4-5%. The thickened WAS is then pumped to a holding tank for the primary digesters. The City has three primary digesters. The primary treated solids are then pumped to the secondary digester and then fed to the centrifuge to dry out the solids to about 17-18%. The centrifuge centrate is returned to the Headworks. The City produces Class B biosolids that is either land applied in City-owned land or composted.

2.1 NPDES Permit

The City's NPDES permit #CO-0024171, issued by the Colorado Department of Public Health and Environment (CDPHE), contains provisions for an EPA-approved Pretreatment program in Part I.B.7. The permit was issued on November 27, 2019, effective on January 1, 2020 and will expire on December 31, 2024.

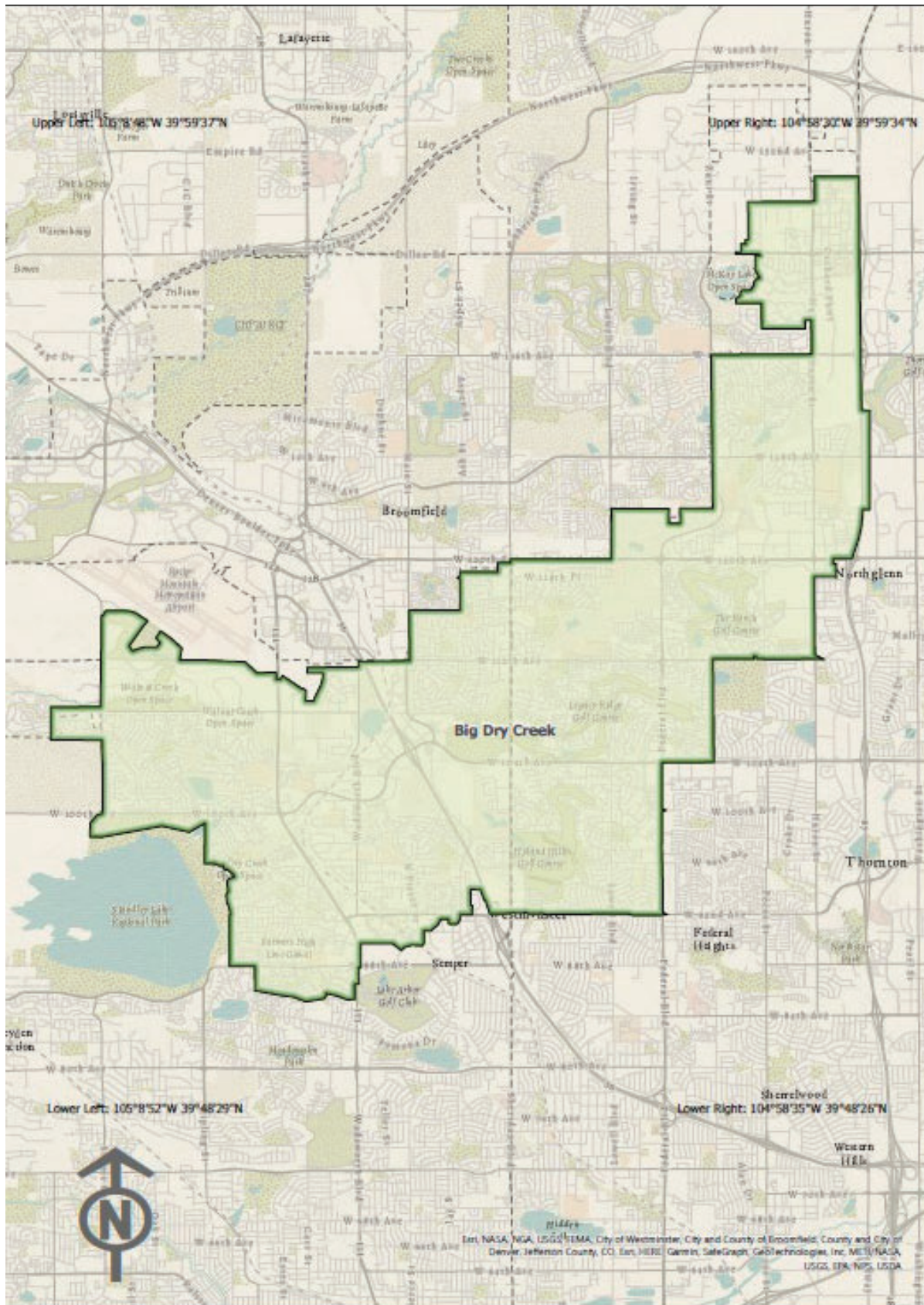


Figure 1 –City of Westminster Service Area

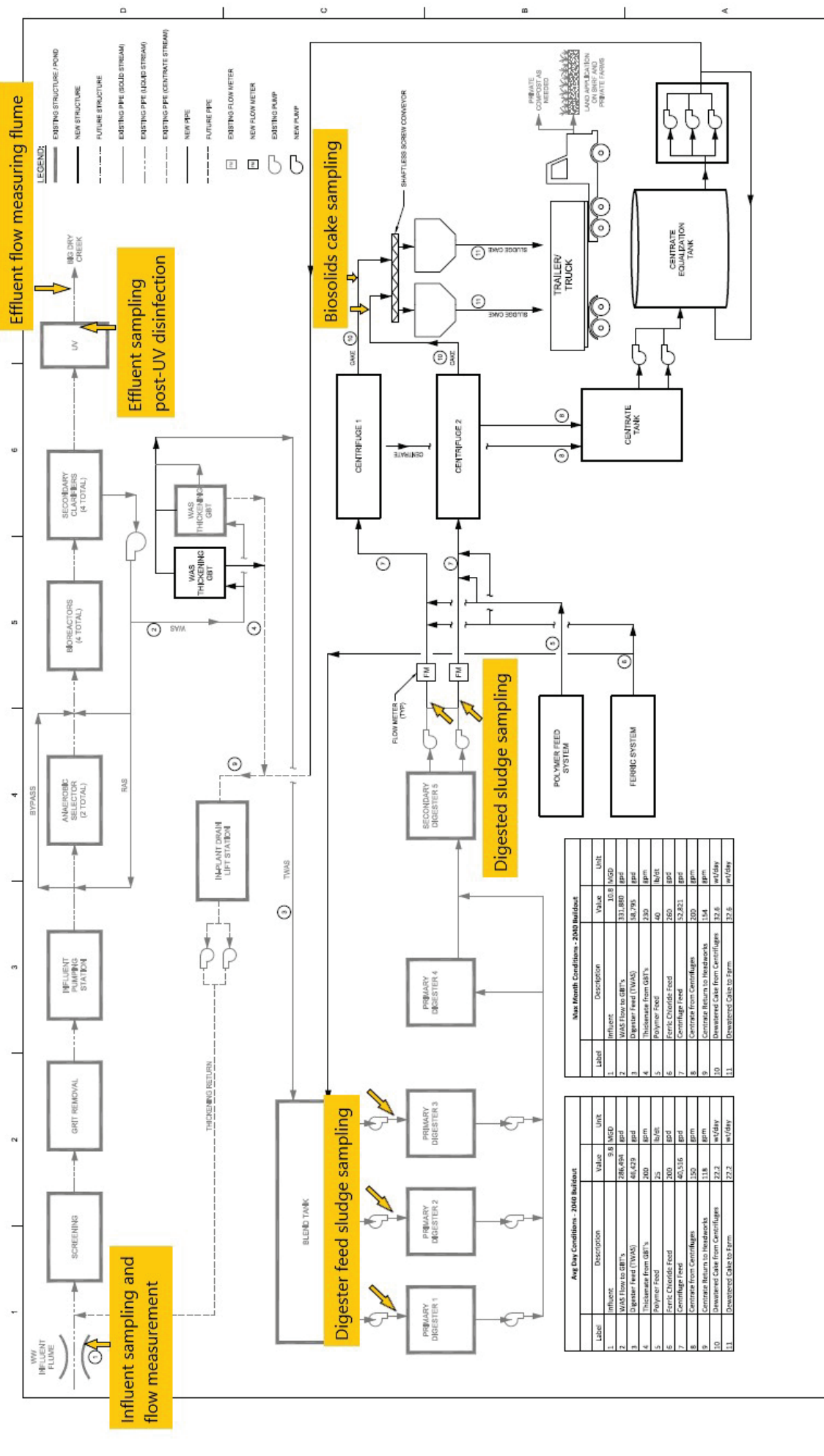


Figure 2 – Westminster POTW Process Diagram



Figure 3 - City of Westminster POTW, Google Maps View

3.0 Resources

3.1 *Resources Regulatory Background*

The Pretreatment Regulations found in 40 C.F.R. § 403.8(f)(1-6) include POTW Pretreatment requirements and procedures to implement an approved Pretreatment program. These requirements and procedures include the legal authority and the implementation procedures of the Pretreatment program (permitting, inspections, sampling, industrial waste survey, receipt of IU reporting and notification, record-keeping, slug discharge control, data evaluation and enforcement for non-compliance). In addition, the Pretreatment Regulations found in 40 C.F.R. § 403.8(f)(3) state that the POTW shall have sufficient resources and qualified personnel to carry out the authorities and implementation procedures of the Pretreatment program.

A Pretreatment program, in compliance with the criteria listed in the Pretreatment Regulations, requires adequate and qualified staffing to implement the Pretreatment program in its service area. The resources required for each implementation activity depend largely on the size of the service area, number of IUs/SIUs/sector control programs, and Pretreatment program policies. A compliant program also requires a consistent funding mechanism to ensure the program is adequately funded and equipped to fully implement the program.

3.2 *Evaluation of the City's Resources and Funding*

According to the FY22 Pretreatment annual report, the City's resource commitment to the Pretreatment program is 0.50 FTE. The Pretreatment Coordinator implements all programmatic activities such as the industrial user inventory/characterization, permitting or BMP sector control, field activities such as inspections/sampling, compliance evaluation and enforcement. The Pretreatment Coordinator is provided support from the POTW laboratory staff for SIU inspections/sampling and service area PFAS sampling. In addition, the Pretreatment Coordinator collaborates with the internal City departments such as Building and Utilities. The Pretreatment Coordinator reports to the Water Resources Division Manager, who reports to the Public Works Director. The Public Works Director reports to the Deputy City Manager and the City Manager.

The City reported in the FY22 Annual Report that its Pretreatment program is budgeted \$50,000. The budget is a line item within the wastewater treatment plant budget. The wastewater treatment plant budget is funded by the City's Enterprise Fund, generated from residential and non-residential users in the service area. The City appears to be well equipped to implement the field activities of the Pretreatment program and has portable automatic samplers, sampling equipment, confined space entry equipment, and personal protective equipment.

Based on EPA's review of the City's implementation of its Pretreatment program, it appears that the City's current resources and budget is adequate to implement all programmatic activities of the Pretreatment program, in compliance with 40 C.F.R. § 403.8(f)(3).

3.3 Examples of Available Pretreatment Training/Resources

This is not a comprehensive list of all Pretreatment related training/resources available. The City is encouraged to seek out training and resources that will support its Pretreatment program implementation. EPA is also available to the City for Pretreatment training opportunities.

The Region 8 Pretreatment workshop provided by Region 8 Pretreatment Association provides training sessions directly related to Pretreatment implementation, updates to upcoming regulations and policies, and networking opportunities.

The EPA provides “Pretreatment 101” webinar training designed to provide consistent national training to local and state Pretreatment programs. The webinar series is located at <https://www.epa.gov/npdes/national-pretreatment-program-training-and-webinar>. Archived presentations may be downloaded, and a schedule of future training opportunities is located at the website.

An additional resource available is the Pretreatment Coordinators Group discussion forum, found at the following website:

<https://groups.io/g/Pretreatment/topics>

4.0 Municipal Ordinance and Intergovernmental Agreements

4.1 Legal Authority Background

40 C.F.R. § 403.8(f)(1) of the Pretreatment Regulations states:

“The POTW shall operate pursuant to legal authority enforceable in Federal, State, or local courts, which authorizes or enables the POTW to apply and to enforce the requirements of sections 307 (b) and (c), and 402(b)(8) of the Clean Water Act (Act) and any regulations implementing those sections. Such authority may be contained in a statute, ordinance, or series of contracts or joint powers agreements which the POTW is authorized to enact, enter into or implement, and which are authorized by State law.

At a minimum, this legal authority shall enable the POTW to:

- i.* Deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by Industrial Users where such contributions do not meet applicable Pretreatment Standards and Requirements or where such contributions would cause the POTW to violate its NPDES permit;
- ii.* Require compliance with applicable Pretreatment Standards and Requirements by Industrial Users;
- iii.* Control through Permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards

and Requirements. In the case of Industrial Users identified as significant under §403.3(v), this control shall be achieved through individual permits or equivalent individual control mechanisms issued to each such User...

- iv. Require (A) the development of a compliance schedule by each Industrial User for the installation of technology required to meet applicable Pretreatment Standards and Requirements and (B) the submission of all notices and self-monitoring reports from Industrial Users as are necessary to assess and assure compliance by Industrial Users with Pretreatment Standards and Requirements, including but not limited to the reports required in §403.12.
- v. Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by Industrial Users. Representatives of the POTW shall be authorized to enter any premises of any Industrial User in which a Discharge source or treatment system is located or in which records are required to be kept under §403.12(o) to assure compliance with Pretreatment Standards. Such authority shall be at least as extensive as the authority provided under section 308 of the Act;
- vi. (A) Obtain remedies for noncompliance by any Industrial User with any Pretreatment Standard and Requirement. All POTW's shall be able to seek injunctive relief for noncompliance by Industrial Users with Pretreatment Standards and Requirements. All POTWs shall also have authority to seek or assess civil or criminal penalties in at least the amount of \$1,000 a day for each violation by Industrial Users of Pretreatment Standards and Requirements.

(B) Pretreatment requirements which will be enforced through the remedies set forth in paragraph (f)(1)(vi)(A) of this section, will include but not be limited to, the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the POTW; any requirements set forth in control mechanisms issued by the POTW; or any reporting requirements imposed by the POTW or these regulations in this part. The POTW shall have authority and procedures (after informal notice to the discharger) immediately and effectively to halt or prevent any discharge of pollutants to the POTW which reasonably appears to present an imminent endangerment to the health or welfare of persons. The POTW shall also have authority and procedures (which shall include notice to the affected industrial users and an opportunity to respond) to halt or prevent any discharge to the POTW which presents or may present an endangerment to the environment or which threatens to interfere with the operation of the POTW. The Approval Authority shall have authority to seek judicial relief and may also use administrative penalty authority when the POTW has sought a monetary penalty which the Approval Authority believes to be insufficient.
- vii. Comply with the confidentiality requirements set forth in §403.14.”

The provisions in 40 C.F.R. § 403.8(f)(1)(i-vii) do not provide local Pretreatment programs with legal authority, but they do establish the minimum requirements for the local municipality to implement the Pretreatment program. A POTW’s legal authority is derived

from State law. Therefore, State law must confer the minimum legal authority required by the Pretreatment Regulations on a POTW.

To apply the regulatory authority provided by State law, it is necessary for the POTW to establish local regulations to legally implement and enforce pretreatment requirements. A POTW's legal authority is typically established in a sewer use ordinance as part of the municipality's code, or in the case of a sanitation district, its Rules and Regulations. The EPA's 2007 *Model Pretreatment Ordinance* provides a template for POTWs that are required to develop pretreatment programs and can be found at the following website:

https://www3.epa.gov/npdes/pubs/pretreatment_model_suo.pdf

4.2 *City of Westminster Municipal Ordinance*

EPA approved the City's Pretreatment program on January 18, 1983. According to records maintained by EPA, the City submitted updates to its municipal ordinance on December 11, 1991 for the Domestic Sewage Exclusions, updated its local limits on January 14, 1995, and August 6, 2004. On August 9, 2012, EPA approved the City's update to its local limits and municipal ordinance language to align with the 2005 Pretreatment Streamlining Rule.

The City provided its Pretreatment legal authority found in Title 8; Chapter 10 – Industrial Pretreatment of the municipal ordinance for the EPA to review. Based on EPA's review, the Pretreatment Regulations incorporated in Title 8; Chapter 10-Industrial Pretreatment of the municipal ordinance provide the City the framework to implement the Pretreatment Regulations in the POTW's service area, with the following exception:

- **Local Limits Applicability Language** [§8-10-2(D)(3)] – the current applicability language for local limits developed by the City states that “No person shall discharge wastewater containing in excess of the following maximum limits. These limits apply at the point where the wastewater is discharged to the POTW. The City Manager may impose mass-based limitations in addition to the concentration-based limits below:“
 - The phrase person needs to be replaced by SIU as defined in the municipal ordinance because the local limits were developed in 2012 using SIU regulated flows and therefore, only apply to SIUs, not persons.
- **Requirement to Control Slug Discharges** [8-10-4(J)(2)(c)] – the current language in the ordinance states that following: “Requirements for the development and implementation of spill control plans or other special conditions, including management practices necessary to adequately prevent accidental, unanticipated, or nonroutine discharges”
 - The phrase nonroutine in this requirement needs to be replaced by Slug to ensure the Slug Discharge definition in the ordinance is implemented by this requirement.
- **Digital Photos** [8-10-7(A)] – EPA recommends the City directly establish the authority to take digital photos as part of information gathering in the Right of Entry section.

4.3 Inter-Jurisdictional or Governmental Agreements (IGA)

4.3.1 IGA Regulatory Background

A POTW's authority to implement and enforce its approved Pretreatment program is directly related to its regulatory jurisdiction. The POTW's authority is established in ordinance or Rules and Regulations, which are in effect for its service area. Local entities with connectors, or outside jurisdictions to the service area that contribute wastewater, must establish legally binding mechanisms to ensure that all IUs in these outside contributing jurisdictions are subject to enforceable Pretreatment standards and requirements, as required in §403.8(f)(1).

40 C.F.R. § 403.8(f)(1)(i) states, "The POTW shall operate pursuant to legal authority enforceable in Federal, State or local courts, which authorizes or enables the POTW to apply and to enforce the requirements of sections 307 (b) and (c), and 402(b)(8) of the Act and any regulations implementing those sections. *Such authority may be contained in a statute, ordinance, or series of contracts or joint powers agreements which the POTW is authorized to enact, enter into or implement, and which are authorized by State law.*" [Emphasis added]

The local entity that implements the Pretreatment program must either obtain this authority for itself through an IGA or ensure that the outside contributing jurisdiction has both the authority and the obligation to implement and enforce the Pretreatment Standards and Requirements against every IU that discharges to the POTW.

4.3.2 Evaluation of the City's IGAs with Outside Contributing Jurisdictions

According to information gathered during the audit, there are no outside jurisdictions contributing non-domestic wastewater to the City's POTW.

5.0 Local Limits

5.1 Local Limits Regulatory Background

40 C.F.R. § 403.8(f)(4) of the Pretreatment Regulations require POTWs that are developing pretreatment programs to develop and enforce specific limits on prohibited discharges or demonstrate that the limits are not necessary. 40 C.F.R. § 403.5(c)(1) states, "Each POTW developing a POTW Pretreatment Program pursuant to §403.8 shall develop and enforce specific limits to implement the prohibitions listed in paragraphs (a)(1) and (b) of this section [*general and specific prohibitions*]. Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits." [Clarification and emphasis added].

The National Pretreatment Program consists of three types of national pretreatment standards established by regulation that apply to industrial users. These include prohibited discharge standards, categorical standards, and local limits. Prohibited discharge and categorical standards are developed by the EPA to establish nationwide Pretreatment Standards. Prohibited discharge standards, comprised of general and specific prohibitions

found in 40 C.F.R. 403.5(a) and (b) of the Pretreatment Regulations, apply to all IUs regardless of the size or type of operation. Categorical standards are uniform, technology-based standards that apply to specific process wastewater discharges from industrial categories. These categorical standards are found at 40 C.F.R. Parts 405 through 471.

The EPA's promulgation of categorical standards does not relieve a POTW from its obligation to evaluate the need for and to develop local limits to meet the general and specific prohibitions in the Pretreatment Regulations. Because specific prohibitions and categorical standards provide only general protection against pass through and interference, local limits based on POTW-specific conditions may be necessary. Local limits are developed by POTWs to enforce the specific and general prohibitions, as well as any state and local regulations.

An EPA-approved Pretreatment program is required to develop local limits that are protective of the POTW, the collection system, and the POTW's site-specific standards. These site-specific standards may be NPDES permit effluent limits, biosolids limits, environmental criterion, worker health and safety standards or other local standards.

The EPA recommends that POTWs establish their local limits based on the maximum allowable headworks loading (MAHL) calculated for each pollutant of concern. The MAHL approach enables the POTW to calculate local limits considering the portion of the MAHL that is controllable (non-domestic discharges from IUs) from the uncontrollable portion (domestic sources, background concentrations, etc.). A pollutant's MAHL is determined by first calculating its Allowable Headworks Loading (AHL) for each POTW's site-specific standard or environmental criterion. Local limit development uses a mass-balance approach to determine the AHLs for a POTW based on the environmental and treatment plant criteria.

An AHL is the estimated maximum loading of a pollutant that can be received at a POTW's headworks, that should not cause a POTW to violate a treatment plant limit or environmental criterion. An AHL is developed to prevent interference or pass through. An AHL is calculated for each applicable POTW site-specific standard: pass through, sludge contamination, air quality standards, and the various forms of interference (i.e. biological treatment inhibition, sludge digestion inhibition). The AHLs for each pollutant of concern (POC) are calculated based on the various suitable environmental criteria, plant flow rates, and plant removal efficiency. After calculating a series of AHLs for each POC, the lowest AHL is chosen as the MAHL.

MAHLs estimate the maximum combined loadings that can be received at the POTW's headworks from all sources. Maximum allowable industrial loadings (MAIL), developed by the POTW, represent the amount of pollutant loadings the POTW can receive from controlled sources (i.e., industrial users, some commercial sources, and some hauled waste) that the POTW chooses to control through local limits. Local limits can take many forms based on how MAILs are allocated by the POTW. The designation and implementation of these MAILs, including the allocation of loadings to SIUs, are left to each POTW. The POTW should provide a reasonable method of allocating the MAIL to the SIUs while ensuring the implementation procedures do not exceed the calculated MAHL. Typically,

the POTWs allocate the MAIL as a uniform concentration-based or a mass limit to each SIU.

The local limits should be based on the following:

- Sampling of the service area to develop a representative data set collected for local limits (e.g., influent, effluent, biosolids, commercial, residential, industrial, trucked/hailed waste),
- Evaluation of the current POTW standards/criteria (including, but not limited to: NPDES permit limits/conditions, water quality standards, biosolids standards),
- Identification of the POTW removal efficiency and pollutant partitioning,
- Evaluation of data to ensure it is current and representative of current conditions,
- Identification of pollutants of concern,
- Calculations of loadings and determination of MAHL,
- Development of local limits and allocation methods.

5.2 Local Limits Requirements Established in the City's NPDES Permits

The City's NPDES permit issued by the CDPHE on November 29, 2019 and effective on January 1, 2020 include local limit requirements in Part I.B.8.C.

5.3 The EPA Evaluation of the City's Local Limits

5.3.1 Technically-based Local Limits

The City's current local limits were public noticed on June 28, 2012 for a 30-day public comment period and approved by EPA on August 9, 2012. The City's local limits are incorporated in §8.10.2(D)(3) of the municipal ordinance.

The local limits applicability language in §8.10.2(D)(3) is as follows:

“Daily Maximum Discharge Limits: No person shall discharge wastewater containing in excess of the following maximum limits. These limits apply at the point where the wastewater is discharged to the POTW. The City Manager may impose mass-based limitations in addition to the concentration-based limits below:”

The 2012 local limits were developed by the City using SIU regulated flows located at the permitted monitoring points. As a result, the local limits are applicable to SIUs only and not person as defined in the City's municipal ordinance. In addition, because the local limits were developed using SIU regulated flows at permitted monitoring points, the local limits apply at these monitoring points. The City needs to ensure the local limits applicability language is appropriately applied during the local limits update and incorporation into the municipal ordinance.

Table 1 – City of Westminster Local Limits

Pollutant	Symbol	Daily Maximum (mg/L)
Arsenic, Total	As	0.13
Cadmium, Total	Cd	0.10
Chromium, Total	Cr	4.63
Chromium VI	Cr ⁶⁺	1.26
Copper, Total	Cu	2.69
Lead, Total	Pb	0.77
Mercury, Total	Hg	0.0005
Molybdenum, Total	Mo	0.84
Nickel, Total	Ni	1.82
Selenium, Total	Se	0.13
Silver, Total	Ag	0.91
Zinc, Total	Zn	8.44

In addition, the City has established pollutant loadings for all commercial dischargers, as necessary. Maximum allowable commercial loadings (MACL) may be a useful control tool if these are used for necessary control of the commercial sector. If these MACLs are not used, then these loadings are unnecessarily subtracted from the maximum allowable industrial loading dedicated for SIUs. EPA recommends the City evaluate the usefulness of developing MACLs during its local limits update.

Table 2 – Commercial Dischargers Daily Maximum Pollutant Loadings

Pollutant	Symbol	Daily Maximum Loading (lbs/day)
Arsenic, Total	As	0.07
Cadmium, Total	Cd	0.05
Chromium, Total	Cr	2.52
Chromium VI	Cr ⁶⁺	0.69
Copper, Total	Cu	1.47
Lead, Total	Pb	0.42
Mercury, Total	Hg	0.053
Molybdenum, Total	Mo	0.49
Nickel, Total	Ni	0.99
Selenium, Total	Se	0.07
Silver, Total	Ag	0.49
Zinc, Total	Zn	4.60

5.3.2 Numeric Ordinance Limits

In addition to the established technically-based local limits, the City has incorporated a lower and upper pH numeric ordinance limit of between a pH range of 5.5 to 10.0 in §8.10.2(A)(2)(b) of the municipal ordinance. Based on review of available records, it appears that the pH numeric ordinance limit is not site-specific and has not undergone the rigor of approval/public participation for the technically-based local limits.

The City should provide a justification on the establishment of the upper pH numeric ordinance limit during the local limits update submittal.

5.3.3 Dilution Prohibition

The City has incorporated a prohibition on dilution in §8.10.2(F) of the municipal ordinance to ensure the IUs are appropriately managing their regulated wastestreams to meet compliance with an applicable Pretreatment Standard or Requirement:

“No user shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation, unless expressly authorized by an applicable pretreatment standard or requirement. The City Manager may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases when the imposition of mass limitations is appropriate.”

The dilution prohibition language in §8.10.2(F) meets the requirement in 40 C.F.R. Part 403.6(d) of the Pretreatment Regulations.

5.4 *Local Limits Technical Evaluation-Regulatory Background*

40 C.F.R. § 122.44(j)(2)(ii) of the NPDES regulations require POTWs to provide a written technical evaluation of the need to revise local limits following permit issuance or reissuance. The technical evaluation is a detailed re-evaluation of data, criteria, conditions, and assumptions on which local limits are based to determine whether any significant changes affecting the local limits have occurred. Chapter 7 of the *Local Limits Development Guidance Manual*, EPA-833-R-04-002A, July 2004 provides guidance on completing the technical evaluation of local limits.

The Annual Pretreatment Reports submitted to the EPA provide the POTW with an opportunity to perform reviews for exceedances of the established MAHL for the POCs, on an annual basis. The POTW compares both the maximum and average influent data for the reporting year against the MAHL to determine if there were any exceedances. In addition, the POTW is required to report biosolids data to determine if there were any changes or concerns with the biosolids loadings. An exceedance of the established MAHL may be indicative of a change in the service area, changes to the POTW operations or changes to domestic or non-domestic loadings and may indicate a need to recalculate the local limits. However, the annual review may not have addressed conditions that can change over time, such as operating conditions, environmental criteria/standards, data, or assumptions that may make local limits no longer appropriate, protective or legally-defensible.

As a follow-up to MAHL exceedances listed on the annual report and as required during a permit reissuance, a POTW should compare its current conditions and requirements with those that existed when the local limits were developed. The EPA recommends that POTWs determine if re-calculating existing local limits, or developing MAHLs for new pollutants of concern, is necessary in response to the following criteria:

1. Removal Efficiencies
 - a. Modification to the POTW or new POTW brought online.
 - b. Changes in POTW processes or operations that have affected the POTW

- removal efficiencies.
- 2. Total POTW or IU Loading
 - a. Significant changes to flow to the POTW.
 - b. Significant changes to loadings to the POTW due to new IUs, changes in loadings at existing IUs or significant growth in the service area.
 - c. Significant changes in loadings from SIUs in the service area.
- 3. Limiting Criteria
 - a. New or revised NPDES permit limits.
 - b. New or revised biosolids standards.
 - c. Changes in EPA or State Criteria (acute and chronic water quality standards for the receiving waters, reuse water quality criteria) at the time of local limit development to existing criteria.
- 4. Sludge Characteristics or Method of Disposal
 - a. Changes in loadings to biosolids.
 - b. Changes in biosolids disposal methods.
- 5. Background Concentrations of Pollutants in Receiving Water

5.5 Technical Evaluation of the City's Local Limits

Part I.B.8(C) of the City's NPDES permit issued by the CDPHE includes the following requirements for a technical evaluation of the local limits: The local limits requirements are as follows:

"The Permittee shall establish and enforce specific local limits to implement the general and specific prohibitions found in 40 CFR 403.5(a) and (b). The Permittee shall continue to develop these limits as necessary and effectively enforce such limits. Where the Permittee determines that revised or new local limits are necessary, the Permittee shall submit the proposed local limits to the Approval Authority in an approvable form in accordance with 40 CFR 403.18.

In accordance with 40 CFR 122.44(j)(2)(ii), the permittee shall submit to the Division and Approval Authority a technical evaluation of the need to revise or develop local limits in accordance with 40 CFR 403.5(c) and a local limits package if a technical evaluation reveals that development or revision of local limits is necessary. The evaluation shall include, but not be limited to, a consideration of any new or revised numeric and practice-based effluent limits in this permit."

The local limits technical evaluation required by 40 C.F.R. 122.44(j)(2)(ii) and the subsequent update to the City's local limits is currently under development. The City is required to provide EPA a submittal timeline for the updated local limits.

5.6 Permit or Site-Specific Limits

Local municipalities implementing the Pretreatment program should have the ability to establish site or permit-specific limits as deemed necessary to be protective of the POTW. This is a beneficial authority because situations or projects may occur in the service area that the municipality may want to provide control to protect the POTW. However, the current limits in the ordinance may not address the pollutant of concern.

The EPA considers the development of any local limit, whether codified in the municipal ordinance/rules and regulations or developed on a site-specific situation (i.e., permits-specific limit) to be a program modification under 40 C.F.R §403.18 (53 FR 40579, Final Rule, General Pretreatment Regulations for Existing and New Sources, October 17, 1988). The development of any local limit is required to follow the approval and public notice provisions, both at the local level and by submitting to the EPA.

40 C.F.R §403.5(c)(3) of the Pretreatment Regulations states, “Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.” The EPA recommends that POTWs conduct public participation in the local limits process (whether codified in the municipal ordinances/rules and regulations or new limits developed in a permit) as openly as possible. This may involve notifying the SIUs/IUs and other affected parties of the proposed limits or announcing a 30-day public comment period. This would allow sufficient time for the public to participate, which is a fundamental goal of the Clean Water Act in Section 101(e).

The City has established the ability to develop site or permit-specific limits in §8.10.2(E) of its municipal ordinance:

“The City reserves the right to establish, by ordinance or in wastewater discharge permits, more stringent standards or requirements on discharges to the POTW consistent with the purposes of this chapter.”

Based on the EPA’s review of the Pretreatment records, the City has not established site-specific limits in the SIU permits.

6.0 Pretreatment Operating Procedures

6.1 Regulatory Background

40 C.F.R. §403.8(f)(2) of the Pretreatment Regulations states, “The POTW shall *develop and implement* procedures to ensure compliance with the requirements of a Pretreatment Program.” [*emphasis added*] The Pretreatment Regulations identify these minimum procedures in 40 C.F.R. §403.8(f)(2)(i-viii) to include the following **implementation** activities, summarized below:

- Identify and locate all possible IUs that might be subject to the Pretreatment program,
- Obtain information describing the character and volume of wastes discharged by IUs,
- Notify IUs of all applicable Pretreatment standards and other applicable State or Federal standards or requirements,
- Review self-monitoring reports and other notices submitted by IUs,
- Randomly sample and analyze effluents from IUs,
- Evaluate whether each SIU needs a slug discharge control plan,
- Investigate instances of noncompliance with Pretreatment standards and requirements,

- Comply with public participation requirements.

The requirements listed in 40 C.F.R. §403.8(f)(2) include the **development** of procedures. Adequate and updated standard operating procedures (SOPs) provide the following benefits to a Pretreatment program:

- Develop the baseline knowledge of the Pretreatment Regulations and establish the framework for program implementation,
- Adequately implement the authorities established in the municipal ordinance and ensure consistency in program implementation,
- Retain institutional and historical knowledge developed within the POTW's program, and
- Provide a valuable training resource for new or inexperienced staff members.

Ultimately, the benefits of valid SOPs to the Pretreatment program are increased efficiency, along with improved data comparability, credibility, and legal defensibility. In addition, the development of written SOPs and templates allow the EPA to determine if the procedures adequately implement the legal authority developed in the municipal ordinance/rules and regulations as required in 40 C.F.R. §403.8(f):

“A POTW Pretreatment program must be based on the following legal authority and include the following procedures. These authorities and procedures shall at all times be fully and effectively exercised and implemented.”

6.2 *Standard Operating Procedures (SOPs)*

EPA evaluated the City's procedures and templates during the audit to ensure these meet the requirements listed in 40 C.F.R. § 403.8(f)(2). As previously discussed, developing SOPs are beneficial for the City's Pretreatment program but most importantly, to ensure adequate implementation of the authorities established in the municipal ordinance and ensure consistency in program implementation. EPA considers the Industrial User Inventory and Characterization, Sampling Plan/QA-QC, and the Enforcement Response Plan to be priority and required SOPs to ensure consistent implementation of the City's legal authority. EPA evaluated these priority SOPs and provides comments in the following sections within this audit report:

- Industrial User Inventory and Characterization Procedures (*discussed in §7.0*),
- Sampling Plan, Site-Specific Sampling Protocol, Quality Assurance and Quality Control (*discussed in §10.0*), and
- Enforcement Response Plan and Data Compliance Evaluation (*discussed in §11.0*).

EPA recommends the City evaluate the need to develop Pretreatment procedures, as necessary.

6.3 *Templates*

Templates and checklists are also critical to a Pretreatment program to ensure consistent and appropriate implementation of the Pretreatment regulations. The City has developed a

permit application for discharging facilities and an SIU permit template. The permit application appears to provide adequate information and data for the City to develop an appropriate control mechanism. The evaluation of the permit template is included in §8.4 of this audit report.

6.4 Records and Data Management

6.4.1 Regulatory Background

The recordkeeping requirements of the Pretreatment program are established in 40 C.F.R. §403.12(o)(1-3):

“(1) Any Industrial User and POTW subject to the reporting requirements established in this section shall maintain records of all information resulting from any monitoring activities required by this section, including documentation associated with Best Management Practices. Such records shall include for all samples:

- (i) The date, exact place, method, and time of sampling and the names of the person or persons taking the samples.
- (ii) The dates analyses were performed.
- (iii) Who performed the analyses.
- (iv) The analytical techniques/methods use; and
- (v) The results of such analyses.

(2) Any Industrial User or POTW subject to the reporting requirements established in this section (including documentation associated with Best Management Practices) shall be required to retain for a minimum of 3 years, any records of monitoring activities and results (whether or not such monitoring activities are required by this section) and shall make such records available for inspection and copying by the Director and the Regional Administrator (and POTW in the case of an Industrial User). This period of retention shall be extended during the course of any unresolved litigation regarding the Industrial User or POTW or when requested by the Director or the Regional Administrator.

(3) Any POTW to which reports are submitted by an Industrial User pursuant to paragraphs (b), [baseline monitoring reports] (d), [90-day compliance reports] (e), [categorical industrial user monitoring reports] and (h) [significant industrial user monitoring reports] of this section shall retain such reports for a minimum of 3 years and shall make such reports available for inspection and copying by the Director and the Regional Administrator. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Industrial User or the operation of the POTW Pretreatment Program or when requested by the Director or the Regional Administrator.”

6.4.2 Recordkeeping and Data Management

Based on information gathered during the audit, the SIU permit and IU records are located in the Pretreatment Coordinator’s office and are maintained for at least three years. The

SIUs are chronologically organized and the IUs on the industrial user inventory may include records such as building permit, survey, inspection reports, hazardous waste notifications, slug plans, as necessary.

6.5 Receipt of Discharge Monitoring Reports and Notifications

The Pretreatment regulations in 40 C.F.R. §403.8(f)(2)(vii) require a POTW to “Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices required under §403.12 [IU compliance reports], or indicated by analysis, inspection, and surveillance activities [control authority monitoring].” This requires the POTW to ensure adequate receipt and tracking of self-monitoring reports and notifications, have procedures to evaluate the data and information contained within these reports and notices, and determine compliance with the Pretreatment standards (e.g., permit limits and conditions).

The SIU self-monitoring reports, notifications and other reports submitted are date stamped by hand as received. The City evaluates compliance, based on its review of the information in the reports and notifications, either manually or by spreadsheet. The City uses a self-monitoring report (SMR) compliance checklist to ensure the SMR is complete and to document compliance with the SIU permit’s numeric limits and reporting requirements.

6.6 Management of Confidential Records

40 C.F.R. § 403.14 of the Pretreatment Regulations establishes the public availability of the Pretreatment records and the provisions to establish confidential business information (CBI). The City has incorporated the public availability and confidentiality requirements in Section 13.10.801 of the municipal ordinance:

“Information and data on a user obtained from reports, surveys, wastewater discharge permit applications, wastewater discharge permits, and monitoring programs, and from the City Manager's inspection and sampling activities shall be available to the public without restriction, unless the user specifically requests, and is able to demonstrate to the satisfaction of the City Manager, that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable state and federal law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report that might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other effluent data, as defined by 40 CFR 2.302, will not be recognized as confidential information and will be available to the public without restriction.”

According to information gathered during the audit, the City has not received confidential business information.

7.0 Industrial User Inventory and Characterization

7.1 Regulatory Background

The Pretreatment Regulations state in 40 C.F.R. § 403.8(f)(2)(i-iii) that a POTW shall develop and implement procedures to ensure compliance with requirements of a Pretreatment Program. [These requirements are summarized after the regulation language in **bold** and *italics* font].

- i. “Identify and locate all possible Industrial Users which might be subject to the POTW Pretreatment Program. Any compilation, index or inventory of Industrial Users made under this paragraph shall be made available to the Regional Administrator or Director upon request.” ***This requires a POTW to develop and maintain an inventory of IUs in the service area.***
- ii. “Identify the character and volume of pollutants contributed to the POTW by the Industrial Users identified under paragraph (f)(2)(i) of this section. This information shall be made available to the Regional Administrator or Director upon request.” ***This requires a POTW to characterize the IUs in the inventory of the service area.***
- iii. “Notify Industrial Users identified under paragraph (f)(2)(i) of this section, of applicable Pretreatment Standards and any applicable requirements under sections 204(b) and 405 of the Act and subtitles C and D of the Resource Conservation and Recovery Act. Within 30 days of approval pursuant to 40 C.F.R. 403.8(f)(6), of a list of significant industrial users, notify each significant industrial user of its status as such and of all requirements applicable to it as a result of such status.” ***These procedures must include the notification of IUs of applicable Pretreatment Standards and other applicable requirements.***

The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(6) state, “The POTW shall prepare and maintain a list of its non-domestic or Industrial Users meeting the criteria in §403.3(v)(1). The list shall identify the criteria in §403.3(v)(1) applicable to each Industrial User and, where applicable, shall also indicate whether the POTW has made a determination pursuant to §403.3(v)(2) that such Industrial User should not be considered a Significant Industrial User. The initial list shall be submitted to the Approval Authority pursuant to §403.9 or as a non-substantial modification pursuant to §403.18(d).”

Approved Pretreatment programs are required by the Pretreatment Regulations to understand their service area and outside contributing jurisdictions, by developing and maintaining an inventory of IUs. In addition, the Pretreatment Regulations require a Pretreatment program to characterize the IUs listed on the inventory and notify the IU of their status under the Pretreatment program. For example, the following characterizations may apply to an IU, based on information received from questionnaires, drive-by or facility inspections:

- The IU is not characterized as significant, based on volume and characteristic of the discharged wastewater.
- The IU is characterized as significant and issued a permit.
- The IU is not characterized as significant, but loadings need to be controlled using

- BMPs in a source control program.
- The IU is generating wastewaters that are significant but is characterized as a zero-discharging facility.

The **Industrial Waste Inventory and Characterization** or industrial waste survey (IWS)/IU inventory procedures are an important component to an effective Pretreatment program because this is a POTW's first exposure to the IUs, allows the POTW to determine if an IU is significant, notify the IU of its status under the Pretreatment regulations, and determine the appropriate type of control mechanisms for these facilities to protect the POTW and collection system.

7.2 Industrial User Identification and Characterization Procedure

40 C.F.R. §403.8(f)(2) of the Pretreatment Regulations require the City to “develop and implement procedures” that “enable the POTW” to comply with these Pretreatment Program requirements. The City developed an Industrial Waste Survey standard operating procedure (SOP) that identifies methods and procedures used to identify and characterize IUs in the service area of its POTW. The City continually evaluates or participates in the following:

- Evaluate new commercial wastewater accounts from the Utility Billing System
- Evaluate new business list from City Clerk
- Monitor City Development Review Process
- Review potential IUs in service area, based on inquiries to Engineering/Community Development
- Yellow Pages/ECHO searches and service area drive-bys
- IU Survey
- Service area sampling to gather data and follow-up.

The Industrial Waste Survey SOP does not describe notification procedures for these IUs and needs to be updated to include the notification of applicable Pretreatment Standards, as required in 40 C.F.R. § 403.8(f)(2)(iii).

EPA recommends the City establish procedures in these sections of the current SOP to ensure the information gathered during the IU identification, characterization and notification procedures are documented on the IU inventory and characterization list or spreadsheets. This will help ensure the City's IU Inventory and Characterization list is maintained and updated, as required in 40 C.F.R. § 403.8(f)(6) of the Pretreatment Regulations.

7.3 Industrial User Database of the City's Service Area

40 C.F.R. § 403.8(f)(2)(i-iii) of the Pretreatment regulations require the City to identify and locate all IUs in its service area, identify the character and volume of pollutants contributed by these IUs based on current information, and notify these IUs of applicable Pretreatment Standards and Requirements. As discussed in the Industrial Waste Survey SOP, the City uses internal City departments to gather information on new businesses or

tenant finishes at existing IUs that may be subject to applicable Pretreatment Standards. The City also gather information and data in the service area by drive-bys, inspections, surveys and service area sampling.

The City provided a current IU inventory of the IUs in its service area for EPA to review. Based on EPA's review, the City's IU inventory has 1,595 IUs and provides contact information and a description of the IU business practice or processes. It appears that the City has developed a current inventory of IUs in its service area and is adequately maintaining the inventory. EPA recommends the City follow up with Steen Machining to inspect the parts washing process to ensure this is not subject to Metal Finishing Categorical Pretreatment Standards.

EPA recommends the City collaborate with the Fire Department because this department is also performing facility inspections based on fire codes but may be able to provide information to the City regarding potential significant process/wastewater generation or spill/sludg potential in the service area, based on their observations.

The EPA currently provides "Pretreatment 101" webinar training, and a training for "Industrial User Inventory and Characterization Procedures," provided in September 2010, is archived at the following website:

<https://www.epa.gov/npdes/national-pretreatment-program-events-training-and-publications#pretreat101>

8.0 Control Mechanism (Permit) Evaluation and Permit Specific Issues

8.1 Regulatory Background

POTWs are required to issue control mechanisms to IUs identified through IU Inventory and Characterization procedures as SIUs. Individual permits or general control mechanisms authorize the discharge of wastewater to a POTW upon condition that the discharger complies with the permit limitations and conditions. An SIU permit is effective for only a limited period and should be revocable by the issuing authority at any time for just cause. In addition, the POTW's legal authority will typically include a provision that forbids the discharge of industrial wastewater from a SIU without a current permit.

The Pretreatment Regulations establish the required permit conditions in 40 C.F.R. § 403.8(f)(1)(iii)(B)(1-6) that include the following minimum elements:

1. Statement of duration (in no case more than five years);
2. Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
3. Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards, categorical Pretreatment Standards, local limits, and State and local law;
4. Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location,

- sampling frequency, and sample type, based on the applicable general Pretreatment Standards, categorical Pretreatment Standards, local limits, and State and local law;
5. Statement of applicable civil and criminal penalties for violation of Pretreatment Standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond applicable federal deadlines;
 6. Requirements to control Slug Discharges, if determined by the POTW to be necessary.

The reporting and notification requirements in permit condition #4 above are found in 40 C.F.R. § 403.12 of the Pretreatment Regulations and include the following:

- Baseline Monitoring Reports – 403.12(b)
- Compliance Schedule Progress Reports – 403.12(c)
- 90-Day Compliance Reports – 403.12(d)
- CIU Periodic Compliance Reports – 403.12(e)
- Notice of Potential Problems, including Slug Loading – 403.12(f)
- Notification of Changes Affecting Slug Discharge Potential – 403.8(f)(2)(vi)
- 24-Hour Non-Compliance Notification – 403.12(g)
- SIU Periodic Compliance Reports – 403.12(h)
- Notification of Changed Discharge – 403.12(j)
- Notification of Hazardous Waste Discharge – 403.12(p)
- Notification of Bypass – 403.17

Under general principles of administrative law, permit applicants and other interested parties may challenge the POTW's permit decisions, including the permit limitations and conditions and the POTW's authority to issue the permit. The POTW must ensure that it has the requisite legal authority to impose Pretreatment Standards and Requirements in SIU permits and that it exercises its authority in a consistent and non-arbitrary manner. The local ordinance must clearly provide the POTW with the following authorities to support the permit requirements found in 40 C.F.R. § 403.8(f)(1)(iii):

- Authority to regulate all Industrial Users contributing wastewater to the POTW.
- Authority to require and issue permits, orders, or other control mechanisms, including:
 - Authority to require Industrial Users to submit all data that the POTW deems relevant to permit decisions and provisions for public access to data.
 - Authority to enter, inspect, and sample to verify information supplied by the Industrial User as well as to assess the Industrial User's compliance status.
 - Authority to incorporate local limits, including BMPs (if applicable).
 - Authority to incorporate federal and state Pretreatment Standards and Requirements.
 - Authority to require self-monitoring, record keeping, reporting, and notifications by the permittee.
 - Authority to develop other appropriate permit conditions.
- Authority to enforce sewer use ordinance and discharge permit violations.
- Authority to require the development of a slug discharge control plan.

The POTW is required to establish the legal authority to require an IU to complete and file a permit application, with current information, to receive an initial or reissued permit. A permit application enables the POTW to obtain the information necessary to characterize the facility, to evaluate the quality and quantity of wastewater discharged, or projected to be discharged for a new facility, and to determine the applicable Pretreatment Standards and controls. The permit application serves as the formal request from the IU to discharge to the POTW and is required to be signed by a responsible corporate officer of the IU, as defined in 40 C.F.R. § 403.12(l) of the Pretreatment Regulations. In addition to the permit application, the POTW should evaluate, if available, historic IU effluent data, compliance reports, previous inspection reports, Safety Data Sheets, etc.

Throughout the permit drafting process, the POTW should carefully and thoroughly document each step in a permit rationale or statement of basis. A statement of basis is a document that provides a justification of the permit conditions and limits based on a characterization of the IU, its wastewater discharge, and the applicable Pretreatment Standards and Requirements. The statement of basis should include a description of the facility's production, process(es), wastewater generation/management, and discharge locations to adequately characterize the facility. The statement of basis should also identify the appropriate Federal, State, and Local Pretreatment Standards, based on the IU's characterization; and should provide justification for permit conditions and requirements, such as pollutants of concern, monitoring/reporting frequencies, representative sampling types, notification requirements, slug discharge control, operation and maintenance requirements, etc.

The statement of basis facilitates defending any challenges that the permit terms and conditions were developed arbitrarily or capriciously and provides the required documentation in the permit record of any relief from otherwise applicable requirements (i.e., pollutants not expected to be present, equivalent limits, decisions on general control mechanisms, decisions on Non-Significant Categorical Industrial User (NSCIU) classification, and decisions on reduced monitoring requirements). In addition, the statement of basis can serve as a resident document to preserve institutional knowledge and continuity for new or different staff members.

The EPA updated the IU Permitting Guidance Manual, 833-R-12-0001A in September 2012. This guidance manual supports the implementation of the permit conditions found in 40 C.F. R. § 403.8(f)(1)(iii)(B)(1-6) of the Pretreatment Regulations. The guidance manual is intended to provide both new and experienced permit writers with conceptual support and specific examples to strengthen their permit development expertise. The guidance manual references technical guidance developed by the EPA regarding local limits, enforcing Pretreatment Standards and Requirements, controlling hauled waste, information regarding compliance inspections and sampling, and BMPs.

The IU Permitting Guidance Manual can be found at the following website:

https://www.epa.gov/sites/production/files/2015-10/documents/industrial_user_permitting_manual_full.pdf

8.2 *The EPA's Evaluation of the City's Permitting Legal Authority*

EPA evaluated the City's municipal ordinance to ensure it provides an adequate framework to require permit coverage, to deny or condition non-domestic wastewater contributions and to establish adequate permit conditions.

- Section 8-10-4(B)(1) –establishes the requirement for SIUs to obtain a wastewater discharge permit.
- Section 8-10-4(F) – contains the permit application contents.
- Sections 8-10-3(B)-and 8-10-3(H) — establishes the authority for the City to deny or conditions wastewaters discharged to the public sewers.
- Section 8-10-4(J)(1) – establishes the permit conditions to prevent Passthrough or Interference and to protect the POTW, worker health and safety, biosolids and the receiving stream water quality.

8.3 *Permit Template Overview*

EPA evaluated the City's permit template to ensure the City is incorporating the required permit conditions found in 40 C.F.R. § 403.8(f)(1)(iii)(B)(1-6) of the Pretreatment required Regulations and Section 8-10-4(J)(1) of the City's municipal ordinance. Based on EPA evaluation, the SIU permit complies with the permit conditions found in the Pretreatment Regulations and incorporated in the City's municipal ordinance, with the following exceptions: (Note: The EPA's evaluation of the City's permit is included in the Westminster Permit Template Review.docx and embedded in the Permit Boilerplate-EPA.doc, attached to the audit report.)

- **Pollutants Not Present** [40 C.F.R. § 403.12(e)] – the process for seeking a waiver for pollutants not present incorporated in 8-10-6(D)(2) of the municipal ordinance is not established in the permit template. In addition, the pollutants not present certification statement incorporated in 8-10-6(N)(3) of the municipal ordinance is not established in the permit template.
- **Upset Provisions** [40 C.F.R. § 403.12(e)] – the upset affirmative defense provisions and notification requirements incorporated in 8-10-13(a) of the municipal ordinance are not established in the permit template.

8.4 *Specific Permit Record Findings*

The City has identified one IU in the service area that is determined to be a categorical industrial user (CIU) and that has been issued a permit under the Pretreatment program. In addition, the City has identified two IUs subject to categorical Pretreatment Standards but not discharging regulated wastewater, these IUs have been issued zero discharge permits. The CIU, Ball Aerospace and Technologies, Inc. is subject to the Metal Finishing Pretreatment Standards for New Sources found in 40 CFR 433.17 and the City's local limits. Findings from the EPA's review of the Pretreatment records, including the facility inspection report, statement of basis, permit, compliance evaluation, and enforcement records are listed below:

8.4.1 Permit records Overview

1. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(ii) require the City to “Identify the character and volume of pollutants contributed to the POTW.” The SIU inspection reports include minimal descriptions of the facility’s unit operations. Facility inspection report need to include more detail regarding the SIU’s chemical storage/handling/transfer, process/unit operations, wastestream generation from these unit operations, wastestream management or wastewater treatment, sampling procedures to provide a current characterization, including an evaluation of slug discharge potential and process or treatment plant changes. This information is important to capture current conditions and determine if control such as an SIU permit or BMPs are necessary or if modifications to existing control mechanism or control plans such as slug discharge control plans or spill plans are necessary.
 - a. During the audit, EPA provided compliance assistance and training on conducting facility inspections and generating inspections reports that gather information to capture current conditions at the facility that may impact categorical determinations, permit conditions, or control documents such as the slug discharge control plan.
2. Fact Sheets/Permit Rationales: The City should develop permit rationales that adequately capture current conditions at the SIUs, identifies applicable Pretreatment Standards and justifies permit conditions, including the most stringent permit limits based on an evaluation of all Pretreatment Standards, representative monitoring type/frequencies based on the SIU’s wastewater discharge and recent compliance history, slug discharge/spill potential, reporting frequency and reportable data, TOMP requirement, requirement for slug discharge control plan based on current conditions.
3. The Pretreatment records are complete and appear to be very well organized and current. The City uses an SMR compliance evaluation sheets to track due dates for the self-monitoring reports and determine compliance with the permit conditions. This SMR compliance evaluation sheets are a useful tool for the City to ensure consistent compliance evaluation.

8.4.2 Ball Aerospace and Technologies Corporation

1. The facility inspection reports generated for Ball Aerospace need to include more detail, as described in §8.4.1(1) of this audit report.
2. The Ball Aerospace fact sheet needs to include process line start dates to determine if Pretreatment Standards for New Sources are applicable. As described in §8.4.1(3) of this audit report, EPA recommends the City develop a fact sheet for Ball Aerospace that describes current conditions at the facility and adequately addresses appropriate permit conditions. If changes occur at the facility, the fact sheet should be modified, and a determination be made if permit conditions need to be amended.
3. Ball Aerospace was provided a monitoring waiver for cyanide, but it does not appear that the SIU meet the requirements for the Pollutants not Present

provisions established in the Pretreatment Regulations at 40 C.F.R. § 403.12(e)(2)(v) and incorporated in the City's municipal ordinance at §8-10-6(D)(2).

- a. The SIU is required to provide the following:
 - i. Sampling data and other technical factors demonstrating that the pollutant is not present in the discharge
 - ii. Data from at least one sampling of the facility's process wastewater prior to any treatment. EPA will provide the optional sampling waiver fact sheet.
 - b. In addition, the Ball Aerospace permit does not contain the required certification for the pollutants not present provision, as incorporated in §8-6-10(N)(3) of the municipal ordinance.
4. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vi) require a POTW to evaluate whether each such Significant Industrial User needs a plan or other action to control Slug Discharges. A Slug Discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or Permit conditions.
- a. Based on EPA's review of the Pretreatment records, Ball Aerospace is not required to develop a slug discharge control plan that meets the requirements of the Pretreatment Regulations. The City states in the 2022 inspection report that the spill plan and TOMP are sufficient to protect the sanitary sewer from any slug discharges.
 - b. Based on EPA's observations at the facility, the current spill plan does not address specific slug discharge potential at the SIU which include discharges that are non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharges from the manufacturing operations. For example, the spill plan does not address management of spent chemical solutions in the printed circuit boards and tetra-etch labs.
 - c. The SIU's spill plan will need to be updated to address slug discharge control provisions, as required in the Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vi) and incorporated in the City's municipal ordinance at §8-10-3(C). Attached to this audit report is Fact Sheet 8.0 - Slug Control Plans.pdf and 1991-Feb - Control of Slug Loadings to POTWs Guidance Manual.pdf as guidance to the City regarding development of slug discharge control plans.
5. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(1)(iii)(B)(3) require a permit to consist of effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards, categorical Pretreatment Standards, local limits, and State and local law. The most stringent of these applicable limits need to be established as permit limits.
- a. The Ball Aerospace permit does not incorporate the most stringent limits for Cd, Cu, and Ni between the applicable Metal Finishing PSNS and Local

limits. The most stringent limit for Cd is the local limit of 0.10 mg/L, Cu local limit of 2.69 mg/L, and Ni local limit of 1.82 mg/L. The City needs to modify the permit to ensure it complies with the Pretreatment Regulations.

6. The City should justify whether As, Mo, and Se are pollutants of concern at Ball Aerospace and why local limits established by the City for these pollutants are not incorporated in the Ball Aerospace permit.
7. The EPA conducted a facility inspection of Ball Aerospace on March 15, 2023 and has the following observations: (Note: the Ball Aerospace inspection report was submitted to the facility on March 29, 2023 and is attached to this report)
 - a. The sampling of the batch discharge tanks in the wastewater treatment system should be evaluated to ensure the sampling procedure is representative of the discharge for the production day. The grab sample is typically representative of discharges that last up to 2 hours.
 - b. The facility should develop a sampling protocol/procedure for compliance monitoring to ensure consistency.
 - c. Based on information gathered during the facility inspection, there appears to be potential for slug discharges to occur from the process lines that should be addressed in a slug discharge control plan. For example, the management of the spent chemical solutions generated in the printed circuit board and the tetra-etch labs need to be addressed to minimize or eliminate the potential for errors to occur during management of these wastestreams that result in slug discharges.

8.4.3 Ball Technical Center

1. The Ball Technical Center permit issued on May 2, 2018 states the following: “This permit prohibits the discharge of any wastewater from the facility’s metal finishing line to the City of Westminster wastewater treatment system and requires compliance with other conditions so set forth herein.” The permit allows wastewater from the neck rinsing process in the can-making operation to be discharged to the POTW.
 - a. Based on the EPA’s review of the Pretreatment records, it appears that this facility is a can-making facility and not a metal finisher. The permit needs to be modified to accurately describe the zero-discharge unit operations.
 - b. The fact sheet for the Ball Technical Center permit states that the can-making facility is for product testing and development only, the federal categorical Coil Coating-Canmaking subcategory regulations (40 CFR Part 465, Subpart D) do not apply.
 - c. The Canmaking Categorical Pretreatment Standards at 40 CFR 465, Subpart D do not specifically exempt research and development facilities. The exemption from categorical Pretreatment Standards is not based on commercial sales but on the unit operations, production methods, materials or other factors being materially different than those the EPA evaluated in developing the standards. In these situations, the wastewater quality or quantity may differ from the wastewater the EPA evaluated as the basis for the categorical Pretreatment standards and the facility would be exempt

from the applicable Rule. The determination for applicability of the categorical Pretreatment Standards to research and development facilities was clarified by EPA in a 1995 letter to Arias Research Associates, Inc. The 1995 letter and the 1983 Canmaking development document are attached to the audit report.

- i. As described in §8.4.1(3) of this audit report, EPA recommends the City develop a fact sheet for Ball Technical that describes current conditions at the facility and adequately addresses appropriate permit conditions. The fact sheet should provide a determination if the facility is performing operations that fall within the applicability of the Canmaking Categorical Pretreatment Standards and therefore if the can-making Pretreatment Standards are applicable to the discharge of the neck rinsing unit operation.
2. The facility inspection reports generated for Ball Technical need to include more detail, as described in §8.4.1(1) of this audit report. A complete and current facility inspection is necessary to characterize this facility and determine appropriate zero-discharge conditions.
3. The facility reports annually, as required by the permit and certifies that the facility has not discharged any wastewater prohibited by the zero-discharge permit. The EPA recommends the City ensure the facility report on flows from the neck rinsing operation.

8.4.4 Creation Tech

1. The facility inspection reports generated for Creation Tech need to include more detail, as described in §8.4.1(1) of this audit report. A complete and current facility inspection is necessary to characterize this facility and determine appropriate zero-discharge conditions. For example, the 2022 inspection report does not contain business contact information.
2. As described in §8.4.1(3) of this audit report, EPA recommends the City develop a fact sheet for Creation Tech that describes current conditions at the facility and adequately addresses appropriate permit conditions. If changes occur at the facility, the fact sheet should be modified, and a determination be made if permit conditions need to be amended.

9.0 Significant Industrial User Facility Inspections

9.1 Regulatory Background

The General Pretreatment Regulations at 40 C.F.R. § 403.8(f)(1)(v) states that the POTW shall have the legal authority to:

“Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by Industrial Users. Representatives of the POTW shall be authorized to enter any premises of any Industrial User in which a Discharge source or treatment system is located or in which records are required to be kept under §403.12(o) to assure compliance with Pretreatment Standards.

Such authority shall be at least as extensive as the authority provided under section 308 of the Act;”

40 C.F.R. § 403.8(f)(2)(v) of the Pretreatment Regulations requires the POTW to inspect its SIUs at least once per year. 40 C.F.R. § 403.8(f)(2)(ii) require the City to “Identify the character and volume of pollutants contributed to the POTW.” 40 C.F.R. § 403.8(f)(2)(vii) establishes the standard of evidence collection during sampling or inspection activities:

“Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices required under §403.12, or indicated by analysis, inspection, and surveillance activities described in paragraph (f)(2)(v) of this section. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions.”

Typically, an inspector is the only representative from the POTW that regularly appears at the IU’s facility and significantly represents the POTW’s role as a responsible public agency, observing the actions and evaluating the performance of the regulated industry.

9.2 Right of Entry

The City has established the authority for right of entry in §8-10-7(A) of the municipal ordinance:

“(A) Right of Entry: Inspection and Sampling: The City Manager shall have the right to enter the premises of any user to determine whether the user is complying with all requirements of this chapter and any wastewater discharge permit or order issued hereunder. Users shall allow the City Manager ready access to all parts of the premises for the purposes of inspection, whether announced or unannounced, sampling, records examination and copying, and the performance of any additional duties.

(1) Where a user has security measures in force that require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the City Manager will be permitted to enter without delay for the purposes of performing specific responsibilities.

(2) The City Manager shall have the right to set up on the user's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.

(3) The City Manager may require the user to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the user at its own expense. All devices used to measure wastewater flow and quality shall be calibrated to ensure their accuracy. The City Manager may specify the frequency of required calibrations.

(4) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the City Manager and shall not be replaced. The costs of clearing such access

shall be borne by the user.

(5) Delays in allowing the City Manager access to the user's premises shall be a violation of this chapter.

(B) Search Warrants: If the City Manager has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the City designed to verify compliance with this chapter or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the City Manager may seek issuance of a search warrant from the municipal court.”

The municipal ordinance adequately establishes the right of entry authority for the City, as required in 40 C.F.R. § 403.8(f)(1)(v) of the Pretreatment Regulations.

9.3 Facility Inspection Records – Background

40 C.F.R. § 403.8(f)(2)(vii) of the Pretreatment Regulations requires the POTW to meet the criterion for evidence collection “with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions.” This is performed during facility inspections by adequate documentation in the inspection report of the observations, surveillance, inspections, sampling performed, and analysis gathered during facility inspections. A complete and well-developed inspection report that provides a current characterization of the facility will benefit the POTW’s Pretreatment program for programmatic decisions such as categorical determinations, slug discharge/spill potential, changes at the facility that may affect the current permit conditions, sampling frequencies, etc.

As discussed in §2.11.2 of the *Industrial User Inspection and Sampling Manual for POTWs*, EPA-831B17001, January 2017, the inspection report generated from the facility inspections should accomplish the following three objectives: 1) organize and coordinate all information in a comprehensive, usable manner for use by the POTW’s compliance personnel; 2) identify areas that may require follow-up activity; and 3) provide significant background information on the facility that can be reviewed prior to conducting subsequent inspections at the facility. The quality of this documentation will, to a large degree, determine how effective these follow-up activities will be at the facility. The information in the inspection report must be presented in a clear, concise, and well-organized manner.

The Industrial User Inspection and Sampling Manual for POTWs describes the information necessary to characterize a facility in §§2.10.3 and 2.12. The manual also discusses the records to review at a facility to help determine the facility’s compliance in §2.10.8. It is important for Pretreatment programs to capture the following information during facility inspections to characterize the facility, and document facility changes to ensure the SIU’s permit addresses current conditions:

- Chemical storage areas, including potential spill concerns during chemical receiving and transfer/handling.
- Process tanks or processing areas – detailed descriptions of the process including

- tank contents, capacities.
- Wastestream generation from the process areas and disposal/discharge practices – frequency of discharge rinse water tanks, whether spent chemical solutions tanks discharged to the POTW or hauled off site, proximity to floor/trench drains, slug discharge control and spill containment measures, etc.
- Wastestream management (treatment, recycling, hauling off site, evaporation, etc.).
- Waste treatment system.
- Wastestream or hazardous waste storage areas, including potential spill concerns.
- Discharge monitoring points.
 - Evaluation of the sampling/monitoring protocols to determine if these are appropriate to provide representative data of the wastewaters regulated by the permit.

A facility inspection of a permitted SIU should include a review of relevant records used to support compliance with the permit conditions and that may not be reported in the self-monitoring compliance reports such as pH and continuous flow monitoring records, tank change out logs, analytical reports, waste manifests, operation and maintenance logs, etc. A detailed facility inspection report with descriptions of tank contents, capacities, generated wastestreams, plumbing, and management of the wastestreams will benefit the POTW to establish the baseline for the year and to determine if any changes will impact the permit conditions/limits or associated documents such as the slug discharge control plan, spill plan, treatment system operation manual or sampling protocol.

During the Pretreatment audit, the EPA discussed inspection procedures with the City, including EPA's procedures. The EPA performs facility inspections by gathering verbal information in an opening conference, then performing a walkthrough to visually confirm the information gathered during the opening interview. The EPA structures its information gathering by following the raw materials/chemical supply through the unit operations and ultimately to the finished product or service. A closing conference is performed to gather follow-up information, review records, and to provide preliminary conclusions to the facility.

9.4 Evaluation of the City's Inspection Reports/Records

The EPA evaluated the inspection reports and other records related to the facility inspection for the SIU annual facility inspection. As discussed in § 8.4.1(1) of this audit report, the SIU inspection reports provide minimal characterization of the facility and needs to be improved to include information regarding the facility's chemical storage/handling, process, (sources, flow volume and types of discharges) wastewater generation, slug discharge potential, waste treatment methods, sampling procedures, and review of records in the annual inspection report. The inspection reports should also include digital photos to further support information gathered during the inspection.

9.5 Notification of Applicable Pretreatment Standards

The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(iii) require the City to notify IUs of applicable Pretreatment Standards and Requirements. Based on the EPA's review of the

inspection records, it appears that the City is providing notification to the SIUs regarding the applicable Pretreatment Standards and applicable corrective action items as a follow-up to the facility inspections.

9.6 Facility Inspections

During the audit, EPA and the City inspected Ball Aerospace on March 15, 2023. The inspection report was submitted to the facility on March 29, 2023 and is included in this audit report as an enclosure. Areas of concern during the facility inspection is provided in the facility inspection report.

10.0 Control Authority Compliance Monitoring

10.1 Regulatory Background

40 C.F.R. § 403.8(f)(1)(v) of the Pretreatment Regulations requires the POTW to have the legal authority to “Carry out all inspection, surveillance, and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and requirements.” Further, 40 C.F.R. § 403.8(f)(2)(v) require a POTW to “Randomly sample and analyze the effluent from Industrial Users and conduct surveillance activities in order to identify, independent of information supplied by Industrial Users, occasional and continuing noncompliance with Pretreatment Standards. Inspect and sample the effluent from each Significant Industrial User at least once a year.”

The standard to which POTWs are held for purposes of evidence collection during a Control Authority monitoring event is outlined in 40 C.F.R. § 403.8(f)(2)(vii): “Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence which is admissible in enforcement proceedings or judicial actions.”

In addition, a POTW is required to ensure the Control Authority monitoring events are based on representative conditions at the monitoring point, to ensure that these sampling events are legally defensible and of the same quality as required for self-monitoring events. 40 C.F.R. § 403.12(g)(3) of the Pretreatment Regulations require, “The reports ...must be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data are representative of conditions occurring during the reporting period.”

An enforceable sample must be representative of the nature and character of the discharges during the reporting period and is required to be representative in composition to that in the larger volume of wastewater being discharged. A POTW is required to implement a Control Authority monitoring program that meets the compliance monitoring requirements of the Pretreatment Regulations, provides representative data for compliance determinations, and that would be legally defensible in court, if such an enforcement action is taken by the POTW. In addition, representative and legally defensible data helps the POTW support other program objectives such as local limits evaluation, and permit development or reissuance.

10.2 Sampling Plan and Protocols

As required in 40 C.F.R. § 403.8(f)(2), the POTW shall “develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program.” The development and implementation of a sampling plan or procedures ensures the POTW is appropriately and consistently performing sampling or monitoring events, as well as providing enforceable data that is representative of the discharge conditions at the facility. The sampling plan should include the following:

- purpose and objective of the sampling program,
- specific sampling protocols at each facility sampling location to ensure representative sampling, and
- appropriate QA/QC procedures to ensure legally defensible data.

10.2.1 Site-Specific Sampling Protocols

The sampling protocols must include specific procedures used at each facility to ensure adequate and representative sampling protocols. The development of the sampling protocols will ensure the sampling events are performed in accordance with appropriate standards and procedures and produce quality data that is legally defensible.

At a minimum, the specific sampling protocols at each sampling location should include the following:

- Sampling locations – should include all monitoring points included in the SIU’s permit, including the use of digital photos for each monitoring point.
- Type of sample – the POTW is required to ensure the sampling event is representative of the SIU’s discharge, as required by 40 C.F.R. §403.12(g)(3). The type of sample will be dependent on the parameter to be sampled and discharge characteristics. The type of sample could include specifications for use of automatic samplers (including programming to provide representative sampling) or manual sampling techniques.
- Type of Flow Measurement – if applicable
- Parameters for Analysis – based on the SIU’s permit
- Sample Volume
- Type of Sample Containers
- Sample Preservation Techniques
- Sample Identification and Chain of Custody Procedures
- QA/QC Procedures

10.2.2 Quality Assurance/Quality Control (QA/QC)

QA and QC are tools which are necessary in a sampling program to maintain a level of quality, such as legally defensible data, in the measurement, documentation, and interpretation of sampling data. The QA/QC procedures are used to obtain data that are both precise (degree of closeness between two or more samples) and accurate (degree of closeness between the results obtained from the sample analysis and the true value that

should have been obtained). Proper implementation of QA/QC procedures will result in an increase in the POTW's confidence in the validity of the reported analytical data.

The QA/QC procedures used to ensure data collected is valid and legally defensible include, but are not limited to the following:

- equipment maintenance/calibration,
- proper sampling bottles, proper sampling techniques that are adequate and representative of the discharge from the facility,
- field blanks, equipment blanks, method blanks, standards, blind duplicates, and
- ensuring sampling personnel are adequately trained.

10.3 The EPA Evaluation of the City's Control Authority Monitoring

10.3.1 SOPs

The City developed a sampling plan that identifies the pollutants of concern to sample at the SIUs. The sampling SOP needs to be updated to include SIU-specific sampling protocols that describes sampling techniques/procedures, equipment, and an identification of the sampling location to ensure consistent sampling that is representative for the production day. In addition, the sampling plan needs to be updated to incorporate QA/QC samples such as equipment blanks, trip blanks, sample duplicates, matrix spikes, control standards to ensure the sampling and analytical techniques are in control and compliance with 40 C.F.R. 136. The development of an adequate sampling plan will ensure consistency in sampling and result in enforceable data.

10.3.2 City's Control Authority Monitoring

Based on the EPA's review of the Pretreatment records, the City samples the permitted SIUs at least once per year and with a few exceptions identified in Section 8.0, meets the Control Authority monitoring frequency required in 40 C.F.R. § 403.8(f)(2)(v).

11.0 Enforcement

11.1 Regulatory Background

The EPA establishes the regulatory requirement to develop and implement an Enforcement Response Plan (ERP) in 40 C.F.R. § 403.8(f)(5)(i-iv) of the Pretreatment Regulations. The regulations state:

“The POTW shall develop and implement an enforcement response plan. This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance. The plan shall, at a minimum:

- (i) Describe how the POTW will investigate instances of noncompliance.
- (ii) Describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place.
- (iii) Identify (by title) the official(s) responsible for each type of response.

- (iv) Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards.”

The development and implementation of an ERP is an important component of an effective Pretreatment Program. Although a successful Pretreatment program should provide outreach to facilities in the service area regarding the applicability of the Pretreatment Standards and compliance with these standards, in many situations, enforcement is the necessary driving force that makes the Pretreatment program functional.

The ERP establishes a framework for POTWs to formalize procedures for investigating and responding to instances of IU noncompliance and to ensure that POTWs enforce against IUs objectively, consistently, and equitably. A well-developed ERP should help the POTW decide what resources are needed to enforce the Pretreatment Standards/Requirements and assist in dealing with IU violations. In addition, the ERP will provide notice to the IUs regarding the POTW's responsibility to respond to violations of Pretreatment Standards/Requirements.

11.2 Enforcement Legal Authority

The EPA evaluated the City's enforcement authority and remedies found in its municipal ordinance.

1. Civil/Criminal penalties established in §8-10-11(B) and (C)
2. Injunctive relief provisions established in §8-10-11(A)
3. Authority to enforce against falsification/tampering established in §8-10-11(C)(4)
4. Notice of violations authority established in §8-10-10(B)
5. Administrative orders authority established in §8-10-10(D)
6. Cease and Desist Order authority established in §8-10-10(E)
7. Administrative penalty authority established in §8-10-10(F)
8. Show cause hearing provisions in §8-10-10(C)
9. Suspensions of service provisions in §8-10-10(G)
10. Permit termination provisions established in §8-10-4(M)
11. Publication of IUs in significant noncompliance in §8-10-9

11.3 Enforcement Response Plan

The City submitted its ERP to the EPA for review, prior to the audit. Based on the EPA's review, the ERP needs to be updated to meet the requirements established in the Pretreatment regulations at 40 C.F.R. § 403.8(f)(5)(i-iv) and incorporated in the municipal ordinance: (Note: the EPA's review of the City ERP and the EPA's embedded comments in the City's ERP are included as enclosures to the audit report).

Describe how the POTW will investigate instances of noncompliance:

- Provide a summary of the IU Inventory/characterization and SNC procedures

Enforcement Response Guide:

The following anticipated types of violations are either absent or need to be modified:

- Failure to notify (24-hour, slug/potential problems, changed discharges, hazardous waste, upset, bypass)
- Tampering with monitoring equipment/manhole
- Recordkeeping
- Dilution

The ERG Tables are missing enforcement remedies for violations of Pretreatment Standards that result in SNC:

- Any other violation of a Pretreatment Standard or Requirement as defined by 40 CFR 403.3(l) that the POTW determines has caused Interference or Pass Through (including endangering the health of POTW personnel or the general public) (**SNC Criteria # C**)
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority (**SNC Criteria # D**)
- Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance (**SNC Criteria # E**)
- Reporting Violations that are over 30 days and/or result in SNC (**SNC Criteria #F**)
- Failure to accurately report noncompliance (**SNC Criteria # G**)
- Any other violation or group of violations, which may include a violation of Best Management Practices, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment program (**SNC Criteria # H**)

11.4 Compliance Evaluation

Based on EPA's review described in §8.4.1(4) of this audit report, it appears that the City is consistently evaluating compliance in the self-monitoring reports or notices of violation.

11.5 SNC Calculations and Public Participation

40 C.F.R. § 403.8(f)(2)(viii) of the Pretreatment Regulations require a POTW to comply with the public participation requirements in the enforcement of National Pretreatment Standards. These procedures shall include a provision for at least annual public notification in a newspaper of general circulation, that provides meaningful public notice within the jurisdictions served by the POTW, of IUs which, at any time during the previous 12 months, were in SNC with applicable Pretreatment requirements. The SNC determinations are both calculation of numeric Pretreatment Standards, as listed in 40 C.F.R. § 403.8(f)(2)(viii)(A-D) and determination of violations of the narrative Pretreatment Standards, as listed in 40 C.F.R. § 403.8(f)(2)(viii)(E-H).

Based on EPA's review of the Pretreatment records, the City is calculating numeric SNC and determining narrative SNC as necessary.

12.0 Trucked and Hauled Waste

12.1 Regulatory Background

In addition to receiving wastes through the collection system, many POTWs accept trucked and hauled wastes. As stated in 40 C.F.R. § 403.1(b)(1), pollutants from nondomestic sources that are transported to the POTW by truck or rail are also subject to the Pretreatment Regulations. They may also be subject to categorical Pretreatment Standards. Therefore, hauled wastes from CIUs or hauled waste that otherwise qualifies the discharger as an IU must be regulated in accordance with the requirements of the Pretreatment Regulations, including any applicable requirements for permitting and inspecting the generating facility. Hauled wastes, like wastes received through the collection system, have the potential to negatively affect the POTW, making regulatory control of the wastes necessary.

Most wastewaters hauled or trucked to a POTW are domestic septage, typically from homes outside the POTW's service area, but compatible in nature. Because such discharges are predominantly compatible wastes, treatment at a POTW is the most appropriate disposal method. The biosolids regulations at 40 C.F.R. § 503.9(f) define domestic septage as the liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar system that holds only domestic sewage. Domestic septage does not include liquid or solid material removed from any system that receives either commercial wastewater or industrial wastewater, and it does not include grease removed from a restaurant grease trap.

The POTW cannot know for certain the nature and concentration of the trucked wastes and the impact on the POTW without implementing some type of control or surveillance program. Unlike discharges from IUs directly connected to the POTW, the makeup of a load of hauled waste is virtually unknown without some type of monitoring, be it visual or analytical. Even compatible loads of domestic septage can cause problems for a POTW due to high strength or discharge rate. Domestic septage can be partially digested, higher in metals concentrations than normal domestic wastes, or contain small amounts of household contaminants (e.g., cleaners). Similarly, disinfectants used in portable toilets have the potential to affect POTW operations.

Receipt of hauled hazardous waste (as defined in Resource Conservation and Recovery Act (RCRA)) might not only affect POTW operations but also could subject the POTW to additional reporting requirements. The Domestic Sewage Exclusion, specified in 40 C.F.R. § 261.4(a)(1)(ii), provides that hazardous wastes mixed with domestic sewage and under control of the Pretreatment program are exempt from the RCRA waste regulations. However, hazardous wastes received by truck or rail (or dedicated pipe) at the treatment plant are not exempt from the regulations. POTWs that accept hazardous wastes from those sources are subject to *permit by rule* status under RCRA [40 C.F.R. § 270.60(c)] provided that certain requirements are met. The POTW must be in compliance with all its NPDES permit requirements and the waste must comply with all federal, state, and local

pretreatment requirements.

12.2 Legal Authority

The City has adopted the Federal specific discharge prohibitions for trucked and hauled wastes found in 40 C.F.R. § 403.5(b)(8) of the Pretreatment Regulations. This is incorporated by the City in §8-10-2(A)(2)(o) of the municipal ordinance:

“Trucked or hauled pollutants, except at discharge points designated by the City Manager and in accordance with subsection 8-10-3(D), W.M.C.”

Section 8-10-3(D) establishes the acceptance of RV waste and specifically prohibits other types of hauled waste:

“(1) Domestic wastewater from privately owned recreational vehicles may be introduced into the POTW only at locations, and at times, designated by the City Manager.
(2) The discharge into the POTW of hauled septic tank waste, hauled commercial waste or hauled industrial waste is prohibited.”

12.3 Trucked and Hauled Waste Disposal Location and Control Mechanisms

According to information gathered during the audit, The City does not accept trucked and hauled waste and appears to have adequate control of the dedicated RV dump station at the POTW.

13.0 Best Management Practices – Sector Control Programs

13.1 Regulatory Background

BMPs are defined in 40 C.F.R. § 403.3(e) as “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 C.F.R. § 403.5(a)(1) [General Prohibitions] and (b) [Specific Prohibitions]. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.”

40 C.F.R. § 403.5(c)(4) states, “POTWs may develop Best Management Practices (BMPs) to implement paragraphs (c)(1) [develop limits to implement the general/specific prohibitions] and (c)(2) [develop and enforce specific effluent limits for industrial users that contribute pollutants that may result in Interference and Pass-Through] of this section. Such BMPs shall be considered local limits and Pretreatment Standards for the purposes of this part and section 307(d) of the Act.” The regulations establish that BMPs are enforceable Pretreatment Standards.

13.2 Authority in Rules and Regulations

The City established the authority to implement BMPs in its Rules and Regulations as follows:

- BMP definition in §8-10-1(D).
- BMPs are established as Pretreatment Standards in §8-10-4(D)(5)
- BMPs established as a permit condition in §8-10-4(J)(1)(c).
- BMP recordkeeping requirements in §8-10-6(M).
- BMPs established as an SNC criterion in §8-10-1(D)-SNC Definition.

13.3 Dental Amalgam BMP Sector Control Program

The Dental Amalgam Rule, found in 40 C.F.R. Part 441, was promulgated as a final rule with new source dental facilities required to be in compliance with the Pretreatment Standards as of July 14, 2017, and existing source dental facilities required to be in compliance as of June 14, 2020. Compliance with the rule requires the installation of an ISO1143 amalgam separator or equivalent device, and compliance with the following two BMPs:

- Prohibition on the use of oxidizing or chlorine-containing line cleaners; and
- Ensuring all amalgam process wastewater including chair-side traps, screens, vacuum pump filters, dental tools, cuspidors or collection devices are treated through the amalgam separator.

In addition, the new and existing dental facilities are required in 40 C.F.R. § 441.50 of the Dental Amalgam Rule to provide a report that characterizes the dental facility and certifies compliance. The new source dental facilities are required to be in compliance upon discharge and submit a one-time compliance report within 90 days of startup.

The City has identified 25 dental facilities in its industrial waste survey and has received one-time compliance reports within the deadline required by the Rule. The City adequately tracks the dentists subject to the Rule and the spreadsheet provides an excellent snapshot of the dental offices, their applicability/compliance status, submittal of 1-time compliance reports and characterization.

Based on EPA's evaluation of the dental offices one-time compliance reports, it appears that the following dental offices incorrectly reported in their one-time compliance report that they send their amalgam waste to CWTs. The City needs to follow up with these facilities to ensure the information is correct: (Note: *the reports are identified by the City issued report identifiers*)

- Willow Run Dental P.C. (ES-25)
- Monarch Family Dental (ES-31)
- Standley Shores Dental Group (ES-37)