UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8ENF-W-NW

SENT VIA EMAIL
DIGITAL READ RECEIPT REQUESTED

Paul Trombino, Public Works Director
City of Greeley
paul.trombino@greeleygov.com

Re: MS4 Self-Assessment Report for City of Greeley, CDPS Permit No. COR090033

Dear Mr. Trombino:

On March 14, 2022, the U.S. Environmental Protection Agency issued an Information Request to the City of Greeley (City) to complete a Municipal Separate Storm Sewer System (MS4) Self-Assessment (Assessment) to evaluate compliance with the facility's Colorado Discharge Permit System permit for small MS4s. The Assessment was conducted under the authority of Section 308 of the Clean Water Act (Act). Enclosed is a report of the Assessment.

Assessment findings are summarized within the enclosed report in a table titled "Findings, Corrective Actions and Recommendations." Within **thirty (30) days** of receipt of this report, please provide the EPA with a summary of corrective actions taken to address each of the findings identified in the report and any information that may change the findings or content of the report. This summary should be sent to:

Stephanie Meyers	Randi Johnson-Hufford
meyers.stephanie@epa.gov	randi.johnson-hufford@state.co.us

Please contact me at 303-312-6938 or meyers.stephanie@epa.gov if you have any questions regarding this letter or the enclosed report.

Sincerely,

STEPHANIE MEYERS

Digitally signed by STEPHANIE MEYERS
Date: 2022.05.27 07:49:48 -06'00'

Stephanie Meyers
NPDES and Wetlands Enforcement Section
Enforcement and Compliance Assurance Division

cc: Brian Hathaway, Water Quality and Regulatory Compliance Manager (via email)
Lauren Hillmer, Stormwater Quality Administrator, City of Greeley (via email)
Randi Johnson-Hufford, Unit Manager, CDPHE (via email)
Maura McGovern, Unit Manager, CDPHE (via email)
Mary Welch, Environmental Protection Specialist, CDPHE (via email)

U.S. EPA Region 8 NPDES MS4 Self-Assessment Report

National Database Information	
Name of Facility: **City of Greeley**	NPDES ID Number: **COR090033**
Desk Audit Date(s): **04/18/2022 – 05/11/2022**	Evaluation Type: **MS4 Self-Assessment**
Type of Facility: **Municipal Separate Storm Sewer System, Minor**	SIC Code: **9511**
Permit Issuing Authority: **Colorado Department of Public Health and Environment (CDPHE)**	Name of receiving water(s): **Cache la Poudre River – South Platte River**
Permit Effective Date: **July 1, 2016**	Permit Expiration Date: **June 30, 2021 (Administratively Continued)**
Latitude: **40.422**	Longitude: **-104.697**
Evaluator and affiliation: **Stephanie Meyers (EPA Region 8)**	

Facility Location Information	
Site/Facility Location: **City of Greeley** **1001 11th Avenue** **Greeley, CO 80631**	Mailing Addresses: **1001 11th Avenue** **Greeley, CO 80631**

Contact Information	
	Name(s)/Title
Facility Contact(s):	**Brian Hathaway, Water Quality and Regulatory Compliance Manager**
	Lauren Hillmer, Stormwater Quality Administrator

Assessment Review and Signature		
Drafter Name	Date	Telephone/Email
Stephanie Meyers	**5/17/2022**	**303-312-6938** **meyers.stephanie@epa.gov**
NPDES & Wetlands Enforcement Section Supervisor Name/Signature/Date		Telephone/Email
Boeglin, Michael Digitally signed by Boeglin, Michael Date: 2022.05.27 07:44:09 -06'00'		**303-312-6250** **boeglin.michael@epa.gov**

Evaluation

Introduction and Background

On March 14, 2022, a Clean Water Act Section 308 Information Request Letter was sent to the City of Greeley (City) requesting the City to complete an electronic Municipal Separate Storm Sewer System (MS4) Self-Assessment (Assessment) to evaluate compliance with the City's MS4 permit and provide information about its stormwater program.

The City of Greeley is classified as a small MS4 with a population of approximately 107,445. The City is permitted under CDPHE's Colorado Discharge Permit System general permit for stormwater discharges associated with small MS4s. The City discharges to the South Platte River and Cache la Poudre River. The City has two Intergovernmental Agreements (IGAs) in place with Aims Community College and the University of Northern Colorado where the City has oversight responsibilities for each school's MS4 program.

The City's MS4 program is overseen by the Stormwater Quality Unit (SWQ), which is comprised of four full-time equivalent positions. These positions include the Water Quality and Regulatory Compliance Manager, Stormwater Quality Administrator, and two Environmental Technicians. The Water Quality and Regulatory Compliance Manager oversees the implementation of the City's MS4 program and manages SWQ Unit staff. The Stormwater Quality Administrator is the direct supervisor of the Environmental Technicians and oversees individual program elements. The Environmental Technicians are responsible for field related operations and inspections. The City also has a Stormwater Division with ten staff members in the Streets Division who maintain stormwater features, assist with illicit discharge clean-up efforts, and conduct regular street sweeping. The SWQ Unit has also assigned a Runoff Control Plan Administrator for each department, and these individuals are responsible for oversight of pollution prevention and good housekeeping at their respective municipal facilities.

MS4 Self-Assessment

The MS4 Self-Assessment is an online tool that contains a series of questions about each stormwater program area municipalities are required to implement, such as public education and outreach, illicit discharge detection and elimination, construction sites, post-construction stormwater management in new development and redevelopment, and pollution prevent/good housekeeping. The purpose of the Assessment is to evaluate an MS4's implementation of their stormwater program. The Assessment includes a certification statement prior to submittal, in which the MS4 certifies that all information submitted to EPA is true, accurate, and complete.

The City was given 30 days to complete the Assessment, which was submitted to EPA on April 8, 2022. EPA conducted its review of the completed Assessment and associated attachments from April 18, 2022 to May 11, 2022. On May 11, 2022, EPA held a call with the City and CDPHE to discuss questions and preliminary findings. Findings, Corrective Actions, and Recommendations pursuant to the Assessment are discussed in the section below.

Findings, Corrective Actions and Recommendations

Finding #1: Enforcement escalation procedures were not followed by the City when chronic violations occurred at active construction sites.

After review of construction site inspection reports from calendar year 2021, the October 14, 2021, inspection report for Mountain View Condos noted three violations that had each repeatedly received four warnings. The City's Standard Operating Procedures (SOPs) for Construction Site and Post-Construction Inspection Requirements and Enforcement states, "Deficiencies that are not rectified after three consecutive cycles will proceed with elevated enforcement. An NOV shall be issued after the third non-compliant inspection." In this instance, enforcement escalation SOPs were not followed.

Permit requirement:

Part I.E.3.a.vii of the permit states, "Implement appropriate enforcement procedures and actions to meet the requirements of Part I.E.3.

(A) The permittee must have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements.
(B) The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. Enforcement procedures must include informal, formal, and judicial enforcement responses."

Corrective Action:

Ensure that enforcement escalation procedures are followed as described in the City's SOPs for Construction Site and Post-Construction Inspection Requirements and Enforcement. Provide the EPA and CDPHE with a description of the corrective actions taken to address this finding.

Finding #2: The City was not properly implementing a Pollution Prevention/Good Housekeeping program to prevent pollutants from municipal facilities and operations from coming into contact with stormwater.

After review of 2021 inspection reports for each municipal facility owned and operated by the City, reports noted numerous deficiencies at several facilities. Deficiencies found include but are not limited to: open containers of anti-freeze, used oil, and other materials stored outside, insufficient berm around fuel tank, sediment accumulation around inlets, sheen observed in stormwater inlet, insufficient containment of stockpiled materials, and insufficient secondary containment.

Permit requirement:

Part I.E.5 of the permit states, "The permittee must implement a program for Pollution Prevention/Good Housekeeping for facilities and operations that they own, operate, or perform within the permit area. The program must prevent or reduce water quality impacts from pollutants being discharged to the MS4 from municipal facilities and operations."

Corrective Action:

On May 16, 2022, EPA received information from Brian Hathaway with the City of Greeley that SOPs have been developed for inspection procedures at municipal operations. SOPs include language establishing procedures for inspections of municipal facilities, escalation procedures in the event deficiencies are found during inspections, and procedures for conducting spot checks of municipal facilities outside of regular inspections.

Ensure that the new SOPs are followed, and a Pollution Prevention/Good Housekeeping program is properly implemented to prevent pollutants from coming into contact with stormwater. No further action is needed.
Finding #3: The City did not have written procedures for determining targeted businesses. After review of the Program Description Document for the City's Public Education and Outreach program, it was noted that the program document did not contain written procedures for determining the type of business(es) to target for outreach. Permit Requirement: Part I.E.1.c.i of the permit states, "The permittee must provide a list of citation(s) and location(s) of the written procedures used to determine the targeted business(es)…" **Corrective Action:** On May 16, 2022, EPA received information from Brian Hathaway with the City of Greeley that the Program Description Document for the Public Education and Outreach program had been updated to include written procedures used to determine the targeted businesses. No further action is needed.
Recommendation: During the preliminary findings discussion held on May 11, 2022, it was noted that Aims Community College has not been implementing portions of their stormwater program, particularly in conducting inspections of municipal facilities and operations. According to the IGA between the City and Aims Community College, the City is responsible for aiding in the implementation of all stormwater program areas for the college. The EPA recommends ensuring program areas are properly implemented for the college per the IGA.

Pretreatment Audit Report

City of Louisville
CO-0023078
Louisville, Colorado

June 28, 2021 to July 1, 2021

Prepared by:

Al Garcia, Pretreatment Coordinator

U.S. Environmental Protection Agency, Region 8
Wastewater Section (8WD-CWW)

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Denver, CO 80202
303.312.6382
garcia.al@epa.gov

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Al Garcia	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202	8/31/2021
	303-312-6382	
Reviewer Name	Address/Phone Number	Date
Stephanie DeJong	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202	8/27/2021
	303-312-6362	
Supervisor Signature/Name	Address/Phone Number	Date
STEPHANIE DEJONG Digitally signed by STEPHANIE DEJONG Date: 2021.08.31 14:10:45 -06'00'	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NP Denver, Colorado 80202	8/31/2021
Stephanie DeJong	303-312-6362	

Pretreatment Audit Findings	Pretreatment Requirement and Corrective Action
Section 3.0 –Resources	
1. 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. 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, such as the industrial user inventory and characterization, permit management, field activities, and the dental amalgam program. The City recently hired the Pretreatment Coordinator position to fill a long-term vacancy. This vacancy and inconsistency of implementation during this period appeared to be the reason for many of the findings identified in this audit report. The recently-hired Coordinator and the consultant appear to be focused on Pretreatment implementation and are enthusiastic regarding strengthening their knowledge of the Pretreatment Regulations.	**Pretreatment Requirements** 40 C.F.R. § 403.8(f)(3) **Corrective Action Item** Based on the uncertain transition of the City's resources to the program, provide a staffing plan as a follow up to this audit to ensure consistent resources to implement the City's Pretreatment program effectively.
Section 4.0 – Municipal Ordinance and Intergovernmental Agreements	
2. 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 of Louisville provided its Pretreatment legal authority found in its municipal ordinance, Title 13, Chapter.13.32-Sewer Use Regulations to the EPA for review. Based on the EPA's review, the City's municipal ordinance provides a framework to	**Pretreatment Requirements** 40 C.F.R. § 403.8(f)(1) **Corrective Action Item** Update municipal ordinance to align with the Federal Pretreatment Regulations, as identified in the attached legal authority review checklist.

implement the Pretreatment Regulations in the POTW's service area, with the following exceptions (as identified in the attached legal authority review):
• *Definitions* – Section 13.32.020
    ○ Categorical Industrial User (CIU) – the definition needs to be modified to state that a CIU is an IU that is subject to a categorical Pretreatment Standard.
    ○ Existing Source – the current definition establishes existing sources as sources in operation at the time of promulgation of categorical Pretreatment Standards. Existing sources with categorical Pretreatment Standards are established by the EPA for those sources in operation at the time of proposal of categorical Pretreatment Standards. The City's current definition needs to be modified to establish existing sources as sources in operation at the time of proposal of categorical Pretreatment Standards.
    ○ Immediately – the City establishes this as within 24 hours. There is no such time element in the Federal Regulations and the ordinance is less stringent than the Federal Regulations.
    ○ Local Limits – the definition defines these as effluent limitations developed for industrial users. The City developed local limits solely for significant industrial users.
• *Categorical Pretreatment Standards* – Section 13.32.050(B): The City has established the authority to convert Categorical Pretreatment Standards expressed as mass limits to equivalent concentration-based limits and from concentration limits to equivalent mass-based limits. The City needs to incorporate the criteria and process for this authority found in 40 CFR 403.6(c)(5) for equivalent mass limits and 40 CFR 403.6(c)(6) for equivalent concentration limits into the ordinance.
• *Permit Conditions and Duration*
    ○ Recommend consolidating duplicate permit conditions found in 13.32.060(C) and	

13.32.060(J) of the municipal ordinance into one section for clarity.

  - Permit Duration -- Section 13.32. 060(C)(1): The City establishes a current permit duration of three years. EPA recommends adding flexibility by extending the permit duration up to five years, example ordinance language may include the following: "discharge permits shall be issued for a specified time period, not to exceed five (5) years".
  - Immediate Notification of changes affecting potential for a slug discharge required in 40 CFR 403.8(f)(C)(2)(vi) is not incorporated in the ordinance. These provisions need to be incorporated in Section 13.32.070(C) – Slug Discharge Management Plan.

- *Right of Entry* – Section 13.32.080(A): EPA recommends incorporating the authority to take and use digital photos for information gathering.
- *Reporting/Notification Requirements – 40 CFR 403.12*
  - Baseline Monitoring Reports – Section 13.32.070(A)(1): The BMR section of the ordinance refers to the permit application requirements in 13.32.060(D)(4). These requirements do not fully incorporate the BMR Federal Requirements in 40 CFR 403.12(b). The City needs to modify the ordinance to include all BMR requirements found in 40 CFR 403.12(b) and be equivalent to the Federal Regulations.
  - Notice of Changed Discharge – Section 13.32.070(A)(3): The City's municipal ordinance is not equivalent to the Federal Regulations found in 40 CFR 403.12(j) and needs to be modified. (<u>underlined font</u> indicates needed changes); Each user must <u>promptly</u> notify the city of any significant changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater at least 90 days before the change, <u>including the listed or characteristic hazardous wastes for which the Industrial User has submitted initial</u>

<u>notification under paragraph (6) of this section</u>. o Notification of Hazardous Waste (13.32.070(A)(6): The City's municipal ordinance needs to be modified to be equivalent to 40 CFR 403.12(p) of the Federal Regulations. • *Signatory Requirements/Certification* – Section 13.32.00(D) o Section 13.32.00(D)(1): Recommend incorporating the certification statements for all reports instead of referencing the Federal Regulations. o Pollutants not Present Waiver Certification required in 40 CFR 403.12(e)(2)(v) needs to be incorporated into the municipal ordinance. o Non-Significant Categorical Industrial User (NSCIU) Certification Statement – Section 13.32.00(D)(2): The City references the NSCIU certification statement found in 403.12(q). EPA recommends the City incorporate this certification statement into the ordinance instead of referencing the Federal regulations. o Spill Management (slug discharge) Plan – Section 13.32.070(C): the spill management plan section includes the slug discharge definition but does not incorporate the following slug discharge provisions below, required in 40 CFR 403.8(f)(2)(vi). The City needs to update this section to be equivalent to the Federal Regulations. ▪ Description of discharge practices, including non-routine batch Discharges. ▪ Description of stored chemicals. ▪ Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b)	

with procedures for follow-up written notification within five days. o Submission of all Monitoring Data – Section 13.32.070(E): The City's ordinance needs to be updated to "using EPA-approved analytical methods". o Upset: the upset provisions found in 40 CFR 403.16 of the Federal Regulations needs to be incorporated into the ordinance.	
Section 7.0 – Industrial User Inventory and Characterization	
3. The Pretreatment Regulations state in 40 C.F.R. §403.8(f)(2) that a POTW shall develop and implement procedures to ensure compliance with requirements of a Pretreatment Program. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(*i-iii*), require an approved Pretreatment program to: • "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." • "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". • "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."	**<u>Pretreatment Requirements</u>** 40 C.F.R. §403.8(f)(2) 40 C.F.R. § 403.8(f)(2)(i-iii) 40 C.F.R. §403.12(i)(1) **<u>Corrective Action Item</u>** Update/maintain the Non-Domestic Inventory by ensuring the information and records capture current conditions for the IUs, based on available tools to the City such as the industrial waste survey, drive by inspections, facility inspections, sampling, etc.

The City provided two spreadsheets (Non-Domestic Inventory.csv and Industrial User Inventory.xlsx) to EPA that represent its industrial user inventory and characterization of the service area. The Non-Domestic Inventory appears to represent all industrial users in the service area and provide a business type for each industrial user. It appears that the City filtered the Non-Domestic Inventory into IUs on the Industrial User Inventory that are either on a control mechanism, have installed a grease interceptor (FOG program) or are subject to the Dental Amalgam Rule. EPA is uncertain if the IU information on the Non-Domestic Inventory is based on current information, as required in 40 C.F.R. §403.12(i)(1).	
Section 8.0 – Control Mechanism (Permit) Evaluation and Permit Specific Issues	
4. The Pretreatment regulations at 40 CFR 403.8(f)(2)(iv) require the City to develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program. At a minimum, these procedures shall enable the City to receive and analyze self-monitoring reports and other notices submitted by Industrial Users in accordance with the self-monitoring requirements in §403.12. The self-monitoring compliance reports and a permit application were not consistently date stamped and EPA could not determine if these reports are received within the due date required by the permit.	**Pretreatment Requirements** 40 C.F.R. § 403.12 40 C.F.R. § 403.8(f)(2)(iv) **Corrective Action Item** Consistently date-stamp the received self-monitoring reports and notices to ensure the received date of the report or notification is recorded and complies with the permit-required due dates.
5. 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." All SIU inspection reports reviewed during the audit include minimal descriptions of the facility's unit operations and do not provide adequate characterization of the facility. The SIU inspection reports 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	**Pretreatment Requirements** 40 C.F.R. § 403.8(f)(2)(ii) **Corrective Action Item** Provide 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.

discharge potential and process or treatment plant changes.	
6. The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law." In addition, the local limits applicability language Section 13.32.120(B) is as follows: "Mass limitations for permitted users. The director of public works or his designated agent may impose mass limitations on permitted users subject to a federal, state, or city standard. Such mass limitation may be imposed through such user's industrial wastewater discharge permits. The total mass of pollutants allocated to all permitted industrial users shall not exceed the level specified below. Changes in local limits due to increased or decreased loading in the service area, or due to other special conditions, including but not limited to water quality stream standards, NPDES discharge permit limits, or other conditions as determined by the director, may cause a change in these allocations. Industrial users shall monitor and report daily flows as required by the wastewater contribution permit. Allocations may be revoked by the director and shall not be considered property rights." The City's calculated MAIL for all permitted users in the service area is 0.5506 lbs/day. The City has over allocated the Mn MAIL by allocating 100% of the MAIL (0.5506 lbs/day) as mass-based limits to Kiosk and the Water Treatment Plants in each permit.	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(1)(iii)(B)(3) City of Louisville Municipal Ordinance, Section 13.32.120(B) **<u>Corrective Action Item</u>** Modify the permits for Kiosk and the Louisville Water Treatment Plants, and any other permit in which the City allocated the Mn MAIL. This modification of the permits is necessary to ensure the MAIL is not over-allocated in the service area and to ensure the calculated Mn MAIL is not exceeded.
7. The previous Hope Foods permit expired on October 1, 2019 and was administratively extended until a permit was reissued on July 1, 2020. The permit was reissued when the new pretreatment coordinator identified and corrected this issue. The City has not established the authority to administratively extend permits in its ordinance, and 40 CFR 403.8(f)(1) requires the city to operate pursuant to its legal authority. The City should either establish the authority to administratively extend permits in its	40 CFR 403.8(f)(1) **<u>Corrective Action Item</u>** This finding was identified and corrected by the new pretreatment coordinator. No further action is necessary.

municipal ordinance or ensure the permits are reissued upon expiration. (Note: The Federal Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(1) do not allow a permit duration including administrative extensions to extend past 5 years.)	
8. 40 CFR 403.12(g)(3) requires that the self-monitoring 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. The Kiosk permit allows for pH to be monitored prior to discharge to the City, which is not representative. Reportable and enforceable pH data must be gathered during discharges from the batch tank.	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.12(g)(3) **<u>Corrective Action Item</u>** Ensure Kiosk collects pH monitoring data from the discharge of the batch tank.
9. 40 CFR 403.12(g)(3) requires that the self-monitoring 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. The Control Authority shall require that frequency of monitoring necessary to assess and assure compliance by Industrial Users with applicable Pretreatment Standards and Requirements. • The Hope Foods permit requires the facility to sample BOD and TSS as composites but does not identify the discharge method and the specific sampling protocols (e.g., flow-proportional, 8-hour time proportional) that are representative of the production day's discharge. • The Kiosk permit allows for grab sampling in Table 3. There is no justification in the permit records if a grab sample is representative of the production day's discharge. • The City of Louisville Water Treatment Plants permit requires the water treatment plants to sample the local limits pollutants of concern as composites but does not identify the discharge method and the specific sampling protocols (e.g., flow-proportional, 8-hour time proportional) that are	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.12(g)(3) **<u>Corrective Action Item</u>** Determine sampling methods for permit-limited pollutants of concern that are representative of the production day's discharge and update the permit to incorporate this specific sampling method. The City should include this justification of representative sampling methods in the fact sheets for each permit.

representative of the production day's discharge.	
10. The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on <u>applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law</u>." This requires the City to apply the applicable and most stringent of the local limits and categorical Pretreatment standards. The Kiosk permit includes both local limits and Metal Finishing New Source limits and does not adequately establish the most stringent permit limits for cadmium (Cd), copper (Cu), lead (Pb), nickel (Ni), silver (Ag), and zinc (Zn).	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(1)(iii)(B)(3) **<u>Corrective Action Item</u>** Modify the Kiosk permit to establish Cd, Cu, Pb, Ni, Ag, and Zn limits that are the most stringent limit between the City's local limits and categorical Pretreatment standards.
11. Based on a review of the 2020-2021 Pretreatment records, Hope Foods has a non-compliance history with permit conditions and limits. The City has adequately identified and responded to these violations with enforcement remedies (NOVs), with the following exceptions: • Hope Foods failed to respond to the June 14, 2019 NOV within the 30 days specified in the NOV. The NOV response was received on July 19, 2019. There is no record that the City provided an enforcement response to this violation. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vii) require the City to "Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices."	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(2)(vii) City of Louisville Enforcement Response Plan **<u>Corrective Action Item</u>** Provide an enforcement response for Hope Foods violations of the failure to respond to the June 14, 2019 NOV, according to the City's ERP.
12. The Pretreatment regulations at 40 CFR 403.8(f)(2)(v) require the City to "Inspect and sample the effluent from each Significant Industrial User at least once a year." This is required for all permit-limited pollutants of concern. The City sampled Hope Foods in 2019 and 2020 but EPA was unable to determine if pH was monitored in 2019.	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(2)(v) **<u>Corrective Action Item</u>** Determine if pH was sampled at Hope Foods in 2019 and provide this data to EPA.

13. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vii) require the City to "Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices." Hope Foods has a record of non-compliance with pH in 2020 and 2021, including pH characteristics and volume of non-compliant discharges. The City issued NOVs for 3rd quarter 2020 on November 3, 2020, for 4th quarter 2020 on February 3, 2021, and for 1st quarter 2021 on April 13, 2021. Hope Foods responded to all NOVs by stating that "The out of service state will be alarmed, requiring Maintenance to correct the situation." or that it plans to install a pH alarm. EPA is concerned that Hope Foods has not installed a pH alarm as it stated in its responses to the NOVs issued by the City.	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(2)(vii) **<u>Corrective Action Item</u>** Evaluate if the pH alarm has been installed at Hope Foods and if it is effective to eliminate or minimize the numerous pH violations. Escalated enforcement actions may be warranted to ensure compliance with pH.
14. The City's municipal ordinance at Section 13.32.040(B)(2) establishes a lower pH limit of 6.0 std units. There is no upper pH limit established in the City's ordinance, The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law." • The wastewater discharge permits for Kiosk and the City of Louisville Water Treatment Plants establish a pH limit range of from 6.0 to 12.0. The City does not have the authority to establish a 12.0 pH limit in the these permits unless the 12.0 pH limit is established as a site-specific limit, subject to public notice.	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(1)(iii)(B)(3) City of Louisville Municipal Ordinance, Section 13.32.040(B)(2) **<u>Corrective Action Item</u>** Modify the Kiosk and City of Louisville Water Treatment Plant permits to delete the unenforceable 12.0 pH limit or public notice the permit to establish this pH limit as a site-specific limit.
15. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vii) require the City to "Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices." Kiosk had a copper (Cu) violation on December 4, 2019 with the permit limit of 0.845 mg/L. The data	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(2)(vii) City of Louisville Enforcement Response Plan **<u>Corrective Action Item</u>** Provide an enforcement response for Kiosk's December 4, 2019 Cu violation, according to

from the December 4, 2019 sample showed a result of 0.98 mg/L. based on a review of the Pretreatment records, it appears that the City has not provided an enforcement action for the December 4, 2019 Cu violation. The City needs to provide an adequate enforcement response to this violation, according to its ERP.	the City's ERP.
16. Immunity Bio was determined to meet the criteria of a non-significant categorical industrial user (NSCIU) and was issued a letter dated June 3, 2019 stating that based on the baseline monitoring report, this facility will never discharge more than 100 gallons per day of categorical wastewater, will never discharge concentrated wastewater and consistently complies with all applicable categorical Pretreatment Standards and Requirements. However, Immunity Bio had not discharged as of the date of the letter and did not develop a compliance history that demonstrated consistent compliance with all Pretreatment Standards. In addition, based on EPA's review of the Pretreatment records, it is unclear if Immunity Bio meets the 100 gpd ceiling threshold. The inspection reports and permit rationale do not adequately provide clear justification for this NSCIU designation. The inspection reports describe a treatment holding tank that if discharged, appears to exceed the 100 gallons/day threshold. The City issued a wastewater discharge permit effective April 1, 2021 through April 1, 2024. The permit includes categorical Pretreatment Standards for New Sources for a SIU subject to the Pharmaceutical Manufacturing, Subpart A-Fermentation Products found at 40 CFR §439.17. The permit also includes monitoring, notification and quarterly reporting requirements for a categorical industrial user (CIU). Although the fact sheet and permit state that this permit is issued for an NSCIU, the permit conditions do not reflect this NSCIU designation. The Pretreatment Regulations at 40 CFR 403.12(e) require a CIU to sample for all permit-limited parameters at a minimum frequency of twice per year. The Immunity Bio permit establishes annual sampling of permit-limited parameters.	**Pretreatment Requirements** 40 C.F.R. § 403.12(e) **Corrective Action Item** Modify the Immunity Bio to establish the minimum twice per year sampling frequency. Once it meets the criteria for a NSCIU, the City may reevaluate whether Immunity Bio should be designated an NSCIU.

17. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vii) require the City to "Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices." Immunity Bio failed to submit the 2019 annual certification by the January 30, 2020 due date. Immunity Bio submitted a NSCIU compliance report on October 31, 2020 that covered a reporting period from January 1, 2019 through October 31, 2020. The late report for 2019 is a violation of the City's reporting conditions and also exceeds SNC criteria for a late report past 45 days. Immunity Bio failed to provide an NSCIU report that covers the reporting period from November 2020 to December 2020. The failure to report for the reporting period from November 2020 to December 2020 is a violation of the City's reporting conditions and also exceeds SNC criteria for a late report past 45 days.	**Pretreatment Requirements** 40 C.F.R. § 403.8(f)(2)(vii) City of Louisville Enforcement Response Plan **Corrective Action Item** Provide an enforcement response for Immunity Bio's reporting violations, according to the City's ERP.
18. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vii) require the City to "Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices." Based on EPA's review of self-monitoring reports for 2019 through 1st quarter 2021, the following calculation errors were discovered for Outfalls 001(Howard Berry Plant) and 002 (Sid Copeland Plant). • 1st quarter of 2019 – The Water Treatment Plants reported no flow at outfall 002 on February 28, 2019, however, a sample was taken with analytical results on that date and the Plant reported a Mn loading value of 0.0000 lbs/day. EPA does not understand how a sample can be taken from a production day with no discharge. • 1st quarter of 2020 – The Water Treatment Plants reported a Mn loading of 0.36062 lbs/day on March 6, 2020 at outfall 002, EPA calculated a Mn loading of 0.0561 lbs/day. • 4th quarter of 2021 – The Water Treatment Plants reported a Mn loading of 0.0093	**Pretreatment Requirements** 40 C.F.R. § 403.8(f)(2)(vii) City of Louisville Enforcement Response Plan **Corrective Action Item** Ensure the Water Treatment Plants accurately calculate and report their compliance with the Mn mass-based limit and determine if an enforcement action is warranted for reporting inaccurate data.

lbs/day on January 20, 2021 at outfall 001; EPA calculated a Mn loading of 0.0124 lbs/day. In addition, the Water Treatment Plants reported that Howard Berry Plant (outfall 002) was offline for the reporting period. However, a review of flow records indicate that flow was reported from January 1, 2021 through January 6, 2021 and on January 13, 2021.	
19. 40 CFR 403.8(f)(2)(vi) of the Pretreatment Regulations require the City to "Evaluate whether each such Significant Industrial User needs a plan or other action to control Slug Discharges." The BMPP (slug discharge control plan) generated by Lockheed Martin is very general and does not provide site specific information regarding the measures, equipment, housekeeping, and operator training to minimize or eliminate slug discharges and spills.	**<u>Pretreatment Requirements</u>** 40 CFR 403.8(f)(2)(vi) **<u>Corrective Action Item</u>** Require Lockheed Martin to update their current slug discharge control plan to include the site-specific elements required in 40 CFR 403.8(f)(2)(vi)(A-D): • Description of discharge practices, including non-routine batch Discharges. • Description of stored chemicals. • Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b) with procedures for follow-up written notification within five days. • If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.
Section 10.0 – Control Authority Compliance Monitoring	
20. The Pretreatment Regulations state in 40 C.F.R. §403.8(f)(2) that a POTW shall develop and implement procedures to ensure compliance with requirements of a Pretreatment Program. In addition, 40 C.F.R. § 403.8(f)(2)(viii) requires that "Sampling	**<u>Pretreatment Requirements</u>** 40 C.F.R. § 403.8(f)(2) 40 C.F.R. § 403.8(f)(2)(viii)

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." The City developed a sampling plan in Section IV of the QAQC Program document. This section provides a general overview of the sampling equipment and techniques. The City's sampling plan needs to be updated to meet the requirements found in 40 C.F.R. § 403.8(f)(2)(viii), to ensure consistent implementation of sampling techniques/methods and QA/QC to produce representative and enforceable data.	**<u>Corrective Action Item</u>** Update the sampling plan found in Section IV of the QACA Program document to address 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 CFR 136. In addition, update the sampling plan to provide site-specific sampling protocols at the SIUs that are representative, based on the SIU's wastewater discharge for the production day.
Section 11.0 – Enforcement	

21. 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 include the following, in accordance with 40 C.F.R. § 403.8(f)(5)(i-iv): (*Note: the Louisville ERP Review checklist will be enclosed with the audit report*)
 	
• **Describe how the POTW will investigate instances of noncompliance.**
  • The City needs to address the implementation procedures utilized to investigate instances of noncompliance which includes procedures for IU Inventory/Inspection and Permitting procedures.
 	
• **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.**
  • The City needs to establish escalating enforcement responses it will take for the following types of IU violations:
  • SNC criteria for Reporting Violations or Deficiencies/Late Reports (BMRs, 90-day compliance reports, self-monitoring compliance reports, compliance schedule reports) – SNC criteria needs to be updated
	<u>Pretreatment Requirements</u>
	
	40 C.F.R. § 403.8(f)(5)
	
	<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.

to more than 45 days late, pursuant to §13.32.020-SNC definition, #F • Analytical Deficiencies (hold time exceedances, etc) • Tampering with monitoring equipment/methods • Sector control programs and BMPs • SNC Narrative Criteria found in §13.32.020-Significant Noncompliance definition, #C. "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 Narrative Criteria found in §13.32.020-Significant Noncompliance definition, #D. "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 Narrative Criteria found in §13.3217.1.20-Significant Noncompliance definition, #G. "Failure to accurately report noncompliance." • SNC Narrative Criteria found in §13.32.20-Significant Noncompliance definition, #H. "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 Narrative Criteria found in §13.32.20-Significant Noncompliance definition, #I. "Failure to report an accident, prohibited or non-permitted discharge." • **Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards.** • Note: Public Notice of SNC violations is a public participation requirement required by	

the Federal Regulations and by City ordinance and is not considered to be an enforcement response to the violation.	
22. 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). The City stated that it performs SNC calculations or determinations with every self-monitoring compliance report with SMR check-in and TRC check-in sheets.	**Pretreatment Requirements** 40 C.F.R. § 403.8(f)(2)(vii) **Corrective Action Item** Ensure the SNC calculations also include a determination if the narrative SNC criteria (such as compliance reports or notifications submitted later than 45 days past the due date) have been exceeded.

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Figures

Tables

1.0 Introduction

The U.S. Environmental Protection Agency, Region 8 (EPA) conducted a remote audit of the Pretreatment program, administered by the City of Louisville, CO (City) from June 28, 2021 to July 1, 2021. The remote Pretreatment audit was held in lieu of an on-site audit in response to concerns related to the COVID-19 pandemic. The remote inspection, hosted on the MS-Teams platform, started on June 28, 2021 at 8 a.m. with an opening interview. Pretreatment records were reviewed, and a closing conference was held on July 1, 2021 at 1 p.m. during which the EPA presented the preliminary observations, conclusions, and findings from the audit.

Participants in the audit included:

City of Louisville, CO

Jocelyn Brink	Pretreatment Coordinator
Corey Peterson	Deputy Director – Utilities
Kurt Kowar	Director – Utilities
Zachary Steinbach	POTW Chief Operator (ORC)
Alicia Gilley	Consultant, RESPEC

EPA:

Al Garcia	Region 8 Pretreatment Coordinator

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 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 13, Chapter 13.32-Sewer Use Regulations.
- 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).
- Due to the remote nature of the Pretreatment audit, site inspection of selected SIUs and IUs in the service area were not completed.
- 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 1600 Empire Road, Louisville, CO 80027, Latitude/Longitude, 39°58'47.01"N, 105° 7'19.86"W. The POTW serves the boundary of the City of Louisville. There are no outside contributing jurisdictions to the City. The service area for the POTW is shown in Figure 1 and the Google Earth view of the City's POTW is shown in Figure 2.

Due to the pandemic and the necessity for a remote audit, a POTW tour was not completed.

2.1 NPDES Permit

The City's NPDES permit #CO-0023078 issued by the Colorado Department of Public Health and Environment (CDPHE) on August 16, 2011 and effective on October 1, 2011 contain provisions for an EPA-approved Pretreatment program in Part I.A.8. The City's NPDES permit expired on September 30, 2016 and is currently administratively extended by the CDPHE.

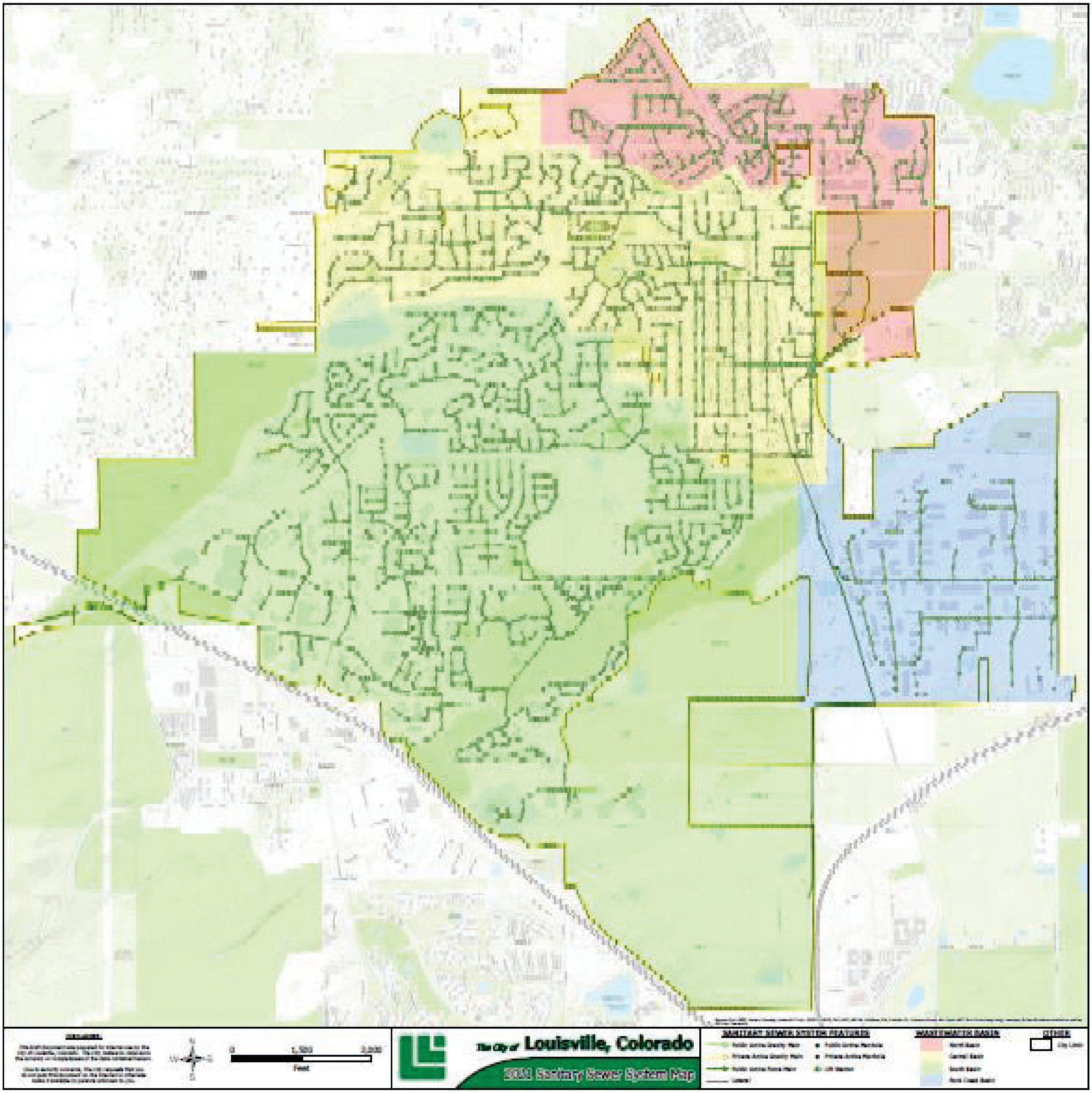

Figure 1 –City of Louisville Service Area

Figure 2 – City of Louisville Google Earth 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

The City reported in its 2020 annual Pretreatment report that it commits 0.75 FTE to implementing the programmatic activities of the Pretreatment regulations. The City's 0.75 FTE commitment is currently supplemented with an additional 0.25 FTE from RESPEC, a consulting firm. The Pretreatment Coordinator collaborates with the POTW Chief Operator to collaborate on the plant LIMS database and with sampling activities, as needed. The Pretreatment Coordinator also collaborates with the Collection System department regarding issues in the collection system and with the Engineering/Building departments for new business in the service area and changes to existing business. The Pretreatment Coordinator also provides 25% of her time to implementing the backflow/cross connection program.

The City stated in the audit that it is provided $151,500 to the Pretreatment program from the Wastewater Treatment Plant budget as a special line item. The Wastewater budget is generated from an Enterprise fund generated from residential and non-residential users in the service area.

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, such as the industrial user inventory and characterization, permit management, field activities, and the dental amalgam program. The City recently hired the Pretreatment Coordinator position to fill a long-term vacancy. This vacancy and inconsistency of implementation during this period appeared to be the reason for many of the findings identified in this audit report. The recently-hired Coordinator and the consultant appear to be focused on Pretreatment implementation and are enthusiastic regarding strengthening their knowledge of the Pretreatment Regulations. However, based on the findings that may be based on the long-term vacancy and the uncertain transition of the City's resources to the program, the City needs to provide a staffing plan as a follow up to this audit to ensure consistent resources to implement the City's Pretreatment program effectively.

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 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-events-training-and-publications#training. 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 Louisville Municipal Ordinance

EPA approved the City's Pretreatment program on May 5, 1986. According to records maintained by EPA, the City updated its legal authority (municipal ordinance) in 1991 to incorporate the Domestic Sewage Exclusion regulations, in 2002 to update definitions and incorporate the specific prohibitions and in 2007 to incorporate the Pretreatment Streamlining Regulations. In addition, the City established local limits on September 14, 1994 and updated its local limits in 1995, 2003, and an update to its current local limits on May 6, 2013 and Mn on December 22, 2015.

The City provided its Pretreatment legal authority found in its municipal ordinance, Title 13, Chapter.13.32-Sewer Use Regulations to the EPA for review. Based on the EPA's review, the City's municipal ordinance provides a framework to implement the Pretreatment Regulations in the POTW's service area, with the following exceptions (as identified in the attached legal authority review):

- *Definitions* – Section 13.32.020
  - Categorical Industrial User (CIU) – the definition needs to be modified to state that a CIU is an IU that is subject to a categorical Pretreatment Standard.
  - Existing Source – the current definition establishes existing sources as sources in operation at the time of promulgation of categorical Pretreatment Standards. Existing sources with categorical Pretreatment Standards are established by the EPA for those sources in operation at the time of proposal of categorical Pretreatment Standards. The City's current definition needs to be modified to establish existing sources as sources in operation at the time of proposal of categorical Pretreatment Standards.
  - Immediately – the City establishes this as within 24 hours. There is no such time element in the Federal Regulations and the ordinance is less stringent than the Federal Regulations.

  - Local Limits – the definition defines these as effluent limitations developed for industrial users. The City developed local limits solely for significant industrial users.

- *Categorical Pretreatment Standards* – Section 13.32.050(B): The City has established the authority to convert Categorical Pretreatment Standards expressed as mass limits to equivalent concentration-based limits and from concentration limits to equivalent mass-based limits. The City needs to incorporate the criteria and process for this authority found in 40 CFR 403.6(c)(5) for equivalent mass limits and 40 CFR 403.6(c)(6) for equivalent concentration limits into the ordinance.
- *Permit Conditions and Duration*
  - Recommend consolidating duplicate permit conditions found in 13.32.060(C) and 13.32.060(J) of the municipal ordinance into one section for clarity.
  - Permit Duration -- Section 13.32. 060(C)(1): The City establishes a current permit duration of three years. EPA recommends adding flexibility by extending the permit duration up to five years, example ordinance language may include the following: "discharge permits shall be issued for a specified time period, not to exceed five (5) years".
  - Immediate Notification of changes affecting potential for a slug discharge required in 40 CFR 403.8(f)(C)(2)(vi) is not incorporated in the ordinance. These provisions need to be incorporated in Section 13.32.070(C) – Slug Discharge Management Plan.
- *Right of Entry* – Section 13.32.080(A): EPA recommends incorporating the authority to take and use digital photos for information gathering.
- *Reporting/Notification Requirements – 40 CFR 403.12*
  - Baseline Monitoring Reports – Section 13.32.070(A)(1): The BMR section of the ordinance refers to the permit application requirements in 13.32.060(D)(4). These requirements do not fully incorporate the BMR Federal Requirements in 40 CFR 403.12(b). The City needs to modify the ordinance to include all BMR requirements found in 40 CFR 403.12(b) and be equivalent to the Federal Regulations.
  - Notice of Changed Discharge – Section 13.32.070(A)(3): The City's municipal ordinance is not equivalent to the Federal Regulations found in 40 CFR 403.12(j) and needs to be modified. (<u>underlined font</u> indicates needed changes); Each user must <u>promptly</u> notify the city of any significant changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater at least 90 days before the change, <u>including the listed or characteristic hazardous wastes for which the Industrial User has submitted initial notification under paragraph (6) of this section</u>.
  - Notification of Hazardous Waste (13.32.070(A)(6): The City's municipal ordinance needs to be modified to be equivalent to 40 CFR 403.12(p) of the Federal Regulations.

- *Signatory Requirements/Certification* – Section 13.32.00(D)
  - Section 13.32.00(D)(1): Recommend incorporating the certification statements for all reports instead of referencing the Federal Regulations.
  - Pollutants not Present Waiver Certification required in 40 CFR 403.12(e)(2)(v) needs to be incorporated into the municipal ordinance.
  - Non-Significant Categorical Industrial User (NSCIU) Certification Statement – Section 13.32.00(D)(2): The City references the NSCIU certification statement found in 403.12(q). EPA recommends the City incorporate this certification statement into the ordinance instead of referencing the Federal regulations.
  - Spill Management (slug discharge) Plan – Section 13.32.070(C): the spill management plan section includes the slug discharge definition but does not incorporate the following slug discharge provisions required in 40 CFR 403.8(f)(2)(vi) below:. The City needs to update this section to be equivalent to the Federal Regulations.
    - Description of discharge practices, including non-routine batch Discharges.
    - Description of stored chemicals.
    - Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b) with procedures for follow-up written notification within five days.
  - Submission of all Monitoring Data – Section 13.32.070(E): The City's ordinance needs to be updated to "using EPA-approved analytical methods".
  - Upset: the upset provisions found in 40 CFR 403.16 of the Federal Regulations needs to be incorporated into the ordinance.

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 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/hauled 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 August 16, 2011 and effective on

October 1, 2011 include local limit requirements in Part I.B.7(c). The local limits requirements are as follows:

"c. 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), by [12 MONTHS FROM EFFECTIVE DATE]. 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. If a technical evaluation reveals that development or revision of local limits is necessary, the permittee shall submit a program modification with the proposed revised local limits to the Division and Approval Authority in an approvable form by [24 MONTHS FROM EFFECTIVE DATE] and implement the new local limits within 12 months of approval by the Approval Authority."

5.3 The EPA Evaluation of the City's Local Limits

The City's local limits were updated in 2013 and in 2015 for Mn, after providing a technical evaluation required by the 2011 NPDES permit renewal. The current local limits are incorporated in Section 13.32.120(A-C) of the municipal ordinance. Section 13.32.120(A) establishes the SIU concentration-based local limits, Section 13.32.120(B) incorporates the MAIL as a total allocation ceiling for mass limits, and Section 13.32.120(C) establishes a maximum allowable commercial loading for non-permitted SIUs.

The local limits applicability language Section 13.32.120(A) is as follows:

"Every permitted significant industrial user of the POTW, except where mass limits have been established, shall not discharge any wastewater with a pollutant concentration exceeding the following standards:"

Table 1 – City of Louisville Local Limits – SIU Concentration-based limits

Pollutant	Symbol	Daily Maximum (mg/L)
Arsenic, Total	As	0.126
Cadmium, Total	Cd	0.039
Chromium, VI, dissolved	Cr VI	0.546

Chromium III, dissolved	Cr III	1.330
Copper, Total	Cu	0.845
Lead, Total	Pb	0.027
Mercury, Total	Hg	0.004
Molybdenum, Total	Mo	0.521
Nickel, Total	Ni	0.840
Selenium, Total	Se	0.189
Silver, Total	Ag	0.102
Zinc, Total	Zn	1.800

The local limits applicability language Section 13.32.120(B) is as follows:

"Mass Limitation for Permitted Users: The director of public works or his designated agent may impose mass limitations on permitted users subject to a federal, state, or city standard. Such mass limitation may be imposed through such user's industrial wastewater discharge permits. The total mass of pollutants allocated to all permitted industrial users shall not exceed the level specified below. Changes in local limits due to increased or decreased loading in the service area, or due to other special conditions, including but not limited to water quality stream standards, NPDES discharge permit limits, or other conditions as determined by the director, may cause a change in these allocations. Industrial users shall monitor and report daily flows as required by the wastewater contribution permit. Allocations may be revoked by the director and shall not be considered property rights."

Table 2 – City of Louisville Local Limits – Maximum Allowable Industrial Loading

Pollutant	**Symbol**	**Maximum Allowable Industrial Loading (lbs/day)**
Arsenic, Total	As	0.0210
Cadmium, Total	Cd	0.0064
Chromium, VI, dissolved	Cr VI	0.907

Chromium III, dissolved	Cr III	0.2212
Copper, Total	Cu	0.1405
Lead, Total	Pb	0.0045
Manganese	Mn	0.5506
Mercury, Total	Hg	0.0007
Molybdenum, Total	Mo	0.867
Nickel, Total	Ni	0.1397
Selenium, Total	Se	0.0314
Silver, Total	Ag	0.0170
Zinc, Total	Zn	0.2993

The local limits applicability language Section 13.32.120(C) is as follows:

"Mass limitations for non-permitted users. The director of public works or his designated agent may impose mass limitations on non-permitted users. The total mass of pollutants allocated to all non-permitted users shall not exceed the level specified below. Changes in local limits due to increased or decreased loading in the service area, or due to other special conditions, including but not limited to water quality stream standards, NPDES discharge permit limits, or other conditions as determined by the director, may cause a change in these allocations. Non-permitted users shall monitor and report daily flows as required by the director. Allocations may be revoked by the director and shall not be considered property rights"

Table 3 – City of Louisville Local Limits – Maximum Allowable Commercial Loading

Pollutant	Symbol	Maximum Allowable Commercial Loading (lbs/day)
Arsenic, Total	As	0.0021
Cadmium, Total	Cd	0.0150

Chromium, VI, dissolved	Cr VI	0.2117
Chromium III, dissolved	Cr III	0.5160
Copper, Total	Cu	0.3277
Lead, Total	Pb	0.0104
Mercury, Total	Hg	0.0017
Molybdenum, Total	Mo	0.2024
Nickel, Total	Ni	0.3260
Selenium, Total	Se	0.0732
Silver, Total	Ag	0.0396
Zinc, Total	Zn	0.6984

5.3.1 Numeric Ordinance Limits

In addition to the established technically-based local limits, the City has incorporated the following numeric ordinance limits in Section 13.32.040(B) – Specific Prohibitions of the municipal ordinance. These numeric ordinance limits are not site-specific and have not undergone the rigor of approval/ public participation for the technically-based local limits:

- 13.32.040(B)(2) - Any wastewater having a pH less than 6.0 or any other corrosive property capable of causing damage or hazard to structures or equipment of the POTW or to employees of the city
- 13.32.040(B)(13) - At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system, or at any point in the system, be more than five percent nor any single reading over ten percent of the lower explosive limit (LEL) of the meter.

5.3.2 Dilution Prohibition

The City has incorporated a prohibition on dilution in Section 13.32.050(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 established by the City:

"Dilution. No user shall ever increase the use of water, or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the categorical pretreatment standards, or in any other specific pollutant limitation developed by the city or state."

The dilution prohibition language in Section 13.32.050(F) meets the requirement in 40 CFR 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 includes the following requirements for a technical evaluation of the local limits:

"In accordance with EPA policy and with the requirements of 40 CFR sections 403.8(f)(4) and 403.5(c), the Permittee shall determine if technically based local limits are necessary to implement the general and specific prohibitions of 40 CFR sections 403.5(a) and (b).

This evaluation should be conducted in accordance with the latest revision of *the* EPA Region VIII Strategy for Developing Technically Based Local Limits, and after review of the Guidance Manual on the Development and implementation of Local Discharge Limitations Under the Pretreatment Program, December 1987. 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 based upon the findings of the technical evaluation within two-hundred and seventy (270) days from the effective date of this permit."

The City's NPDES permit expired on September 30, 2016 and is currently on administrative extension by the CDPHE. The reissued permit by CDPHE will include a requirement to provide a technical evaluation of the City's local limits to be submitted to the EPA within 12 months of reissuance.

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 state, "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 Section 13.32.050(E) of its municipal ordinance:

"City right of revision. The city reserves the right to establish more stringent limitations or requirements on discharges to the POTW if deemed necessary to comply with the objectives presented herein."

Based on the EPA's review of the Pretreatment records, the City has not established site-specific limits in the control mechanisms.

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*).

According to information gathered during the audit, the City is developing program aids to ensure consistent implementation of the programmatic activities of the Pretreatment Regulations. EPA recommends the City continually 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. In addition, the City developed implementation tools such as permit applications, facility inspection report forms, self-monitoring report compliance evaluation checklists, etc.

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 Procedures

Based on information gathered during the audit, the Pretreatment Coordinator maintains the SIU permit and IU records in their office. The records are maintained for at least five years and are digitized to maximize record space. Due to the Covid Pandemic and the remote nature of the audit, the physical recordkeeping and organization was not observed by EPA.

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. Based on a review of the Pretreatment records documented in §8.4 of this audit report, it does not appear that the City is consistently evaluating the self-monitoring reports for compliance. The City uses SMR check-in and TRC checklists to determine compliance with the permit's narrative conditions and numeric limits.

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 13.32.105 of the municipal ordinance:

"The industrial user must assert any claim of confidential information at the time of submission by stating the words "Confidential Business Information" on each page containing such information. If no such claim is made at the time of submission, the city may make the information available to the public without further notice. 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. If the industrial user feels that the approval authority's findings regarding the classification of information claimed to be confidential are in error, the user may elect to appeal such findings in accordance with Rule 106.A.2 of the state rules of civil procedure.

Information and data on a user obtained from reports, questionnaires, permit applications, permits and monitoring programs and from inspections shall be available to the public or other governmental agency without restriction unless the user specifically requests and is able to demonstrate at the time of submission thereof to the satisfaction of the city or the director that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user.

When requested by the user furnishing a report and such request is approved by the city, the portion of a report which might disclose trade "secrets" or "secret processes" shall not be made available for inspection by the public but sha made available upon written request to governmental agencies for uses related to enforcing this article, the National pollutant discharge elimination system (NPDES) permit, or applicable standards or requirements. Moreover, such po of the report shall be available for use by city, state, or any state agency in judicial review or enforcement proceedings involving the user furnishing the report."

According to information gathered during the audit, the City does not maintain 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). Modifications to the list shall be submitted to the Approval Authority pursuant to §403.12(i)(1)."

The Pretreatment Regulations in 40 C.F.R. §403.12(i)(1) require that programs maintain an IU inventory that contains information on the IU's status under the Pretreatment program. 40 C.F.R. §403.12(i)(1) states that a program shall maintain "An updated list of the POTW's Industrial Users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The POTW shall provide a brief explanation of each deletion. This list shall identify which Industrial Users are subject to categorical Pretreatment Standards and specify which Standards are applicable to each Industrial User.

The list shall indicate which Industrial Users are subject to local standards that are more stringent than the categorical Pretreatment Standards. The POTW shall also list the Industrial Users that are subject only to local Requirements, such as local limits and site-specific BMPs. The list must also identify Industrial Users subject to categorical Pretreatment Standards that are subject to reduced reporting requirements under paragraph (e)(3) and identify which Industrial Users are Non-Significant Categorical Industrial Users."

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

As required by 40 C.F.R. §403.8(f)(2), "develop and implement procedures" that "enable the POTW" to comply with these Pretreatment Program requirements, the City has developed an adequate inventory and characterization procedure for industrial users in the service area and to prepare and maintain a list of industrial users meeting the Significant Industrial User criteria, as required by 40 CFR 403.8(f)(6). The City's IU inventory and characterization procedure and consistent implementation will ensure the City is identifying IUs, characterizing their pollutants, and including this information on the updated IU inventory.

The procedure describes the steps and procedures the City utilizes to develop this list including the following:

- Require all commercial and industrial users fill out waste surveys when they apply for business licenses.

- Coordinate with other city departments (i.e., water, utilities, health and safety, and building departments) concerning new industries in the POTW service area.
- Review periodically business license records or other standard listings of industrial firms, such as Chamber of Commerce rosters or the telephone directory.
- Ongoing inspection and monitoring activities.
- Periodic expiration of permits and subsequent reapplication by permit holders.
- Periodic mailing of a survey questionnaire to industries accompanied by a request to update the information.

In addition to coordinating with other City departments such as the Water, Utilities, Health and Safety, and Building departments, the EPA recommends the City collaborate with the Fire Department because the Fire Department routinely inspects facilities in the service area and may provide additional information regarding potential for significant process/wastewater generation or spill/slug potential in the service area observed during their routine fire prevention inspections.

7.3 Industrial User Database of the City's Service Area

According to information gathered during the audit, the City collaborates with the Building department and requires a waste survey to be completed during the building permit application process. The City receives the waste survey and has to provide a signature on the plan review checklist for the facility to proceed in this process. In addition, the City sends waste surveys to existing IUs in the service area to provide current information and the City routinely reviews the sales tax licenses generated quarterly.

The City provided two spreadsheets (Non-Domestic Inventory.csv and Industrial User Inventory.xlsx) to EPA that represent its industrial user inventory and characterization of the service area. The Non-Domestic Inventory appears to represent all industrial users in the service area and provide a business type for each industrial user. It appears that the City filtered the Non-Domestic Inventory into IUs on the Industrial User Inventory that are either on a control mechanism, have installed a grease interceptor (FOG program) or are subject to the Dental Amalgam Rule.

40 C.F.R. § 403.8(f)(2)(*i-iii*) of the Pretreatment regulations require the City to identify 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.

It appears that the Non-Domestic Inventory is representative of the IUs in the City's service area and provides baseline characterization for these IUs. However, EPA is uncertain if this information is based on current information, as required in 40 C.F.R. §403.12(i)(1). The City needs to update/maintain the Non-Domestic Inventory by ensuring the information and records capture current conditions for the IU, based on available tools to the City such as the industrial waste survey, drive by inspections, facility inspections, sampling, etc.

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 13.32.060(F) – establishes the requirement for SIUs to obtain a wastewater discharge permit.
- Section 13.32.060(E) – establishes the requirement for existing IUs to provide a permit application at least 90 days before the expiration of the permit.
- Section 13.32.060(D)(4)– contains the permit application contents.
- Section 13.32.060(E) – establishes the authority for the City to deny or conditions wastewaters discharged to the public sewers.
- Section 13.32.060(C) – 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

The City has developed a permit template and provided it to EPA for evaluation to ensure it complies with the permit conditions found in 40 C.F.R. § 403.8(f)(1)(iii)(B)(1-6) of the Pretreatment Regulations. Based on EPA evaluation, the SIU permit needs to be updated ot comply with the permit conditions found in the Pretreatment Regulations. These corrective action items to update the permit template, to align with the required and optional Pretreatment Streamlining permit conditions in the Federal Pretreatment Regulations and adopted by the City in its municipal ordinance, are documented in the enclosed City of Louisville Permit Template Review and are included below:

1. Requirement to conduct representative sampling – 40 CFR 403.12(g)(3) and Section 13.32.070(A)(8) of the ordinance.
2. Sample Collection Procedures – 40 CFR 403.12(g)(3-4) and 13.32.070(A)(8) of the ordinance.
3. Pretreatment Streamlining optional permit conditions adopted by the City in the ordinance:
    - Process for Seeking a Waiver for Pollutants Not Present or Expected to be Present – 40 CFR 403.12(e)(2). [Note: Pollutants Not Present provision adopted by the City, but the ordinance needs to be updated to include the required waiver.]
    - Requirements including an identification of the pollutants to be monitored (including the process for seeking a waiver for a pollutant neither present nor expected to be present in the Discharge in accordance with 40 CFR 403.12(e)(2), or a specific waived pollutant in the case of an individual control mechanism), sampling location, sampling frequency, and sample type, based on the applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law [Note: Pollutants Not Present provision adopted by the City but the ordinance needs to be updated to include the required waiver.]
    - Equivalent mass or concentration limits - report a reasonable measure of the User's long-term production rate – 40 CFR 403.12(e)(4) and 13.32.050(B)(1) of the ordinance.
    - Annual certification for NSCIU – 40 CFR 403.12(q) [Note: NSCIU provision adopted by the City but the ordinance needs to be updated to include the required certification.]
    - The City needs to determine if the Environmental Compliance Specialist has the appropriate delegation of authority to sign the wastewater discharge permits.

8.4 Specific Permit Record Findings

The City has identified twelve IUs that have been issued a permit under the Pretreatment program. Eight of these IUs employ a zero-discharge wastewater management and are issued zero discharge permits. The City issues wastewater discharge permits to two SIUs subject to categorical Pretreatment Standards and two SIUs subject to 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 Pretreatment 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." All SIU inspection reports reviewed during the audit include minimal descriptions of the facility's unit operations and do not provide adequate characterization of the facility. The SIU inspection reports 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.
2. Fact sheets or permit rationales should include an adequate justification of all permit conditions, including most stringent permit limits based on an evaluation of all Pretreatment Standards, seasonal discharge flow volume for the SIU, representative monitoring type/frequencies based on the SIU's wastewater discharge and recent compliance history, slug discharge/spill potential, reporting frequency and reportable data (min/max pH and daily average and total monthly flow for every month in the reporting period), TOMP requirement (Metal Finishers), adequacy of BMPP (slug discharge control plan) based on current conditions.
3. The Pretreatment regulations at 40 CFR 403.8(f)(2)(iv) require the City to develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program. At a minimum, these procedures shall enable the City to receive and analyze self-monitoring reports and other notices submitted by Industrial Users in accordance with the self-monitoring requirements in §403.12.
   a. The self-monitoring compliance reports were not consistently date stamped and EPA could not determine if these reports are received within the due date required by the permit. The City needs to consistently date-stamp the received self-monitoring reports and notices to ensure the received date of the report or notification is recorded and complies with the permit-required due dates.
   b. The self-monitoring (SMR) Checkin sheets are a useful tool for the City to evaluate if the report is complete and complies with permit conditions. However, the City should ensure these checklists are specific to the permit limits and reporting requirements for the SIU. For example, the City should ensure the Water Treatment Plants accurately calculates its compliance with the Mn mass-based loading.
   c. The City was not consistently determining the SIU's compliance with narrative SNC standards but recently changed its TRC checklists to include evaluation of this criteria. The TRC checklist needs to include the Failure

to report an accident, prohibited or non-permitted discharge, established in the City of Louisville ordinance to ensure the compliance evaluation is complete.

4. The local limits applicability language Section 13.32.120(B) is as follows:

   > "Mass limitations for permitted users. The director of public works or his designated agent may impose mass limitations on permitted users subject to a federal, state, or city standard. Such mass limitation may be imposed through such user's industrial wastewater discharge permits. The total mass of pollutants allocated to all permitted industrial users shall not exceed the level specified below. Changes in local limits due to increased or decreased loading in the service area, or due to other special conditions, including but not limited to water quality stream standards, NPDES discharge permit limits, or other conditions as determined by the director, may cause a change in these allocations. Industrial users shall monitor and report daily flows as required by the wastewater contribution permit. Allocations may be revoked by the director and shall not be considered property rights."

   a. The City's calculated MAIL for all permitted users in the service area is 0.5506 lbs/day. The City has over allocated the Mn MAIL by allocating 100% of the MAIL (0.5506 lbs/day) as mass-based limits to Kiosk and the Water Treatment Plants in each permit. The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law." The City needs to appropriately allocate the MAIL to eligible permits and ensure the calculated MAIL is not exceeded.

8.4.2 Hope Foods

1. The previous permit expired on October 1, 2019 and was administratively extended until a permit was reissued on July 1, 2020. The permit was reissued when the new pretreatment coordinator identified and corrected this issue. The City has not established the authority to administratively extend permits in its ordinance, and 40 CFR 403.8(f)(1) requires the city to operate pursuant to its legal authority. The City should either establish the authority to administratively extend permits in its municipal ordinance or ensure the permits are reissued upon expiration. (Note: The Federal Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(1) do not allow a permit duration including administrative extensions to extend past 5 years.)
2. 40 CFR 403.12(g)(3) requires that the self-monitoring 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. The Control Authority shall require that frequency of monitoring necessary to assess and assure compliance by Industrial Users with applicable Pretreatment Standards and Requirements.

a. The permit requires Hope Foods to sample BOD and TSS as composites. The associated fact sheet does not identify the discharge method for this SIU and the specific sampling protocols (e.g., flow-proportional, 8-hour time proportional) that are representative of the production day's discharge. The City need to determine sampling methods for BOD and TSS that are representative of the production day's discharge and update the permit to incorporate this specific sampling method.

3. 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 and ensure these are received within the due date required by the permit. The City did not date stamp self-monitoring reports for 3rd and 4th quarters 2019 and 1st quarter 2020. Therefore, EPA was not able to determine if these reports were received within the permit-required due dates. The City needs to ensure it consistently date stamps all reports, notifications and other correspondence required by permit with due dates.

4. Based on a review of the 2020-2021 Pretreatment records, Hope Foods has a significant non-compliance history with permit conditions and limits. The City has adequately identified and responded to these violations with enforcement remedies (NOVs), with the following exceptions:

   a. Hope Foods failed to respond to the June 14, 2019 NOV within the 30 days specified in the NOV. The NOV response was received on July 19, 2019. There is no record that the City provided an enforcement response to this violation. The City needs to provide an adequate enforcement response to this violation, according to its ERP.

5. Hope Foods has a record of non-compliance with pH in 2020 and 2021, including pH characteristics and volume of non-compliant discharges. The City issued NOVs for 3rd quarter 2020 on November 3, 2020, for 4th quarter 2020 on February 3, 2021, and for 1st quarter 2021 on April 13, 2021. Hope Foods responded to all NOVs by stating that "The out of service state will be alarmed, requiring Maintenance to correct the situation." or that it plans to install a pH alarm.

   a. EPA is concerned that Hope Foods has not installed a pH alarm as it stated in its responses to the NOVs issued by the City. The City needs to evaluate if the pH alarm has been installed and if it is effective to eliminate or minimize the numerous pH violations. Escalated enforcement actions may be warranted to ensure compliance with pH.

6. The Pretreatment regulations at 40 CFR 403.8(f)(2)(v) require the City to "Inspect and sample the effluent from each Significant Industrial User at least once a year." This is required for all permit-limited pollutants of concern. The City sampled Hope Foods in 2019 and 2020 but EPA was unable to determine

if pH was monitored in 2019. The City needs to determine if pH was sampled in 2019 to determine compliance and provide this data to EPA.

8.4.3 Kiosk Information

1. The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on <u>applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law</u>." This requires the City to apply the applicable and most stringent of the local limits and categorical Pretreatment standards.
    a. The Kiosk permit includes both local limits and Metal Finishing New Source limits and does not adequately establish the most stringent permit limits for cadmium (Cd), copper (Cu), lead (Pb), nickel (Ni), silver (Ag), and zinc (Zn). The City needs to modify the permit to establish Cd, Cu, Pb, Ni, Ag, and Zn limits that are the most stringent limit between the City's local limits and categorical Pretreatment standards.
2. The City's municipal ordinance at §13.32.040(B)(2) establishes a lower pH limit of 6.0 std units. There is no upper pH limit established in the City's ordinance, The Kiosk permit establishes a pH limit range of from 6.0 to 12.0. The City does not have the authority to establish a 12.0 pH limit in the Kiosk permit unless the 12.0 pH limit is established as a site-specific limit, subject to public notice. The City needs to modify the permit to delete the unenforceable 12.0 pH limit or public notice the permit to establish this pH limit as a site-specific limit.
3. The City's calculated MAIL for all permitted users in the service area is 0.5506 lbs/day. The City has allocated 100% of the Mn MAIL (0.5506 lbs/day) as a mass-based limit in the Kiosk permit. The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law." The Kiosk permit needs to be modified to establish the appropriate allocation of the Mn MAIL and ensure the calculated MAIL is not exceeded.
4. 40 CFR 403.12(g)(3) requires that the self-monitoring 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. The Kiosk permit allows for pH to be monitored prior to discharge to the City, which is not representative. Reportable and enforceable pH data must be gathered during discharges from the batch tank.
5. 40 CFR 403.12(g)(3) requires that the self-monitoring 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. The Control Authority shall require that frequency of monitoring necessary to assess and assure compliance by Industrial Users with applicable Pretreatment Standards and Requirements. The Kiosk permit allows for grab sampling in Table 3. There is no justification in the permit records if a grab sample is representative of the production day's discharge. The City needs to include justification in the permit records or fact sheet if grab sampling is representative.

6. 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 and ensure these are received within the due date required by the permit. The City did not date stamp self-monitoring reports for a time period from 2nd quarter 2019 through 2nd quarter 2020. Therefore, EPA was not able to determine if these reports were received within the permit-required due dates. The City is required to ensure it consistently date stamps all reports, notifications and other correspondence required by permit with due dates.

7. Kiosk had a copper (Cu) violation on December 4, 2019 with the permit limit of 0.845 mg/L. The data from the December 4, 2019 sample showed a result of 0.98 mg/L. based on a review of the Pretreatment records, it appears that the City has not provided an enforcement action for the December 4, 2019 Cu violation. The City needs to provide an adequate enforcement response to this violation, according to its ERP.

8.4.4 Immunity Bio

1. Immunity Bio was determined to meet the criteria of a non-significant categorical industrial user (NSCIU) and was issued a letter dated June 3, 2019 stating that based on the baseline monitoring report, this facility will never discharge more than 100 gallons per day of categorical wastewater, will never discharge concentrated wastewater and consistently complies with all applicable categorical Pretreatment Standards and Requirements. However, Immunity Bio had not discharged as of the date of the letter and did not develop a compliance history that demonstrated consistent compliance with all Pretreatment Standards.

2. In addition, based on EPA's review of the Pretreatment records, it is unclear if Immunity Bio meets the 100 gpd ceiling threshold. The inspection reports and permit rationale do not adequately provide clear justification for this NSCIU designation. The inspection reports describe a treatment holding tank that if discharged, appears to exceed the 100 gallons/day threshold.

3. The City issued a wastewater discharge permit effective April 1, 2021 through April 1, 2024. The permit includes categorical Pretreatment Standards for New Sources for a SIU subject to the Pharmaceutical Manufacturing, Subpart A-Fermentation Products found at 40 CFR §439.17. The permit also includes

monitoring, notification and quarterly reporting requirements for a categorical industrial user (CIU).

Although the fact sheet and permit state that this permit is issued for an NSCIU, the permit conditions do not reflect this NSCIU designation. As identified in items #1 and 2 of this section, it is unclear if Immunity Bio meets the consistent compliance and below 100 gallons/day NSCIU criteria.

a. The Pretreatment Regulations at 40 CFR 403.12(e) require a CIU to sample for all permit-limited parameters at a minimum frequency of twice per year. The Immunity Bio permit establishes annual sampling of permit-limited parameters. The permit must be modified to establish the minimum twice per year sampling frequency.

b. The permit allows for pH to be monitored prior to discharge. Reportable and enforceable pH data must be gathered during discharges from the batch tank.

4. NSCIU Self-Monitoring Report

a. Immunity Bio failed to submit the 2019 annual certification by the January 30, 2020 due date Immunity Bio submitted a NSCIU compliance report on October 31, 2020 that covered a reporting period from January 1, 2019 through October 31, 2020. The late report for 2019 is a violation of the City's reporting conditions and also exceeds SNC criteria for a late report past 45 days. The City needs to provide an adequate enforcement response to the late 2019 reporting violation, according to its ERP.

b. Immunity Bio failed to provide an NSCIU report that covers the reporting period from November 2020 to December 2020. The failure to report for the reporting period from November 2020 to December 2020 is a violation of the City's reporting conditions and also exceeds SNC criteria for a late report past 45 days. The City needs to provide an adequate enforcement response to this violation, according to its ERP.

c. These reporting violations demonstrate that Immunity Bio has not demonstrated consistent compliance with all Pretreatment Standards and Requirements, that is the requirement to provide reports within the due dates.

8.4.5 City of Louisville Water Treatment Plants

1. Permit application signed on December 7, 2018 was not date stamped by the City. EPA was unable to determine if the permit application was received by the permit-required due date. The City needs to ensure it consistently date stamps permit applications required by permit with due dates.

2. The City's calculated MAIL for all permitted users in the service area is 0.5506 lbs/day. The City has allocated 100% of the Mn MAIL (0.5506 lbs/day) as a mass-based limit in the City of Louisville Water Treatment Plants' permit. The Pretreatment Regulations at 40 CFR 403.8(f)(1)(iii)(B)(3) require the City to

issue an enforceable permit that contains "Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law." The City of Louisville Water Treatment Plants' permit needs to be modified to establish the appropriate allocation of the Mn MAIL and ensure the calculated MAIL is not exceeded.

3. The City's municipal ordinance at §13.32.040(B)(2) establishes a lower pH limit of 6.0 std units. There is no upper pH limit established in the City's ordinance, The City of Louisville Water Treatment Plants' permit establishes a pH limit range of from 6.0 to 12.0. The City does not have the authority to establish a 12.0 pH limit in the City of Louisville Water Treatment Plants' permit unless the 12.0 pH limit is established as a site-specific limit, subject to public notice. The City needs to modify the permit to delete the unenforceable 12.0 pH limit or public notice the permit to establish this pH limit as a site-specific limit.
4. 40 CFR 403.12(g)(3) requires that the self-monitoring 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. The Control Authority shall require that frequency of monitoring necessary to assess and assure compliance by Industrial Users with applicable Pretreatment Standards and Requirements.
    a. The permit requires the Water Treatment Plants to sample the local limits pollutants of concern as composites. The associated fact sheet does not identify the discharge method for this SIU and the specific sampling protocols (e.g., flow-proportional, 8-hour time proportional) that are representative of the production day's discharge. The City need to determine sampling methods for local limits pollutants that are representative of the production day's discharge and update the permit to incorporate this specific sampling method.
    b. The permit establishes continuous monitoring for pH as the sampling frequency but also establishes a grab sample as the sample type for pH. EPA recommends the City establish continuous monitoring and recording as the sample type and reporting requirement.
5. Self-Monitoring Reports:
    a. The City did not date stamp self-monitoring reports for the 2nd quarter 2019 through the 4th quarter of 2019. EPA was unable to determine if these SMRs were received within the due date specified in the permit. The City needs to ensure it consistently date stamps all reports, notifications and other correspondence required by permit with due dates.
    b. Based on EPA's review of self-monitoring reports for 2019 through 1st quarter 2021, the following calculation errors were discovered for Outfalls 001(Howard Berry Plant) and 002 (Sid Copeland Plant). The City needs to ensure the Water Treatment Plants accurately calculate

and report their compliance with the Mn mass-based limit. In addition, the City needs to provide an enforcement action for reporting inaccurate data.

i. 1st quarter of 2019 – The Water Treatment Plants reported no flow at outfall 002 on February 28, 2019, however, a sample was taken with analytical results on that date and the Plant reported a Mn loading value of 0.0000 lbs/day.

ii. 1st quarter of 2020 – The Water Treatment Plants reported a Mn loading of 0.36062 lbs/day on March 6, 2020 at outfall 002, EPA calculated a Mn loading of 0.0561 lbs/day.

iii. 4th quarter of 2021 – The Water Treatment Plants reported a Mn loading of 0.0093 lbs/day on January 20, 2021 at outfall 001; EPA calculated a Mn loading of 0.0124 lbs/day. In addition, the Water Treatment Plants reported that Howard Berry Plant (outfall 002) was offline for the reporting period. However, a review of flow records indicate that flow was reported from January 1, 2021 through January 6, 2021 and on January 13, 2021.

c. The EPA recommends the City evaluate the water treatment plants seasonal production and establish monitoring and reporting frequencies to ensure the permit conditions address production and loading variability that may occur at the water treatment plants.

8.4.6 Solid Power

1. None identified

8.4.7 Mark Williams Enterprises

1. None identified

8.4.8 Lockheed Martin

1. The BMPP (slug discharge control plan) generated by Lockheed Martin is very general and does not provide site specific information regarding the measures/equipment/housekeeping/operator training to minimize or eliminate slug discharges and spills. The City needs to ensure the slug discharge control plan meets the site-specific elements required in 40 CFR 403.8(f)(2)(vi)(A-D):

    a. Description of discharge practices, including non-routine batch Discharges.
    b. Description of stored chemicals.
    c. Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b) with procedures for follow-up written notification within five days.
    d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling

and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

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 §13.32.080(A) of the municipal ordinance:

1. "The city 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 ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.
2. Where required pursuant to this chapter or pursuant to terms and conditions of the wastewater discharge permit, the user shall provide and operate, at his expense,

monitoring equipment and facilities sufficient to allow inspection, sampling, and flow measurement of the user's sewer systems. The monitoring equipment and facilities shall be situated on the user's premises or such other location as approved by the city.

3. There shall be ample room in or near such monitoring manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling, and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.
4. The city may randomly sample and analyze the effluent from industrial users and conduct surveillance activities in order to identify, independent of information supplied by the industrial users, occasional and continuing noncompliance with pretreatment standards, and inspect and sample the effluent from each significant industrial user at least once a year pursuant to 40 CFR 403.8(f)(2)(v).
5. Whether constructed on public or private property, the sampling and monitoring equipment and facilities shall be provided in accordance with the city's requirements and all applicable local construction standards and specifications. Construction shall be completed within 90 days following written notification by the city unless another date is specified in the wastewater discharge permit.
6. The city may inspect the equipment and facilities of any user at any time during normal business hours to ascertain whether they are in compliance with applicable ordinances, rules and regulations. In the case of emergency the city may cause such inspection to occur at any time. Occupants of premises where wastewater is created or discharged shall allow the city or its representative entry for purpose of inspection, sampling, records examination, records copying or the performance of any other rights or responsibilities under this chapter. The city, state and EPA shall have the right to set up on the user's property such devices as are necessary to conduct sampling inspection, compliance monitoring, or metering operations. Where a user has security measures in force which would require proper identification and clearance before entry into their premises, the user shall make necessary arrangements with its security force/system so that upon presentation of suitable identification, personnel from the city, state and EPA will be permitted to enter, without delay, for the purposes of performing their specified responsibilities. Unreasonable delays in allowing the city, state and EPA access to the user's premises shall be a violation of this chapter. The city may sample and inspect without notice and at monitoring locations other than that specified in the permit to determine compliance independent of information supplied by the user. This sampling may be performed at monitoring locations on the user's property and without notification to the user.
7. In the event a duly authorized officer or agent of the city is refused admission for any purpose, the city may cause water and/or sewer service to the premises in question to be discontinued until the city's officer or agent has been afforded reasonable access to the premises and sewer system to accomplish the inspection or sampling.

8. All measurements, tests and analysis of the characteristics of wastewater to which reference is made in this section shall be determined in accordance with 40 CFR 136 or, where not addressed in accordance with procedures established by the EPA pursuant to Section 304(h) of the Act (33 USC 1314(h)), or with any other test procedures approved by the EPA administrator. In the event that no special facility has been required, the point of inspection shall be the downstream manhole in the POTW sewer nearest to the point at which the building sewer is connected to the public sewer. All measurements, tests, and analysis, and all sampling shall be at the expense of the user."

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 POTW*s, 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. 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 provides 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

Due to the Covid-19 pandemic and the remote Pretreatment audit, there were no onsite facility inspections completed.

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 in Section IV of the QAQC Program document. This section provides a general overview of the sampling equipment and techniques. The City needs to update the sampling plan to address 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 CFR 136. In addition, the sampling plan needs to be updated to provide site-specific sampling protocols at the SIUs that are representative, based on the SIU's wastewater discharge for the production day. The update of the City's sampling plan will meet the requirements found in 40 C.F.R. § 403.8(f)(2)(viii), to ensure consistent implementation of sampling techniques/methods and QA/QC to produce representative and 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 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 §§13.32.150(A)and 13.32.150(C).
2. Injunctive relief provisions established in §13.32.150(D).
3. Authority to enforce against falsification/tampering established in §13.32.150(F).
4. Notice of violations authority established in §13.32.130(B).
5. Administrative orders authority established in §13.32.130(B).
6. Administrative penalty authority established in §13.32.130(B).
7. Show cause hearing provisions in §13.32.130(D).
8. Suspensions of service provisions in §13.32.130(G).
9. Permit termination provisions established in §13.32.130(F).
10. Publication of IUs in significant noncompliance in §13.32.105.

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 include the following, in accordance with 40 C.F.R. § 403.8(f)(5)(i-iv): (*Note: the Louisville ERP Review checklist will be enclosed with the audit report*)

- **Describe how the POTW will investigate instances of noncompliance.**
    - The City needs to address the implementation procedures utilized to investigate instances of noncompliance which includes procedures for IU Inventory/Inspection and Permitting procedures.

- **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.**
    - The City needs to establish escalating enforcement responses it will take for the following types of IU violations:
        - SNC criteria for Reporting Violations or Deficiencies/Late Reports (BMRs, 90-day compliance reports, self-monitoring compliance reports, compliance schedule reports) – SNC criteria needs to be updated to more than 45 days late, pursuant to §13.32.020-SNC definition, #F
        - Analytical Deficiencies (hold time exceedances, etc)
        - Tampering with monitoring equipment/methods
        - Sector control programs and BMPs
        - SNC Narrative Criteria found in §13.32.020-Significant Noncompliance definition, #C. "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 Narrative Criteria found in §13.32.020-Significant Noncompliance definition, #D. "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 Narrative Criteria found in §13.3217.1.20-Significant Noncompliance definition, #G. "Failure to accurately report noncompliance."
        - SNC Narrative Criteria found in §13.32.20-Significant Noncompliance definition, #H. "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 Narrative Criteria found in §13.32.20-Significant Noncompliance definition, #I. "Failure to report an accident, prohibited or non-permitted discharge."
- **Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards.**
    - Note: Public Notice of SNC violations is a public participation requirement required by the Federal Regulations and by City ordinance and is not considered to be an enforcement response to the violation.

11.4 Compliance Evaluation

Based on EPA's review described in §8.4 of this audit report, it appears that the City is consistently evaluating compliance in the self-monitoring reports or notices of violation, with a few exceptions.

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).

The City stated that it performs SNC calculations or determinations with every self-monitoring compliance report with SMR check-in and TRC check-in sheets. The City needs to ensure the SNC calculations also include a determination if the narrative SNC criteria (such as compliance reports or notifications submitted later than 45 days past the due date) have been exceeded.

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 §13.32.040(b)(8) of the municipal ordinance:

"Any trucked or hauled pollutants, including but not limited to, commercial, industrial or domestic generated wastes, except at points designated by the POTW."

12.3 Trucked and Hauled Waste Disposal Location and Control Mechanisms

The City does not currently accept trucked and hauled waste at its POTW.

According to information received during the audit, the City has an RV dump station near the POTW that appears to be in control to protect against the discharge of illicit wastes. The residents of the City are assigned an annual card to gain access for discharge. In addition to the card access, the RV site is under video to minimize or eliminate the potential for illicit discharges.

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 §13.32.20.
- BMP recordkeeping requirements in §13.32.070(A)(9).
- BMPs established as a permit condition in §13.32.060(C)(3).
- BMPs established as an SNC criterion in §13.32.20-SNC Definition.

13.3 Sector Control Programs

13.3.1 Oil and Grease Sector Control Program

The City is currently working on developing and implementing a oil and grease sector control program and are identifying the number of food service establishments and installed interceptors and oil-water separators in the service area. The City should continue to evaluate its implementation of the oil and grease BMP-based sector control programs (grease interceptors-FOG and sand interceptors-POG) to ensure the oil and grease loadings to the collection system are minimized.

13.4 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 eighteen dental facilities in its industrial waste survey and has received one-time compliance reports within the deadline required by the Rule. Based on EPA's review of the one-time compliance reports, the City should follow up with the Cheryl McCarty dental office located on 333 South Boulder Road, #3. Their one-time compliance report states that the office practices general dentistry but has certified to be exempt based on that the office (1) it does not place dental amalgam, and (2) it does not remove amalgam except in limited emergency or unplanned, unanticipated circumstances.