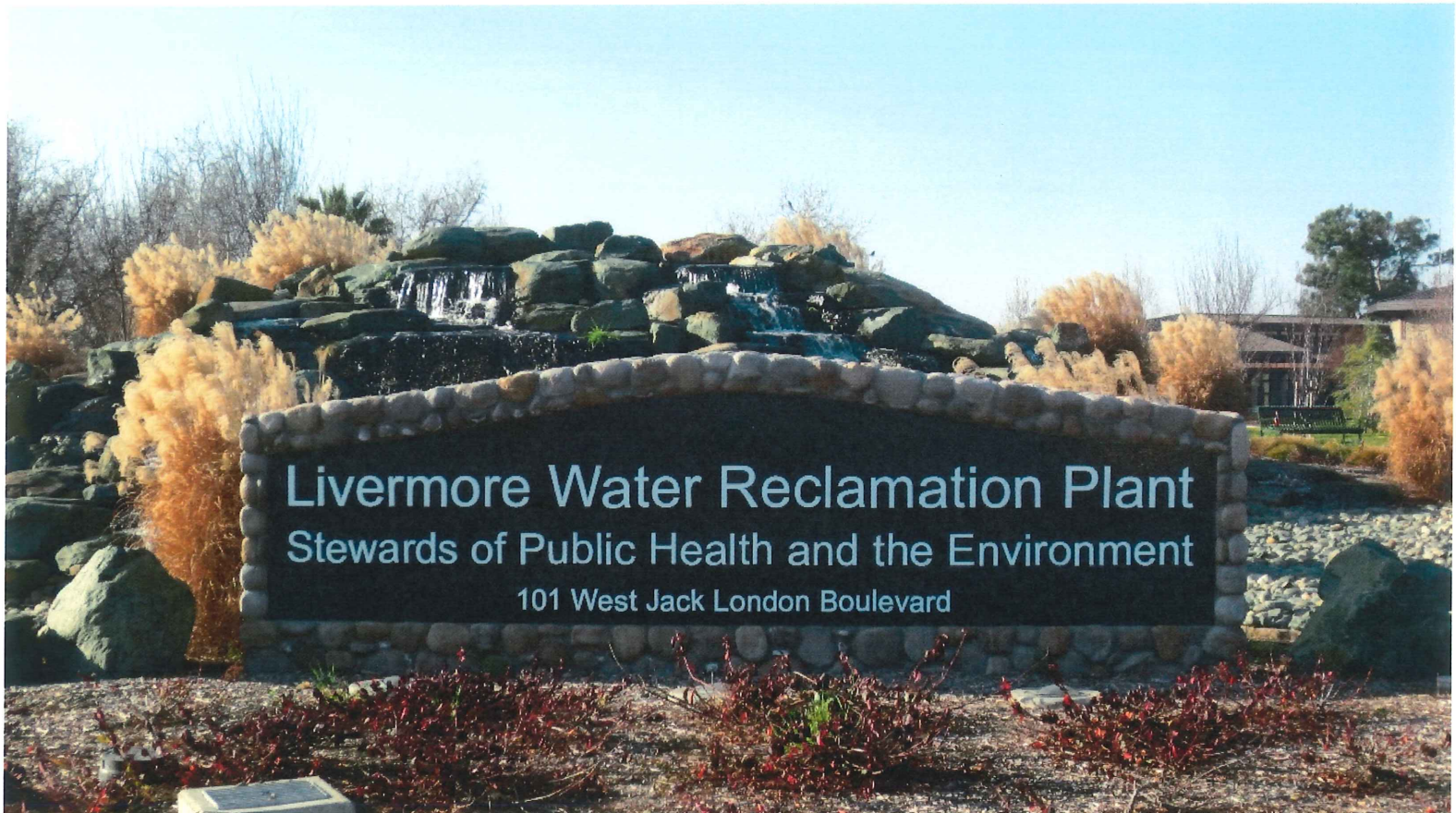


City of Livermore

Water Resources Division

2020 Annual Pretreatment Report



POTW Name: LIVERMORE, CITY OF

NPDES Permit #: CA0038008

Period Covered By This Report: 01/01/2020 (PSSD) 12/31/2020 (PSED)

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**CITY OF LIVERMORE
WATER RECLAMATION PLANT**

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City of Livermore Water Resources Division

2020 Annual Pretreatment Report

1.0 Report Cover Sheet

NPDES Permit Holder:	City of Livermore, Alameda County, California
Report Date:	January 27, 2021
Period Covered by This Report:	01\01\2020 through 12\31\2020
Period Covered by Previous Report:	01\01\2019 through 12\31\2019

Name of Wastewater Treatment Plant:

Livermore Water Reclamation Plant (LWRP)

NPDES Permit Number:

CA 0038008

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City of Livermore

2020 Annual Pretreatment Report

2.0 Introduction:

The Livermore Water Reclamation Plant (LWRP) provides wastewater collection, treatment, and disposal for approximately 91,411 Livermore residents, local business, industry, and a few areas outside of the City limits including Sandia National Laboratory (SNL) and the Ruby Hills development. The LWRP is located on approximately 40 acres on the Western edge of the City. The down gradient location of the Plant allows most of the City's sewage to be collected by gravity.

The LWRP treated an average of 5.443 million gallons of wastewater per day in 2020. The maximum treated during this period was observed in March 2020 with an average influent of 5.737 million gallons per day. A portion of the LWRP influent is treated to reclaimed water standards and reused within the City. The major utilization of LWRP recycled water was used to irrigate landscaped areas at the LWRP, the municipal airport, Las Positas golf course, Las Positas Junior College, Landscaping along Isabel Avenue/Highway 84 as well as, provide fire protection for the airport hangars and local businesses. Additionally, recycled water is used for restroom toilets and landscaping in the Oaks Business Park development located near Isabel Avenue and West Jack London Blvd.

The LWRP completed the last expansion in July 1993; this increased the firm reliable rated capacity of the plant to accommodate an average dry weather flow of 8.5 MGD. Based on this data the plant can currently accommodate future growth in the service area. Daily monitoring of treatment processes and equipment performance at LWRP helps to ensure continuous compliance with all currently established requirements. Process control samples are taken daily, and analytical results are used to adjust process parameters. The plant's Supervisory Control and Data Acquisition (SCADA) system monitors, controls and notifies operators of malfunctions. All historical data is backed up and saved on a regular basis. To help ensure that critical equipment can be relied upon, the City has a preventative and corrective maintenance program. Maintenance requirements for equipment are catalogued within the computerized maintenance management system (CMMS) and work orders are tracked to ensure that maintenance is performed.

Under the pretreatment program, the City issues wastewater discharge permits on an annual basis to each significant industrial user (SIU), and any other users determined to be of potential concern to the LWRP. The permits contain a statement of duration, a statement of non-transferability, applicable effluent limitations, self-monitoring and reporting requirements, and a statement of applicable penalties. In addition to the self-monitoring performed by SIUs, the City conducts inspections and sampling of each SIU a minimum of once per year. The City has developed an Enforcement Response Plan (ERP) which lists the escalating enforcement procedures used by the City to enforce Federal, State, and Local discharge limitations and regulations. The pretreatment program maintains an inventory of industrial businesses in the City by working with other City departments, reviewing business license information, reviewing planning and building project referrals, and conducting business and industrial park survey

inspections. In addition, City staffs performing inspections under the Stormwater and Pollution Prevention Programs identify facilities of concern to the pretreatment program.

Industrial contributions account for approximately 10% of the total flow to the LWRP. The largest users, Lawrence Livermore National Laboratory & Sandia National Laboratory, comprised combined average daily discharge of 325,662 gallons, which represented approximately 5.98 percent of the total influent flow on the average day to the LWRP in 2019.

The City's Pretreatment Program helps educate citizens groups and industrial users about the needs and problems associated with operating a wastewater treatment plant by providing informational brochures and facility tours. For more information on public activities by the City see section 12.0 entitled "Public Participation Summary".

Tetra Tech Inc., a USEPA contractor, conducted a Pretreatment Compliance Audit (PCA) of the City of Livermore's Industrial Pretreatment Program on April 20-21, 2017. On February 20, 2018, the City of Livermore received a copy of the "Pretreatment Compliance Audit Final Summary Report" sent by the San Francisco Regional Water Quality Control Board. The City submitted a detailed response addressing each of the "Required" actions and "Recommendations" that were contained in the Pretreatment Compliance Audit Summary Report to the San Francisco Bay Regional Water Quality Control Board on April 16, 2018.

The City of Livermore is a part of the statewide "California Water/Wastewater Agency Response Network" (CalWARN). The CalWARN agreement provides the basis for providing and receiving aid between wastewater treatment and collection system agencies in times of major emergencies. Safeguards to minimize accidental discharge from the wastewater treatment plant are built into the design and operation of facilities and equipment. Storage tanks are constructed with the required 110% of secondary capture volume to mitigate any accidental discharge. These are inspected periodically to ensure their integrity. Scenarios for accidental discharge from plant process tanks have been reviewed and it is concluded that any discharge would be minimal. If a discharge should occur, the plant under-drain system would capture and direct all such discharges to the LWRP lined holding basin for proper treatment. The City of Livermore's Engineering Division manages the Capital Improvement Program (CIP) for the Water Resources Division (WRD). All WRD sections contribute to the planning and budgeting efforts for current and future CIP projects. The Engineering Division has assigned an Associate Engineer to implement and manage the CIP for WRD-related projects, as well as any emergency projects that may arise. The Engineering Division is adequately staffed to support current needs of the WRD.

The following provides a summary of the major CIP projects that were planned and/or commenced during the reporting period.

A. Sanitary Sewer System

Point Repairs

During 2020, 4 laterals were replaced, and 1 mainline spot repair were completed by an on-call contractor. Repairs done in-house within the City's existing sanitary sewer system consisted of

3 mainline repairs and 2 lateral spot repairs, and 3 manhole rehabilitations. Spot repairs are identified as mainline or lower lateral problems are found during regular maintenance cleaning or televised sewer inspection by Collection Systems Section staff. Typical repairs include the replacement of pipes with severe offset joints, broken pipe segments, short sags, and damaged manhole channels.

Annual Sanitary Sewer Replacement – CIP Project 201803 / 202203

In some cases, the sewer inspection activities referenced above lead to the identification of pipeline segments that require full replacement instead of spot repair. These identified pipeline segments are replaced using trenchless or open-cut construction methods. These pipeline segments usually are replaced as part of a single Capital Improvement Project.

In 2020, the City of Livermore continued to plan for the upcoming Annual Sanitary Sewer Replacement project. Due to turnover in Engineering Division staff, Covid-19 related concerns, and the City placing high priority on storm water projects, the Annual Sanitary Sewer Replacement project was further delayed by the Engineering Division. The project is currently undergoing alternatives analysis to evaluate right-of-way and permitting requirements. It is anticipated that design and construction will be completed during fiscal year 2021/22.

B. Treatment Plant

WRP Aeration Tank Modifications

The Water Reclamation Plant has two aeration tanks, Aeration Tank 1 and Aeration Tank 2, which were originally constructed in 1965 and 1980, respectively. Each tank is sized to treat existing and future build-out flows.

Phase 1 improvements in 2014 consisted of upgrades and repairs to Aeration Tank 1 so that it could be placed into service, and Aeration Tank No. 2 taken out of service. Aeration Tank 2 is being rehabilitated as part of the WRP Phase 2 Aeration Tank Modifications project. The project is currently under construction, with work estimated to be completed by April 2021.

The Phase 2 improvements include replacing equipment in Aeration Tank 2 and structural, process, and energy efficiency improvements to both aeration tanks. The project also includes installing new diffusers, rehabilitating equipment, modifying piping and appurtenances, and repairing concrete structures. The installation of new diffusers will reduce the long-term energy requirements at the plant. Other rehabilitations will allow either tank to be used for full treatment and, therefore, provide full system redundancy.

WRP Emergency Generator

The WRP Emergency Generator Project involves installing an emergency generator at the Water Reclamation Plant. The emergency generator will provide emergency power for all electrical loads and allow the Water Reclamation Plant to sustain wastewater treatment during a power outage. The generator was commissioned for manual operation in October 2020. Automatic transfer switching is under construction and is estimated to be completed in January 2021, pending required coordination with Pacific Gas and Electric Company.

WRP Primary and Secondary Treatment Improvements

The WRP Primary and Secondary Treatment Improvements Project includes modifications to the Influent Pump Station, Primary Effluent Pump Station, Primary Clarifiers, Secondary Clarifier No. 2 and Odor Control. Replacing aged equipment will increase the efficiency and reliability of plant operations. Structural rehabilitation will extend the useful life of treatment systems. Adding an additional influent screen will provide redundancy, improve treatment, and reduce maintenance of downstream equipment. Increasing the size of the odor control treatment system will increase ventilation, reduce odors, and reduce future corrosion. The odor control system will be expanded to include the primary effluent pump station and the grit building. The project design started in October 2020 and will be completed by December 2021.

3.0 Definitions

For a list of definitions used by the Livermore Water Reclamation Plant to describe or characterize elements of the pretreatment program see [Appendix 3.0](#) entitled "Glossary of Terms".

4.0 Discussion of Upset, Interference and Pass-Through

The LWRP did not experience any process upsets or interference that could be attributed to influent characteristics during this annual reporting period. These results are detailed in [Appendix 4.0](#) entitled "2020 Influent/Effluent/Biosolids".

Monitoring of the LWRP influent and effluent showed concentrations of heavy metals, and organics to be well below levels of concern, and below NPDES permit requirements. Laboratory analysis performed on the LWRP sludge also showed the concentration of heavy metals, cyanide and toxic organics to be below required limits.

The City's wastewater discharge permits require IUs to have a spill prevention and containment plan that addresses the protection of the sanitary and storm drain systems. The purpose of this plan is to prevent plant upsets, interferences, and/or pass-through. The permit also requires the IUs to immediately notify the LWRP in the event of a slug, spill, or accidental discharge that may enter the sanitary system.

5.0 Influent, Effluent and Sludge Monitoring Results:

The City performs priority pollutant influent, effluent, and sludge monitoring on a semi-annual basis: once during the wet season, and once during the dry season. Additional daily, weekly, monthly, and quarterly monitoring results are reported in the monthly reports submitted to the State Water Resources Control Board by the Water Resources Division staff.

For a discussion of the semi-annual monitoring results, as well as more information on sampling procedures, dechlorination methods, and data validation refer to [Appendix 5.0](#) entitled "Semi-Annual Influent, Effluent, and Sludge Monitoring Program."

A summary of Metal Monitoring data of the LWRP influent and effluent for the five-year period of 2016-2020 is contained in [Appendix 5.0](#). With the exception a few data point outliers the influent and effluent heavy metal loading averages remained generally stable across the five-year period.

6.0 Inspection and Sampling Program

The City requires some CIUs to perform self-monitoring sample programs and to submit the analytical results to the City to verify compliance with Federal, state, and local regulations. City staff collects monitoring samples to determine compliance for those CIUs not performing self-monitoring programs. The City conducts annual compliance inspections and performs wastewater monitoring of each CIU a minimum of two times per year as part of our efforts to review process operations and to confirm the self-monitoring reports submitted by IUs. The City uses this inspection and sampling frequencies in compliance with 40 CFR 403.12(g). Details regarding inspection formats and chain of custody procedures can be found in [Appendix 6.0](#) entitled "City of Livermore, Inspection/Sampling Program".

Details for information on wastewater permits and permit applications can be found in [Appendix 6.0](#) entitled "Wastewater Discharge/Chemical Storage Permit".

Enforcement Procedures:

In accordance with 40 CFR 403.8(f)(5) the City has developed and is utilizing an Enforcement Response Plan. The Plan defines the type of enforcement action to be taken for various types of violations, the time allowed (days) before escalating enforcement actions, and the person or agency involved in each enforcement action. A copy of the City's Enforcement Response Plan can be found in [Appendix 6.0](#) entitled "City of Livermore, Enforcement Response Plan."

7.0 Updated List of Regulated IUs:

Significant Categorical Industries are classified by the City according to EPA definition for Significant Industrial User (SIUs) 40 CFR 403.t. The following is the current list of permitted Categorical Industrial Users:

- Admedes, 40 CFR 433.17
- AI Industries, 40 CFR 433.17
- Bonner Metal Process, 40 CFR 433.17 (Zero Discharger)
- Bolb Semiconductor, 40 CFR 469.18 (Zero Discharger)
- Form Factor#3, 40 CFR 469.18
- Form Factor#4, 40 CFR 469.18
- Gillig, LLC, 40 CFR 433.17
- InPhenix, 40 CFR 469.18
- Lawrence Livermore National Laboratory, 40 CFR 433.15, 40CFR 469.18., 40CFR 469.28
- RG Plating and Anodizing, 40 CFR 433.17
- Mass Brothers Powder Coating #1, 40 CFR 433.17

- Mass Brothers Powder Coating #2, 40 CFR 433.17 (Zero Discharge)
- Sandia National Laboratory, 40 CFR 433.15, 40 CFR 469.12

Non-Categorical Significant Industrial Users:

The City does not have any Non-Categorical Significant Industrial Users.

Combined Waste stream Formula:

There are no categorical industrial users that are subject to the combined waste stream formula.

Total Toxics Management Plan:

There are no categorical industrial users that have submitted a Total Toxics Management Plan. All CIUs are monitored for Total Toxic Organics as required by 40 CFR.

Federal Categorical/Local Limits:

City discharge limits are applied at the facility outfall, in contrast with Federal Pretreatment Standards, which must be applied at the end of the categorical process being monitored. However, for some small facilities with little unregulated flows, the local limit may be applied at the end of the categorical process.

To reflect the differences in applying limits to various processes and facilities, the City has separate lists of discharge limitations. The following categories of discharge limitations listed in Appendix 7.0 are:

1. Local Limits
2. Metal Finishing New Source (40 CFR 433.17)
3. Semiconductor Existing Source (40 CFR 469.16)

For a listing of Categorical Industrial Users (CIUs) and types of regulated process for the Livermore area, see Table 7.0 entitled "Federal Categorical List".

8.0 Significant Industrial User Compliance Activities:

During this reporting period, the City of Livermore was able to continue to implement its proactive pretreatment program performing all of its required facility inspections and wastewater monitoring despite the challenges created by the Covid-19 Shelter-in-Place Orders put into effect by the State of California and the County of Alameda.

All Categorical Industrial Users (CIUs) within the City are sampled at the end of the categorical process and before dilution with other waste streams. Lawrence Livermore National Laboratory and Sandia National Laboratory complete a significant self-monitoring program that

meets and exceeds 40 CFR requirements. In addition to this self-monitoring, the City also performs annual monitoring of 40 CFR regulated process and monitor's each facilities outfall for compliance with local limits. City staff collects quarterly monitoring samples of other regulated CIUs. Categorical Industrial Users' facility outfalls are also sampled for compliance with local limits and inspected at least once per year. During 2020, all the categorical industrial users were inspected and sampled. In addition, all other permitted industries were inspected and sampled by City Source Control Inspection staff a minimum of once per year. See Table 8.0 for the inspection and sampling summary of all permitted facilities.

Enforcement Summary:

The City took enforcement actions issuing Notice of Violations to three Categorical Industrial Users during this reporting period. No additional enforcement actions beyond this level were taken for these violations.

The following is a summary of the violations issued during 2020:

- **Bolb Semiconductor**

Bolb was issued a Notice of Violation on 11/23/2020 for failure to remit wastewater discharge permit fees.

- **Bonner Metal Processing**

Bonner Metal Processing was issued a Notice of Violation on 11/23/2020 for failure to remit wastewater discharge permit fees.

- **Maas Brothers Powder Coating**

Maas Brothers Powder Coating was issued a Notice of Violation for discharging wastewater with a pH<6.0 on September 17, 2020 and for failing to properly maintain Pretreatment Equipment (Final pH recorder). Subsequent monitoring demonstrated a return to compliance status.

Refer to Table 8.1 for a complete compliance summary for all categorical industrial users.

9.0 Baseline Monitoring Reports (BMR):

The table below contains a cumulative list of all categorical industrial users within the City and their respective BMR status. No categorical industrial users were required to submit updates to their BMRs during the reporting period. The City will continue to require BMRs from any new dischargers who are subject to Federal Pretreatment Standards.

Baseline Monitoring Report Summary Metal Finishing Point Source Category 40 CFR Part 433

CATEGORICAL INDUSTRIAL USER METAL FINISHING	DATE NOTIFIED BY POTW	DATE BMR RECEIVED
Lawrence Livermore National Lab 7000 East Avenue, Livermore, CA 94550 Permit # 1250	03-25-85	10-02-85
Sandia National Laboratory 7011 East Avenue, Livermore, CA 94550 Permit # 1251	03-25-85	10-25-85
RG Plating and Anodizing 6421-F South Front Road, Livermore, CA 94550 Permit # 1267	05-03-95	03-25-96

CATEGORICAL INDUSTRIAL USER METAL FINISHING	DATE NOTIFIED BY POTW	DATE BMR RECEIVED
Maas Brothers Powder Coating 285 South Vasco Rd., Livermore CA 94550 Permit # 1291	12-4-98	1-22-99
Bonner Metal Processing 6052 Industrial Way, Suite A, Livermore, CA 94550 Permit # 1318	9-13-99	Dumping Incident 9-24-99 prior to the “scheduled” commencement of process discharge and resulted in enforcement actions prohibiting process discharges. Facility remains under a Zero-Discharge Permit at this time.
Admedes, Inc 2800 Collier Canyon Road Livermore, CA 94551 Permit #1378	06/10/2010	12-20-2013
Gillig, LLC 451 Discovery Drive Livermore CA Permit # 1399	04/19/2016	04/13/2017
AI Industries 240 S. Vasco Road Livermore, CA 94551 Permit #1398	07/22/2016	01/23/2017

**Electrical and Electronic Components Point Source
40 CFR Part 469**

CATEGORICAL INDUSTRIAL USER SEMICONDUCTOR	DATE NOTIFIED BY POTW	DATE BMR RECEIVED
Lawrence Livermore National Lab 7000 East Avenue Livermore, CA 94550 Permit # 1250	03-25-85	10-02-85
InPhenix 250 N.Mines Road, Livermore, CA 94550 Permit #1272	08/01/03	2/6/04
Form Factor #1, 501 Lawrence Road, Livermore, CA 94550 Permit # 1350	8/20/98	<u>10/8/98</u> : The same processes/operations of Form Factor #1 and #2 were relocated to new location. Therefore, historic BMR data was accepted to satisfy BMR Requirements for new facilities
Form Factor #2, 7545 Longard Road, Livermore, CA 94550 Permit #1348	8/20/98	<u>10/8/98</u> : The same processes/operations of Form Factor #1 and #2 were relocated to new location. Therefore, historic BMR data was accepted to satisfy BMR Requirements for new facilities

10.0 Pretreatment Program Changes:

The following table summarizes any material changes to the City of Livermore's Pretreatment Program.

Pretreatment Program Element	Modification or Change in Status
Legal Authority	No changes
Local Limits	No changes
Monitoring/Inspection program and frequency	No changes
Enforcement Protocol	No changes
Program's administrative structure	No changes
Staffing Levels	Budgeted/Approved staffing levels remain unchanged. Currently, (1) Environmental Compliance Coordinator Position and (1) Source Control Inspector Position remain vacant due to retirement. Recruitment to fill these vacancies are tentatively scheduled to be filled in 2021 but may be delayed due to Covid-19
Resource requirement	No changes
Funding Mechanism	No changes

The San Francisco Regional Water Quality Control Board issued Order No. R2-2017-0018 (NPDES Permit No. CA0038008) for the City of Livermore's Water Reclamation Plant on May 15, 2017. The Code of Federal Regulations 40 CFR Part 122.44(j)(2)(ii) states that a Publicly Owned Treatment Works (POTW) must provide an evaluation of the need to revise local limits under 40 CFR Part 403.5(c) (1) following permit issuance or reissuance. The City of Livermore completed an evaluation of its Local Limits in 2017 and submitted this report to the San Francisco Regional Water Quality Control Board on January 3, 2018. No changes to the Local Limits were determined to be necessary as a result of this evaluation: therefore, the City will continue to implement and enforce its established local limits.

11.0 Pretreatment Program Budget:

The primary source of funding for the Source Control Program comes from Wastewater Discharge Permit fees. Some additional revenues are collected from Groundwater Permit fees, Groundwater Disposal fees, and laboratory analysis fees. Source Control Fees for sampling, inspection, and other tasks are reviewed and updated annually to ensure enough revenue to fully fund the Source Control Program.

For a comparison of the current, previous and the projected year's budgets, see [Appendix 11.0](#) entitled "Pretreatment Program Budget".

12.0 Public Participation Summary

The City has established an Environmental Education Program operated under its Pretreatment Program to help educate Livermore residents, businesses and industries on the needs and challenges of protecting water quality at the Livermore Water Reclamation Plant and in the San Francisco Bay. The Program provides community events, plant tours, classroom presentations, Sewer Science Labs, and Teen Academy internships.

As a result of the Covid-19 Shelter-in-Place Orders mandated by the State of California and Alameda County, the City was unable to implement its Environmental Education Program to the level it has in prior years.

Event Outreach

The following table is a summary of the public outreach events for the reporting period:

Event	Date(s) of Event	Group Size
Livermore Valley Joint Unified School District 's Science Odyssey*	Feb. 13, 2020	50+
Lawrence Livermore National Laboratory's Earth Day Festival	Postponed - Covid	
City of Livermore's Key to the City	Postponed- Covid	
Livermore Downtown's Wine Country Festival	Postponed- Covid	
Livermore Water Reclamation Plant Tours	Postponed- Covid	
Livermore Health & Safety Fair	Postponed- Covid	
Adopt a Creek Spot Program's Tri-Valley Creeks to Bay Clean-up	September 2020	Various Individual groups following social distancing guidelines
City of Livermore's Trick or Treatment Open House	Postponed	

*This year was the 20th anniversary of the Livermore Valley Joint Unified School District's (LVJUSD) Science Odyssey, which is a science fair for Livermore's 1st -12th grade students. In 2012, the City of Livermore Water Resources Division (WRD) began tabling at the event and in 2015 began giving the "One Water Award" to recognize students who completed water resources-related science projects. This year, Zone 7 Water Agency (Zone 7) cosponsored the award with the

City of Livermore. See Appendix 12.0 for a complete summary of this event.

School Outreach

As a result of the Covid-19 Shelter-in-Place Orders mandated by the State of California and Alameda County, no classroom presentation or Sewer Science programs were scheduled.

Business and Industry Outreach

Pretreatment Program Staff provides technical information on pretreatment equipment and waste minimization practices during pretreatment surveys and inspections to ensure consistent compliance from business and industry.

Wastewater Treatment Process Video

The City of Livermore developed a video available to the public. This video highlights the work performed by the City of Livermore's Water Resources Division including an in-depth view of the Livermore Water Reclamation Plant's operation and processes. The video may be view via the following weblink:

http://www.cityoflivermore.net/citygov/pw/public_works_divisions/wrd/water_reclamation_plant/tour.htm

F.O.G. Campaign

Water Resources Communications staff worked in collaboration with the Collections Systems Section and the Source Control Section to develop a F.O.G. campaign for the Water Resources Division's vehicles. The campaign includes vehicle magnets and Vac-Con panel wraps, article in the Water Resources Division's newsletter and a social media campaign to provide awareness to the public about fats, oils and grease. The campaign started in 2018 and continues to be implemented.

13.0 Biosolids Storage and Disposal Practice:

The sludge removed from the treatment process is pumped to three anaerobic digesters. Biosolids are treated to meet Class B requirements as specified in EPA 503 regulations. Digested biosolids are de-watered using belt presses. Biosolids from the LWRP are hauled offsite by Terra Renewal and disposed of via land application in Merced County, California.

14.0 Other Pollutant Reduction Activities:

During this reporting period, the City of Livermore updated and re-launched its Dental Amalgam Pollution Prevention Program. The City's existing program had been in place for many years but had to be updated to maintain compliance with recently promulgated regulations under 40 CFR 441. This update included creating two new Dental Amalgam self-certification forms as well as generating a new inspection form.

On April 30, 2020 the City of Livermore mailed self-certification form packets to the 69 dental facilities in its service area with a Standard Industrial Classification (SIC) of: 8049, 8071, 8021, or 8072. The initial response from these facilities was delayed due to restrictions set on dental facilities during the beginning of the COVID-19 pandemic. During the reporting period, however, the City ultimately received responses from 66 of the 69 facilities. Based upon the review of these responses, it was determined that 47 of these facilities required permitting under the City's new Dental Amalgam Pollution Prevention Program. Follow-up actions are currently underway to obtain the required responses from the remaining 3 facilities.

15.0 Other Subjects:

There were no other significant issues to report during this reporting period.

16.0 Permit Compliance System (PCS) Data Entry Form

PRETREATMENT ANNUAL REPORT

PCS Data Entry Form

PPS1

POTW Name: LIVERMORE, CITY OF

NPDES Permit #: CA0038008

Period Covered By This Report: 01/01/2020 (PSSD) 12/31/2020 (PSED)
Start Date End Date

Number of Significant Industrial Users in SNC with Pretreatment Compliance Schedule: 0 (SSNC)

Number of Notices of Violations and Administrative Orders Issued Against Significant Industrial Users: 3 (FENF)

Number of Civil & Criminal Judicial Actions Against Significant Industrial Users: 0 (JUDI)

Number of Significant Industrial Users with Significant Violations Published: 0 (SVPU)

Number of Industrial Users From Which Penalties Have Been Collected 0 (IUPN)

Appendix 3.0

Glossary of Terms

This glossary includes a collection of some of the terms used in this permit and an explanation of each term. To the extent that explanations provided in this glossary differ from those in EPA regulations or other official documents, they are intended for use in understanding this permit only.

Baseline Monitoring Report (BMR) - A report submitted by categorical industrial users within 180 days after the effective date of an applicable categorical standard which indicates the compliance status of the user with the categorical standard [40 CFR 403.12(b)].

Biochemical Oxygen Demand (BOD) - The oxygen required for the biochemical degradation of organic matter and the oxidation of inorganic matter such as sulfides and ferrous ions under standard laboratory procedure for a period of five days at twenty degrees celsius expressed in terms of weight per unit volume, milligrams per liter (mg/L).

Categorical Pretreatment Standards - Limitations on pollutant discharges to POTW's promulgated by EPA in accordance with Section 307 of the Clean Water Act, that apply to specified process wastewaters of particular industrial categories [40 CFR 403.6 and Parts 405-471].

Categorical Industrial User - An industrial user subject to categorical pretreatment standards.

"City" - City of Livermore or the City Council of Livermore.

Clean Water Act (CWA) - (Otherwise known as the Federal Water Pollution Control Act) enacted by Public Law 92-500, October 18, 1972, 33 USC 1251 et seq; as amended by PL 95-217, December 28, 1977; PL 97-117, December 29, 1981; PL 97-440, January 8, 1983; and PL 100-04, February 4, 1987.

Composite Sample - A sample which is collected manually or automatically and discreetly or continuously over the entire period of discharge. Composite samples may be either time proportional or flow proportional in regards to collection of sample aliquot.

Conventional Pollutants - As defined by Federal Law, these include BOD, TSS, fecal coliform bacteria, oil and grease, and pH [40 CFR 401.16].

Daily Limit - The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in terms of a concentration, the daily

discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

Environmental Protection Agency (EPA) - The United States Environmental Protection Agency, or where appropriate the term may also be used as a designation for the administrator or other duly authorized official of said agency.

Flow Proportional Composite Sample - A sampling method which combines discrete aliquots of a sample collected over time, based on the flow of the wastestream being sampled. There are two methods used to collect this type of sample. One method collects a constant sample volume at time intervals which vary based on the stream flow [e.g., 200 milliliters (ml) sample collected for every 5,000 gallons discharged]. The other method collects aliquots of varying volume, based on stream flow, at constant time intervals.

Grab Sample - A sample which is taken from a waste stream on a one-time basis with no regard to the flow of the waste stream and without consideration of time.

Grease/Oils/Fats - Any material, or like material, that is trichlorotrifluoroethane extractible.

Indirect Discharge - The introduction of pollutants into a POTW from any non-domestic source regulated under Section 307 (b), (c), or (d) of the Clean Water Act.

Industrial User (IU) or User - A source of non-domestic waste. Any non-domestic source discharging pollutants to a POTW.

Instantaneous Limits - The maximum concentration of a pollutant determined from the analysis of any discrete or composited sample collected.

Interference - A discharge which, at one or in conjunction with a discharge or discharges from other sources, both:

- a. Inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use, or disposal; and
- b. Therefore is a cause of a violation of any requirement of the POTW's NPDES Permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued hereunder (or more stringent State or Local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including the State.

Monthly Limitations - The maximum allowable discharge of a pollutant during a calendar month. Where monthly maximum limitations are expressed in terms of a concentration, the monthly discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that month.

National Pretreatment Standard or Pretreatment Standard - Any regulation promulgated by the EPA in accordance with Section 307 (b) and (c) of the Clean Water Act which applies to a specific category of industrial users and provides limitations on the introduction of pollutants into POTW's. This term includes the prohibited discharge standards under 40 CFR 403.5, including local limits [40 CFR 403.3 (j)].

Ninety (90)-day Compliance Report - A report submitted by a categorical industrial user, within 90 days following the date for final compliance with applicable categorical standards, or, in the case of a New Source, following commencement of the introduction of wastewater into the POTW, that documents and certifies the compliance status of the user [40 CFR 403.12 (d)].

Non-conventional Pollutants - All pollutants which are not included in the list of conventional or toxic pollutants in 40 CFR Part 401.

pH - The logarithm (base 10) of the reciprocal of the concentration of hydrogen ion expressed in grams per liter of solution.

Pass Through - A discharge which exits the POTW into waters of the United States in quantities or concentration which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) [40 CFR 403.3 (n)].

Periodic Compliance Report - A report on compliance status submitted by categorical industrial users to the Control Authority at least semiannually [40 CFR 403.12 (e)].

Pollutant - Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked, or discharged equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

Pretreatment - The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW [40 CFR 403.3 (q)].

Pretreatment Standards for Existing Sources (PSES) - Categorical standards and requirements applicable to industrial sources that began construction prior to the publication of the proposed pretreatment standards for that industrial category. (See individual categorical standards in 40 CFR Parts 405-471 for specific dates).

Pretreatment Standards for New Sources (PSNS) - Categorical Standards and requirements applicable to industrial sources that began construction after the publication of the proposed pretreatment standards for that industrial category. (See individual categorical standards in 40 CFR Parts 405-471 for specific dates.)

Process Wastewater - Any water which, during manufacturing or processing, comes into direct contact with or results from the production of or use of any raw material, intermediate product, finished product, by product, or waste product.

Publicly Owned Treatment Works (POTW) - A treatment works as defined by Section 212 of the Clean Water Act which is owned by the state or municipality. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant [40 CFR 403.3 (O)].

Regulated Wastestream - An industrial process wastestream regulated by a national categorical pretreatment standard.

Resource Conservation and Recovery Act (RCRA) - A Federal Statute regulating the management of hazardous waste from its generation through ultimate disposal. The Act contains requirements for waste generators, transporters, and owners and operators of treatment, storage, and disposal facilities [42 USC 6901 et seq.].

Sanitary Sewage - The portion of sewage exclusive of industrial wastes and stormwaters.

Significant Non-compliance:

- (A) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.
- (B) Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH).
- (C) Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public).

- (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 under paragraph (f) (1) (vi) (B) of this Section to halt or prevent such a discharge.
- (E) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.
- (F) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90 day compliance reports, periodic self-monitoring reports and reports on compliance schedules.
- (G) Failure to accurately report non-compliance.
- (H) Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

Significant Violation - A violation which remains uncorrected 45 days after notification of non-compliance; which is part of a pattern of non-compliance over twelve month period; which involves a failure to accurately report non-compliance; or which resulted in the POTW exercising its emergency authority under Section 403.8 (f) (1) (vi) [B].

State - State of California

Self-monitoring - Sampling and analyses performed by the industrial user to ensure compliance with the permit or other regulatory requirements [403.12 (b) and (g)].

Significant Industrial User (SIU) - (a) all categorical industrial users and; (b) any non-categorical industrial user that; (i) discharges 25,000 gallons per day or more of process wastewater ("process wastewater" excludes sanitary, non-contact cooling, and boiler blow down wastewaters); or (ii) contributes a process wastestream which makes up five percent or more of the average dry weather hydraulic or organic (BOD, TSS, etc.) capacity of the treatment plant; or (iii) has a reasonable potential, in the opinion of the Control or Approval Authority to adversely affect the POTW operation (inhibition, pass through of pollutants, sludge contamination, or endangerment of POTW workers).

Slug Load - Any pollutant (including Biochemical Oxygen Demand) released in a discharge at a flow rate or concentration which will cause a violation of the specific discharge prohibitions in 40 CFR 403.5 (b) to 403.12 (f).

Spill Prevention and Control Plan - A plan prepared by an industrial user to minimize

the likelihood of a spill and to expedite control and cleanup activities should a spill occur.

Split Sample - Portion of a collection sample given to the industry or to another agency to verify or compare laboratory results.

Suspended Solids - The total suspended matter that floats on the surface of, or is suspended in, water, wastewater or other liquids, and which is removable by laboratory filtering.

Time Proportional Composite Sample - A sampling method which combines discrete sample aliquot's of constant volume collected at constant time intervals (e.g., 200 milliliter (mL) samples collected every half hour for a 24 hour period). This method provides representative samples only where the sampled stream flow is constant, or where the volume is manually adjusted based on stream flow variation prior to being added to the composite sample container.

Total Toxic Organics - Sum total of all detectable organic compounds which are on the United States Environmental Protection Agency's current priority pollutant list and which are present in concentrations of 0.01 mg/L or greater. In calculating total toxic organics, the concentration of specific compounds measured at detection limits in excess of 0.02 mg/L shall be assumed to be one-half the detection limit (See Appendix A, pg 8).

Upset - An exceptional incident in which there is unintentional and temporary non-compliance with the categorical pretreatment standards because of factors beyond the reasonable control of the Industrial User. An upset does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR, 403.16 (a)].

Wastewater - The liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together which may be present, whether treated or untreated, which is contributed into or permitted to enter the POTW.

Water Resources Manager - (Formerly Superintendent) The person designated by the City to supervise the operation of the publicly owned treatment works and who is charged with certain duties and responsibilities by this Chapter, or his duly authorized representative.

ABBREVIATIONS

BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
EPA	Environmental Protection Agency
L	Liter
mg	Milligrams
mg/L	Milligrams per liter
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Works
SIC	Standard Industrial Classification
SS	Suspended Solids
SWDA	Solid Waste Disposal Act, 42 U.S.C. 6901, et seq.
USC	United States Code

Appendix A - 126 Priority Pollutants

001	Acenaphthene	076	Chrysene
002	Acrolein	077	Acenaphthylene
003	Acrylonitrile	078	Anthracene
004	Benzene	079	1,12-benzoperylene (benzo(ghi) perylene)
005	Benzidine	080	Fluorene
006	Carbon tetrachloride (tetrachloromethane)	081	Phenanthrene
007	Chlorobenzene	082	1,2,5,6-dibenzanthracene (dibenzo(h) anthracene)
008	1,2,4-trichlorobenzene	083	Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)
009	Hexachlorobenzene	084	Pyrene
010	1,2-dichloroethane	085	Tetrachloroethylene
011	1,1,1-trichloroethane	086	Toluene
012	Hexachloroethane	087	Trichloroethylene
013	1,1-dichloroethane	088	Vinyl chloride (chloroethylene)
014	1,1,2-trichloroethane	089	Aldrin
015	1,1,2,2-tetrachloroethane	090	Dieldrin
016	Chloroethane	091	Chlordane (technical mixture and metabolites)
018	Bis(2-chloroethyl) ether	092	4,4-DDT
019	2-chloroethyl vinyl ether (mixed)	093	4,4-DDE (p,p-DDX)
020	2-chloronaphthalene	094	4,4-DDD (p,p-TDE)
021	2,4,6-trichlorophenol	095	Alpha-endosulfan
022	Parachlorometa cresol	096	Beta-endosulfan
023	Chloroform (trichloromethane)	097	Endosulfan sulfate
024	2-chlorophenol	098	Endrin
025	1,2-dichlorobenzene	099	Endrin aldehyde
026	1,3-dichlorobenzene	100	Heptachlor
027	1,4-dichlorobenzene	101	Heptachlor epoxide (BHC-hexachlorocyclohexane)
028	3,3-dichlorobenzidine	102	Alpha-BHC
029	1,1-dichloroethylene	103	Beta-BHC
030	1,2-trans-dichloroethylene	104	Gamma-BHC (lindane)
031	2,4-dichlorophenol	105	Delta-BHC (PCB-polychlorinated biphenyls)
032	1,2-dichloropropane	106	PCB-1242 (Arochlor 1242)
033	1,2-dichloropropylene(1,3-dichloropropene)	107	PCB-1254 (Arochlor 1254)
034	2,4-dimethylphenol	108	PCB-1221 (Arochlor 1221)
035	2,4-dinitrotoluene	109	PCB-1232 (Arochlor 1232)
036	2,6-dinitrotoluene	110	PCB-1248 (Arochlor 1248)
037	1,2-diphenylhydrazine	111	PCB-1260 (Arochlor 1260)
038	Ethylbenzene	112	PCB-1016 (Arochlor 1016)
039	Fluoranthene	113	Toxaphene
040	4-chlorophenyl phenyl ether	114	Antimony
041	4-bromophenyl phenyl ether	115	Arsenic
042	Bis(2-chloroisopropyl) ether	116	Asbestos
043	Bis(2-chloroethoxy) methane	117	Beryllium
044	Methylene chloride (dichloromethane)	118	Cadmium
045	Methyl chloride (dichloromethane)	119	Chromium
046	Methyl bromide (bromomethane)	120	Copper
047	Bromoform (tribromomethane)	121	Cyanide, Total
048	Dichlorobromomethane	122	Lead
051	Chlorodibromomethane	123	Mercury
052	Hexachlorobutadiene	124	Nickel
053	Hexachloromyclopentadiene	125	Selenium
054	Isophorone	126	Silver
055	Naphthalene	127	Thallium
056	Nitrobenzene	128	Zinc
057	2-nitrophenol	129	2,3,7,8-tetrachloro-dibenzo-p-dioxin(TCDD)
058	4-nitrophenol		
059	2,4-dinitrophenol		
060	4,6-dinitro-o-cresol		
061	N-nitrosodimethylamine		
062	N-nitrosodiphenylamine		
063	N-nitrosodi-n-propylamine		
064	Pentachlorophenol		
065	Phenol		
066	Bis(2-ethylhexyl) phthalate		
067	Butyl benzyl phthalate		
068	Di-N-Butyl Phthalate		
069	Di-n-octyl phthalate		
070	Diethyl Phthalate		
071	Dimethyl phthalate		
072	1,2-benzanthracene (benzo(a)anthracene		
073	Benzo(a)pyrene (3,4-benzo-pyrene)		
074	3,4-Benzofluoranthene (benzo(b) fluoranthene)		
075	11,12-benzofluoranthene (benzo(b) fluoranthene)		

Appendix 4.0- Influent 2020

CITY OF LIVERMORE WATER RECLAMATION PLANT Annual Influent Loading Summary

2020

Parameter	ARSENIC		CADMIUM		TOTAL CHROMIUM		COPPER		LEAD		MERCURY	
	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day
January	0.94	0.019	J 0.14	J 0.003	2.5	0.052	65	1.348	2.4	0.050	0.068	0.001
February	0.69	0.014	0.14	0.003	2.5	0.050	51	1.027	1.7	0.034	J 0.048	J 0.001
March	0.77	0.017	J 0.13	J 0.003	2.9	0.063	61	1.325	1.10	0.024	0.63	0.014
April	0.78	0.017	0.13	0.003	1.6	0.034	45	0.964	1.3	0.028	0.057	0.001
May	0.78	0.016	0.26	0.005	2.1	0.043	53	1.079	1.4	0.029	0.11	0.002
June	0.78	0.016	J 0.16	J 0.003	1.7	0.035	50	1.033	1.1	0.023	0.060	0.001
July	0.68	0.014	J 0.12	J 0.002	1.5	0.031	47	0.957	0.92	0.019	0.061	0.001
August	0.67	0.013	0.20	0.004	2.0	0.040	53	1.066	1.8	0.036	0.066	0.001
September	0.66	0.013	J 0.13	J 0.003	1.9	0.039	43	0.872	1.3	0.026	0.087	0.002
October	0.70	0.014	J 0.13	J 0.003	2.1	0.043	44	0.897	1.4	0.029	0.15	0.003
November	0.82	0.017	J 0.11	J 0.002	1.7	0.035	47	0.972	0.8	0.017	J 0.034	J 0.001
December	0.73	0.015	J 0.14	J 0.003	2.1	0.043	51	1.038	0.95	0.019	0.070	0.001
Average	0.75	0.015	0.15	0.003	2.1	0.042	51	1.048	1.3	0.028	0.12	0.003

CITY OF LIVERMORE WATER RECLAMATION PLANT
Annual Influent Loading Summary

2020

Parameter	NICKEL		SELENIUM		SILVER		ZINC		CYANIDE		PHENOL		EPA 610 PAH	
	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day
January	4.2	0.087	1.3	0.027	0.25	0.005	150	3.11	< 0.9	< 0.019	N/A	N/A	N/A	N/A
February	5.2	0.105	1.1	0.022	0.26	0.005	150	3.02	< 0.90	< 0.018	N/A	N/A	N/A	N/A
March	3.8	0.083	1.0	0.022	0.32	0.007	140	3.04	J 1.10	J 0.024	N/A	N/A	N/A	N/A
April	4.2	0.090	J 0.72	J 0.015	0.21	0.004	120	2.57	< 0.90	< 0.019	N/A	N/A	N/A	N/A
May	5.0	0.102	J 1.0	J 0.020	0.31	0.006	180	3.67	J 1.6	J 0.033	N/A	N/A	N/A	N/A
June	4.8	0.099	< 0.80	< 0.017	0.43	0.009	140	2.892	J 1.2	J 0.025	N/A	N/A	N/A	N/A
July	4.3	0.088	< 0.80	< 0.016	0.51	0.010	140	2.85	J 1.4	J 0.029	N/A	N/A	N/A	N/A
August	4.6	0.093	< 0.80	< 0.016	0.27	0.005	170	3.421	< 0.90	< 0.018	15	0.302	< 0.1	< 0.002
September	4.1	0.083	< 0.80	< 0.016	0.31	0.006	130	2.635	J 1.7	J 0.034	N/A	N/A	N/A	N/A
October	4.0	0.082	< 0.80	< 0.016	0.30	0.006	130	2.651	J 0.96	J 0.020	N/A	N/A	N/A	N/A
November	3.5	0.072	J 0.91	J 0.019	0.22	0.005	120	2.481	J 1.6	J 0.033	N/A	N/A	N/A	N/A
December	4.4	0.090	1.2	0.024	0.22	0.004	150	3.053	< 0.90	J 0.018	N/A	N/A	N/A	N/A
Average	4.3	0.089	0.9	0.019	0.30	0.006	143	2.949	1.2	0.024	J 15	J 0.302	< 0	< 0.002

CITY OF LIVERMORE WATER RECLAMATION PLANT
Annual Average Discharge Summary
(Discharge to LAVWMA System)

2020

Parameter	ARSENIC		CADMIUM		TOTAL CHROMIUM		COPPER		LEAD		MERCURY	
	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day
January	0.69	0.013	< 0.050	< 0.0009	0.54	0.010	4.7	0.087	J 0.10	J 0.002	0.0029	0.0001
February	0.53	0.009	< 0.050	< 0.001	J 0.48	J 0.008	4.7	0.080	J 0.09	J 0.002	0.0033	0.0001
March	J 0.40	0.007	< 0.050	< 0.0009	0.58	0.010	5.2	0.093	J 0.09	J 0.002	0.0029	0.0001
April	0.55	0.010	< 0.050	< 0.0009	J 0.36	J 0.006	4.3	0.075	J 0.08	J 0.001	0.0042	0.00007
May	J 0.41	J 0.006	< 0.050	< 0.0007	J 0.37	J 0.005	5.5	0.077	J 0.09	J 0.001	0.0022	0.00003
June	J 0.45	J 0.006	< 0.050	< 0.0006	J 0.36	J 0.004	5.1	0.064	J 0.08	J 0.001	0.0025	0.00003
July	J 0.45	J 0.0053	< 0.050	< 0.0006	J 0.34	J 0.004	3.4	0.040	J 0.06	J 0.001	< 0.0002	< 0.000002
August	J 0.39	J 0.0049	< 0.050	< 0.0006	J 0.36	J 0.005	3.2	0.041	J 0.10	J 0.001	0.0014	0.00002
September	J 0.40	J 0.0055	< 0.050	< 0.0007	J 0.37	J 0.005	2.5	0.034	J 0.09	J 0.001	0.0014	0.00002
October	J 0.40	J 0.0057	< 0.050	0.0007	J 0.33	J 0.005	2.6	0.037	J 0.06	J 0.001	0.0015	0.00002
November	J 0.53	J 0.0095	< 0.050	< 0.0009	J 0.41	J 0.007	6.2	0.111	J 0.08	J 0.001	0.0020	0.00004
December	J 0.47	J 0.0084	< 0.050	< 0.0009	J 0.43	J 0.008	6.5	0.116	J 0.08	J 0.001	0.0025	0.00004
Average	0.5	0.007	< 0.05	< 0.001	0.4	0.006	4.5	0.071	J 0.08	J 0.001	0.002	0.00004

"J" flagged result reflects a value seen below Reporting Limit, but above the Method Detection Limit

Appendix 4.0- Effluent 2020

CITY OF LIVERMORE WATER RECLAMATION PLANT Annual Average Discharge Summary (Discharge to LAVWMA System)

2020

Parameter	NICKEL		SELENIUM		SILVER		ZINC		CYANIDE		PHENOL		EPA 610 PAH	
	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day	ug/L	kg/day
January	2.6	0.048	J 0.48	J 0.009	< 0.020	< 0.000	29	0.539	< 0.90	< 0.017	NA	N/A	N/A	N/A
February	3.1	0.053	J 0.73	J 0.012	< 0.020	< 0.0003	29	0.493	< 0.90	< 0.015	N/A	N/A	N/A	N/A
March	2.7	0.048	J 0.51	J 0.009	J 0.030	J 0.0005	21	0.375	< 0.90	< 0.016	N/A	N/A	N/A	N/A
April	3.0	0.052	J 0.40	J 0.007	< 0.020	< 0.0003	20	0.349	< 0.90	< 0.016	N/A	N/A	N/A	N/A
May	3.1	0.043	J 0.49	J 0.007	< 0.020	< 0.0003	23	0.321	J 1.2	J 0.017	N/A	N/A	N/A	N/A
June	3.0	0.037	J 0.52	J 0.006	< 0.020	< 0.0002	18	0.225	J 1.2	J 0.015	N/A	N/A	N/A	N/A
July	3.1	0.037	< 0.40	< 0.005	< 0.020	< 0.0002	20	0.237	J 2.8	J 0.033	N/A	N/A	N/A	N/A
August	3.1	0.039	< 0.40	< 0.005	< 0.020	< 0.0003	20	0.254	J 1.1	J 0.014	N/A	N/A	N/A	N/A
September	2.8	0.038	< 0.40	< 0.005	< 0.020	< 0.0003	14	0.191	J 1.7	J 0.023	N/A	N/A	N/A	N/A
October	2.8	0.040	< 0.40	< 0.006	< 0.020	< 0.0003	17	0.241	J 0.96	J 0.014	N/A	N/A	N/A	N/A
November	2.7	0.048	J 0.49	J 0.009	< 0.020	< 0.0004	17	0.305	J 1.6	J 0.029	N/A	N/A	N/A	N/A
December	4.8	0.086	J 0.46	J 0.008	< 0.020	< 0.0004	18	0.322	< 0.90	< 0.016	N/A	N/A	N/A	N/A
Average	3.1	0.048	0.47	0.007	0.02	0.0003	21	0.321	1.3	0.019	< #DIV/0!	< #DIV/0!	#DIV/0!	< #DIV/0!

CITY OF LIVERMORE WATER RESOURCES DIVISION

2020

Biosolids Analytical Data

All metals limits and results are on a **dry weight** basis in mg/kg. Limits from Table 1 and Table 3 of 503.13

Parameter	Monthly Average Pollutant Concentration Limits ¹	Ceiling Concentration Limits ²	Feb	April	June	August	Oct	Dec	Average
% Total Solids			15.8	15.9	16.9	16.6	17.0	16.0	16.4
% Volatile Solids Reduction	>38%		66.0	66.4	64.0	62.6	67.3	66.3	65.4
Digester Temperature (° C)	35-55		37.0	37.2	37.4	37.2	37.2	36.8	37.1
SRT (days)	>15		22.8	22.7	20.5	20.5	19.1	19.4	20.8
Arsenic	41	75	J2.8	<2.5	J4.1	J6.0	J5.4	J3.7	J4.1
Cadmium	39	85	J1.2	J0.96	J1.5	J0.91	J0.84	J1.3	J1.1
Chromium	1200	3000	23	21	23	23	23	29.7	23.8
Copper	1500	4300	320	270	350	310	330	390	328
Lead	300	840	J11	J6.1	J12	J11	J9.0	J10.1	9.9
Mercury	17	57	0.63	0.46	0.58	0.47	J0.46	0.63	0.54
Molybdenum	NL	75	J3.9	J8.9	J6.5	J5.6	J6.6	J7.6	6.5
Nickel	420	420	15	14	15	14	16	17.1	15
Selenium	36	100	8.4	<6.2	8.4	<6.4	<5.4	<6.2	6.8
Silver			J1.9	J2.5	J2.1	J2.3	J2.1	J2.7	2.3
Zinc	2800	7500	840	700	1000	1100	840	890	895

¹ Table 3 of §503.13-Pollutant Concentrations² Table 1 of §503.13-Ceiling Concentrations NL= No Limit Established

APPENDIX 5.0 SEMI-ANNUAL INFLUENT, EFFLUENT AND SLUDGE MONITORING PROGRAM

I. Influent and Effluent Monitoring

A. Sampling Procedures

The A-1 (influent) sample point is located prior to pre-chlorination and basin return and contains the entire city flow before being acted on in any way.

The E-2 (effluent) sample point is located at the end of the chlorine contact tank after the addition of sodium hypochlorite and sodium hydroxide, just prior to discharge into the Livermore-Amador Valley Water Management Agency (LAVWMA) export pipeline.

Samples are collected according to the following table and are handled in accordance with established LWRP chain of custody procedures (see attached LWRP chain of custody and custody forms). All samples are picked up by the commercial laboratory within 12 hours of the final grab sample and transported under refrigerated conditions.

SAMPLE COLLECTION CONDITIONS

ANALYSIS STORAGE	TYPE OF CONTAINER	VOLUME COLLECTED	PRESERVATIVE	COLLECTION TIME	STORAGE
EPA 624	Glass VOA vial*	20 mL x 4	HCL after dechlor w/ Na ₂ S ₂ O ₃	Every 4 hrs	4 °C
EPA 625	Amber glass*	1 liter	None	24 hr. Comp	4 °C
EPA 608	Amber glass*	1 liter	None	24 hr. Comp	4 °C
EPA 610	Amber glass*	1 Liter	None	24 hr Comp	4 °C
CN	Plastic	500 ml	Na ₂ S ₂ O ₃ , NaOH, pH>12	Every 4 hrs	4 °C
Metals**	Plastic	1 liter	HNO ₃ , pH<2	24 hr. Comp	4 °C
Phenol	Glass	500 ml	H ₂ SO ₄ , pH<2	Every 4 hrs	4 °C
Oil and Grease	Glass	1 liter	H ₂ SO ₄ , pH<2	Every *hr Comp	4 °C

*Teflon lined caps and collected in duplicate

** Metals = Sb, As, Be, Cd, Cu, Cr, Co, Pb, Hg, Ni, Se, Ag, Te, Zn, Mo

Grab samples are flow-proportionally composited prior to analysis.

B. Sample Dechlorination

As noted in the table above, all effluent 624 samples are dechlorinated before filling VOA vials.

C. Sample Compositing

All grab samples (624 and 625; cyanide and phenols) are collected with time and flow noted on each bottle. Samples are combined flow proportionally immediately prior to analysis at the commercial laboratory. Both influent and effluent automatic composite samplers are flow proportional. Sample lines are made of Teflon or silicone tubing. Grab samples for cyanide and phenols are flow proportionally composited by WRD Laboratory staff prior to being sent to a commercial laboratory for analysis.

D. DATA VALIDATION

The LWRP requires the following listed data validation methods and information to be performed by the commercial laboratory on all samples sent to them for analysis. Data validation information is provided in the QC report by the commercial laboratory with each batch run containing our sample.

1. Results of the laboratory control standards run on the date of the sample analysis. Included is the lab result, the expected result and the % recovery.
2. Precision: results of duplicates run and relative % difference, as well as results of duplicate spikes run and relative % recovery.
3. Accuracy: Results of spikes and % recovery.
4. Blanks and reporting detection limits.
5. The original chain of custody sent with the samples to the lab and returned with the results.
6. A glossary of definitions and QC terms is also provided to facilitate interpretations.
7. Signature from laboratory representative on QC report to verify data validation.

II. SLUDGE MONITORING

A. Sampling Procedures

1. Dewatered Sludge (Belt Press Cake)

Samples of belt pressed; digested sludge are collected in a 10 ml beaker four times per day for five consecutive days. The grab samples are composited into a 240 ml glass jar, which is refrigerated during the five-day sample collection period.

Cyanide, phenol, metals, percent solids, Nitrates, TKN, and EPA methods 8260, 8270, and 8080 are run on the composited sample. There are no preservatives used other than storage at 4°C.

Dewatered sludge collection is started the day following the semi-annual influent and effluent sampling.

B. Data Validation

QC data validation for Sludge Monitoring is identical to that for influent and effluent monitoring. Please reference section D of influent and effluent Data Validation for more information.

Discussion of Results

The LWRP suffered no incidents of interference or upset which could be attributed to influent characteristics during this semi-annual reporting period. Monitoring of the LWRP influent and effluent showed concentrations of heavy metals, phenols to be below inhibition levels of concern and well below NPDES permit requirements.

Laboratory analysis performed on the LWRP biosolids showed concentration levels of heavy metals, cyanide, and toxic organic compounds to be well below required limits. Priority pollutant sampling was conducted in February and August 2020 on the LWRP influent and effluent. Biosolid sampling was conducted in December 2020. A summary of the monthly metals monitoring, annual biosolids monitoring, and a Five-Year History of metal analysis for LWRP influent and effluent is included with this report.

Below is a list of pollutants used in a variety of local industries, including semiconductor manufacturing, metal finishing, research and development, photo processing, dry cleaning, and vehicle repair. The potential exists for these pollutants to be discharged to the LWRP unless proper management practices regarding use and disposal are implemented.

The City of Livermore Water Resources Division implements an aggressive Source

Control Program, which has limited the levels of these potential pollutants in the LWRP influent through enforcement of Federal and local discharge limits. The Source Control Program ensures that adequate controls or management practices are implemented by local businesses to protect the LWRP. During this reporting period, the concentrations of these pollutants in the LWRP influent were below levels of concern or below method detection limits.

List of Potential Pollutants **

Inorganic Pollutants

Arsenic
Cadmium
Copper
Cyanide
Lead
Nickel
Silver
Zinc
Tritium
Plutonium
Methyl Ethyl Ketone

Organic Pollutants

1,1,2-trichloroethane
1,1,2,2-tetrachloroethane
Toluene
Ethyl Benzene
Benzene
Tetrachloroethane
Trichloroethane
Phenols
Chloroform
Methylene Chloride
Acetone
Trichlorotrifluoroethane (Freon)

**** While additional pollutant parameters could be present in the LWRP influent, this list contains only those pollutants which may exist at the facilities in sufficient quantities to cause upsets, pass-through or interference with the LWRP treatment process**

Effluent Chlorination

All sample bottles/containers used for the collection of chlorinated samples contain sodium thiosulfate as a preservative and therefore chlorination has not affected the sample quality after collection. The following listed pollutants have been identified as being generated by the chlorination of the LWRP effluent.

Pollutants:	Bromoform	Bromodichloromethane
	Chloroform	Dibromochloromethane

Compliance with Pretreatment Program Requirements:

The City's program remains in general compliance with Pretreatment Program requirements.

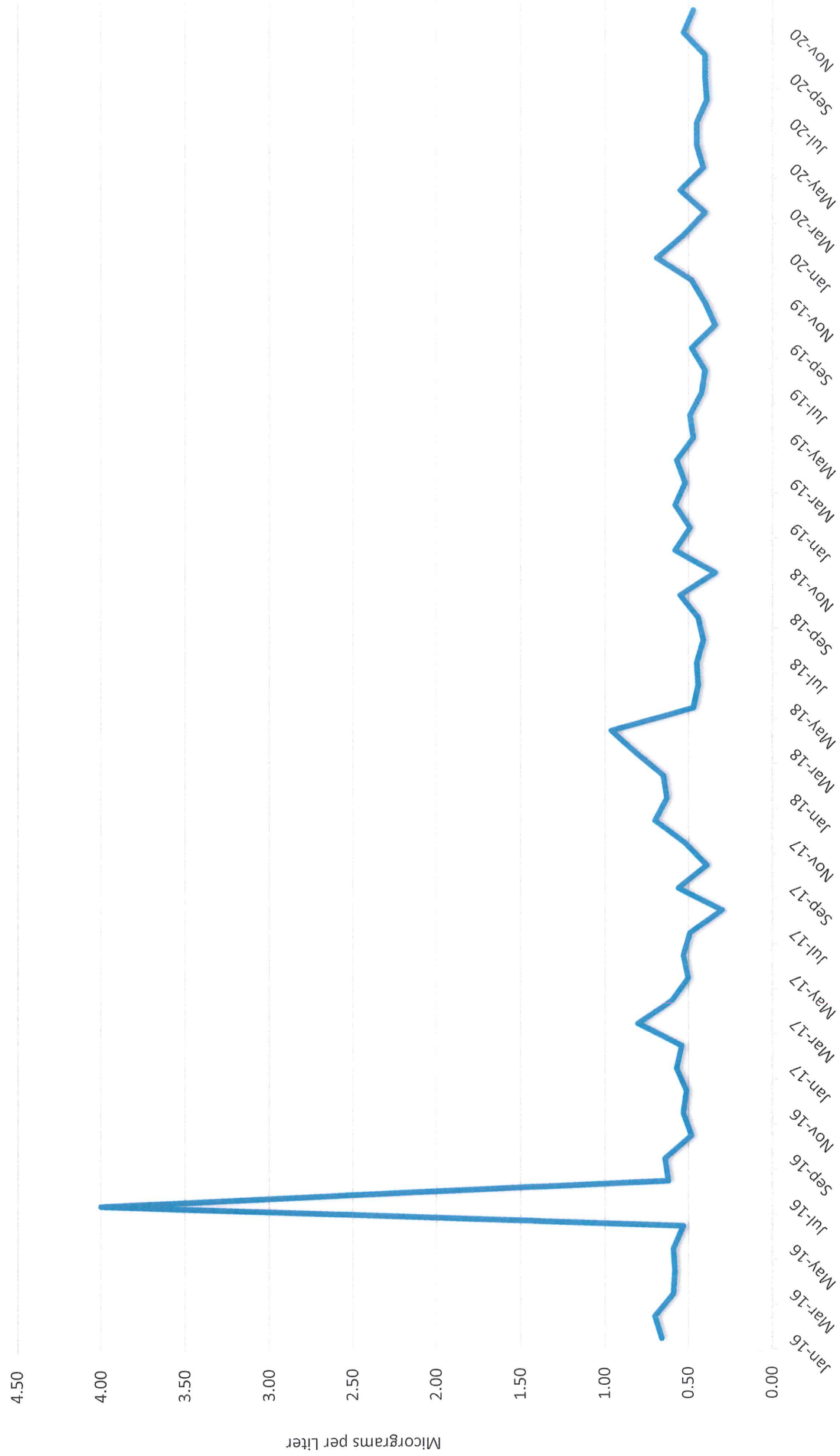
City of Livermore
LWRP Historical Metal Sampling - Effluent

Appendix 5.0

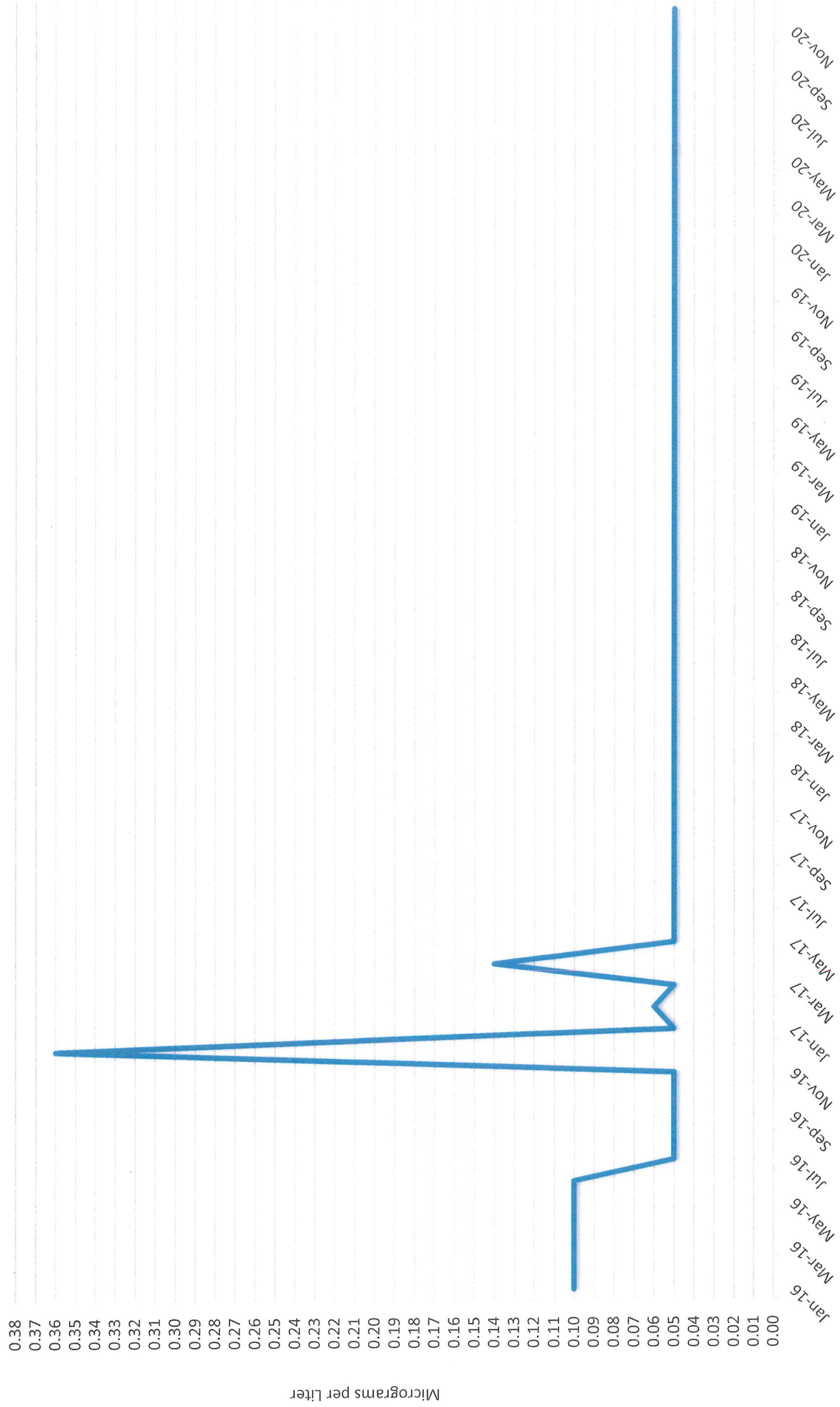
Parameter	Arsenic ug/l	Cadmium ug/l	Total Chromium ug/l	Copper ug/l	Lead ug/l	Mercury ug/l	Nickel ug/l	Silver ug/l	Zinc ug/l
Jan-16	0.66	< 0.10	0.66	5.10	J 0.12	0.0040	3.40	< 0.10	21.00
Feb-16	0.70	< 0.10	0.64	5.70	J 0.15	0.0057	2.80	J 0.03	26.00
Mar-16	0.59	< 0.10	0.57	5.40	J 0.15	0.0044	3.30	J 0.03	22.00
Apr-16	0.58	< 0.10	0.69	5.90	J 0.14	0.0035	4.20	J 0.02	25.00
May-16	0.59	< 0.10	0.58	4.80	J 0.12	0.0022	3.50	< 0.10	19.00
Jun-16	0.53	< 0.10	0.50	6.80	J 0.17	0.0032	3.30	< 0.10	18.00
Jul-16	4.00	< 0.05	0.57	5.30	J 0.13	0.0037	3.40	J 0.02	14.00
Aug-16	0.62	< 0.05	0.63	4.20	J 0.13	0.0030	2.70	< 0.02	13.00
Sep-16	0.64	< 0.05	0.60	4.70	J 0.14	0.0053	2.70	J 0.03	14.00
Oct-16	J 0.48	< 0.05	0.61	4.30	J 0.13	0.0023	3.40	J 0.04	18.00
Nov-16	0.53	< 0.05	0.62	4.20	J 0.12	0.0042	2.90	J 0.02	19.00
Dec-16	0.51	0.36	0.60	5.70	J 0.15	0.0033	2.80	J 0.02	27.00
Jan-17	0.57	< 0.05	0.50	6.50	J 0.13	0.0041	2.70	< 0.02	22.00
Feb-17	0.54	J 0.06	0.52	5.20	J 0.12	0.0068	3.00	J 0.03	23.00
Mar-17	0.80	< 0.05	0.54	3.40	J 0.11	0.0084	3.10	J 0.03	20.00
Apr-17	0.60	0.14	0.64	5.50	J 0.13	0.0049	3.00	< 0.02	25.00
May-17	0.50	< 0.05	0.69	5.30	J 0.16	0.0044	3.00	< 0.02	30.00
Jun-17	0.53	< 0.05	0.63	4.80	0.41	0.0037	4.40	J 0.03	26.00
Jul-17	J 0.49	< 0.05	0.56	4.20	J 0.16	0.0025	2.70	< 0.02	24.00
Aug-17	J 0.30	< 0.05	J 0.46	3.50	J 0.10	< 0.0100	2.60	< 0.02	19.00
Sep-17	0.56	< 0.05	0.62	4.30	0.33	0.0033	2.50	J 0.02	15.00
Oct-17	J 0.39	< 0.05	0.54	3.30	J 0.16	0.0037	2.30	< 0.02	20.00
Nov-17	0.52	< 0.05	0.59	3.10	J 0.13	0.0029	2.90	< 0.02	24.00
Dec-17	0.70	< 0.05	0.57	5.00	J 0.12	0.0035	2.80	J 0.02	27.00
Jan-18	0.63	< 0.05	0.68	6.70	J 0.20	0.0071	3.00	J 0.03	30.00
Feb-18	0.65	< 0.05	0.60	5.20	J 0.17	0.0068	2.70	1.60	39.00
Mar-18	0.81	< 0.05	0.53	4.20	J 0.11	0.0048	3.00	J 0.02	25.00
Apr-18	0.96	< 0.05	0.55	4.76	J 0.18	0.0045	3.10	< 0.02	26.00
May-18	J 0.47	< 0.05	0.53	3.30	J 0.12	0.0035	2.70	< 0.02	27.00
Jun-18	J 0.44	< 0.05	0.54	3.80	J 0.12	0.0032	2.80	< 0.02	30.00
Jul-18	J 0.45	< 0.05	0.83	4.30	J 0.16	0.0028	3.50	< 0.02	25.00
Aug-18	J 0.41	< 0.05	0.51	4.10	J 0.11	0.0036	3.00	J 0.02	25.00
Sep-18	J 0.44	< 0.05	0.65	4.10	0.36	0.0028	4.10	J 0.07	20.00
Oct-18	0.55	< 0.05	0.60	4.50	J 0.12	0.0023	4.10	J 0.07	20.00
Nov-18	J 0.34	< 0.05	0.53	3.80	J 0.09	0.0026	3.20	J 0.05	23.00
Dec-18	0.58	< 0.05	0.58	4.60	J 0.16	0.0041	3.00	< 0.02	32.00
Jan-19	J 0.49	< 0.05	0.68	5.80	J 0.14	0.0052	3.10	J 0.02	25.00
Feb-19	0.58	< 0.05	0.64	4.30	J 0.10	< 0.0002	3.20	< 0.02	23.00
Mar-19	0.52	< 0.05	0.58	4.30	0.81	0.0045	3.10	< 0.02	21.00
Apr-19	0.57	< 0.05	0.57	7.20	J 0.11	0.0039	3.60	< 0.02	22.00
May-19	J 0.47	< 0.05	0.84	6.00	J 0.11	0.0032	3.40	< 0.02	26.00
Jun-19	J 0.49	< 0.05	J 0.48	4.40	J 0.11	0.0031	2.50	< 0.02	26.00
Jul-19	J 0.42	< 0.05	J 0.49	3.60	0.69	0.0020	2.90	< 0.02	24.00
Aug-19	J 0.40	< 0.05	J 0.44	3.50	J 0.13	0.0028	2.70	< 0.02	22.00
Sep-19	J 0.48	< 0.05	J 0.41	2.60	J 0.11	0.0028	2.90	< 0.02	17.00
Oct-19	J 0.34	< 0.05	J 0.41	3.40	J 0.11	0.0026	2.70	< 0.02	22.00
Nov-19	J 0.40	< 0.05	J 0.46	3.30	J 0.10	0.0020	2.70	< 0.02	22.00
Dec-19	J 0.48	< 0.05	0.55	4.50	J 0.11	0.0038	2.50	< 0.02	25.00
Jan-20	0.69	< 0.05	0.54	4.70	J 0.10	0.0029	2.60	< 0.02	29.00
Feb-20	0.53	< 0.05	J 0.48	4.70	J 0.09	0.0033	3.10	< 0.02	29.00
Mar-20	J 0.40	< 0.05	0.58	5.20	J 0.09	0.0029	2.70	J 0.03	21.00
Apr-20	0.55	< 0.05	J 0.36	4.30	J 0.08	0.0042	3.00	< 0.02	20.00
May-20	J 0.41	< 0.05	J 0.37	5.50	J 0.09	0.0022	3.10	< 0.02	23.00
Jun-20	J 0.45	< 0.05	J 0.36	5.10	J 0.08	0.0025	3.00	< 0.02	18.00
Jul-20	J 0.45	< 0.05	J 0.34	3.40	J 0.06	< 0.0002	3.10	< 0.02	20.00
Aug-20	J 0.39	< 0.05	J 0.36	3.20	J 0.10	0.0014	3.10	< 0.02	20.00
Sep-20	J 0.40	< 0.05	J 0.37	2.50	J 0.09	0.0014	2.80	< 0.02	14.00
Oct-20	J 0.40	< 0.05	J 0.33	2.60	J 0.06	0.0015	2.80	< 0.02	17.00
Nov-20	J 0.53	< 0.05	J 0.41	6.20	J 0.08	0.0020	2.70	< 0.02	17.00
Dec-20	J 0.47	< 0.05	J 0.43	6.50	J 0.08	0.0025	4.80	< 0.02	18.00
Averages:	0.583	0.062	0.546	4.606	0.154	0.004	3.062	0.054	22.567

<= Non Detect Reported as less than the detection limit
J= indicates an estimated concentration above the Method Detection Limit and below the Reporting Limit.

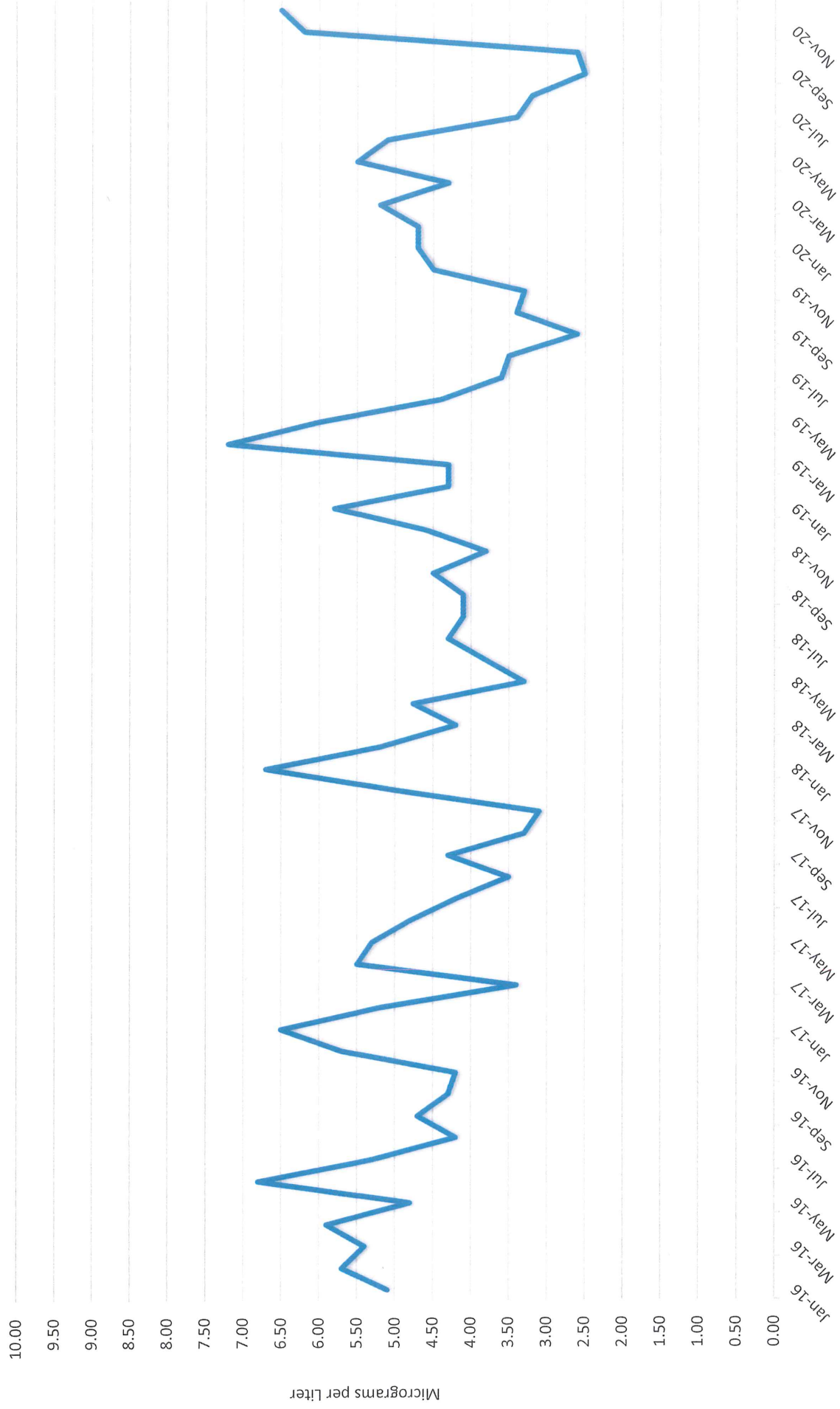
Arsenic Monitoring Results Effluent 2016-2020



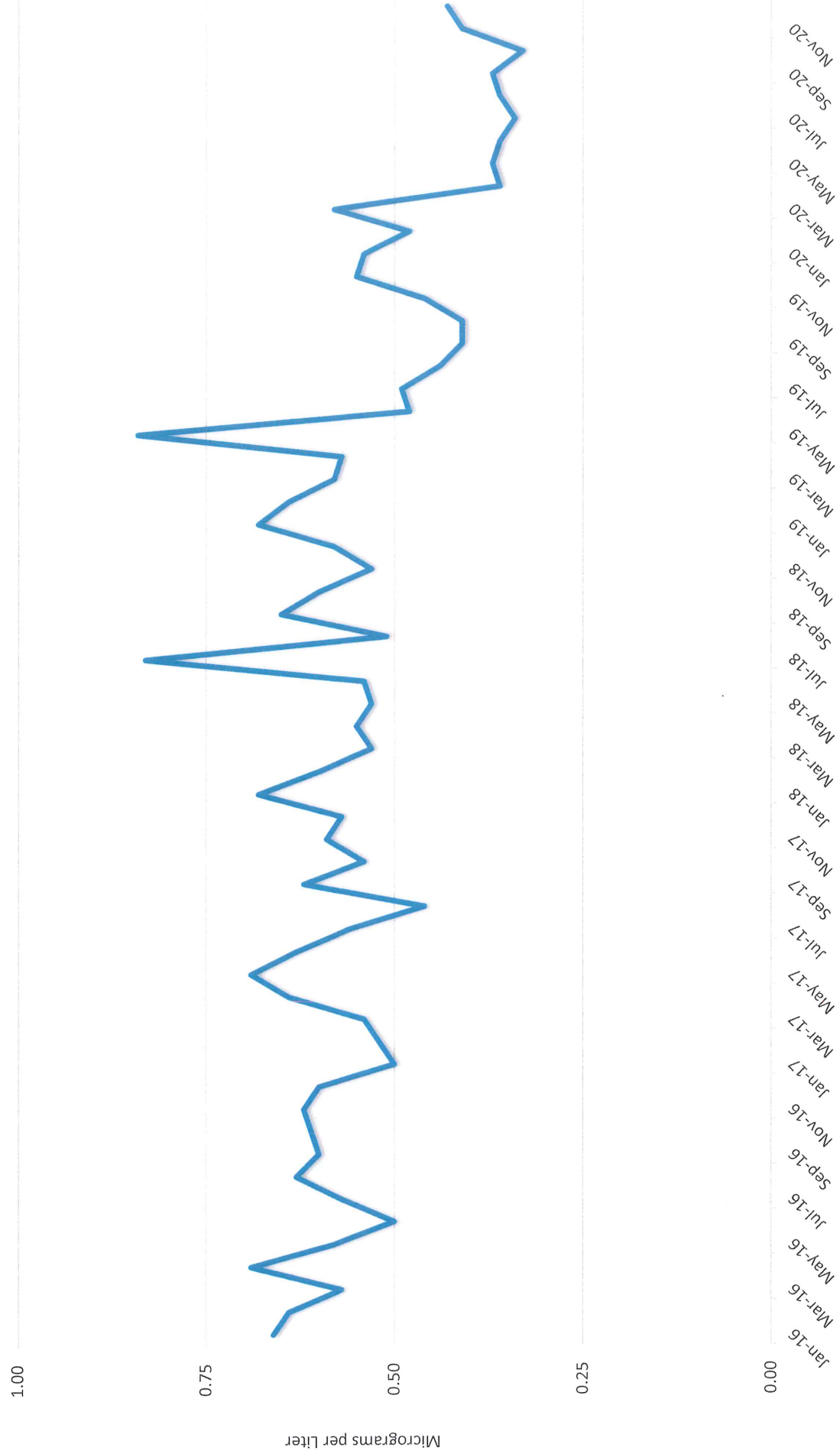
Cadmium Monitoring Results Effluent 2016-2020



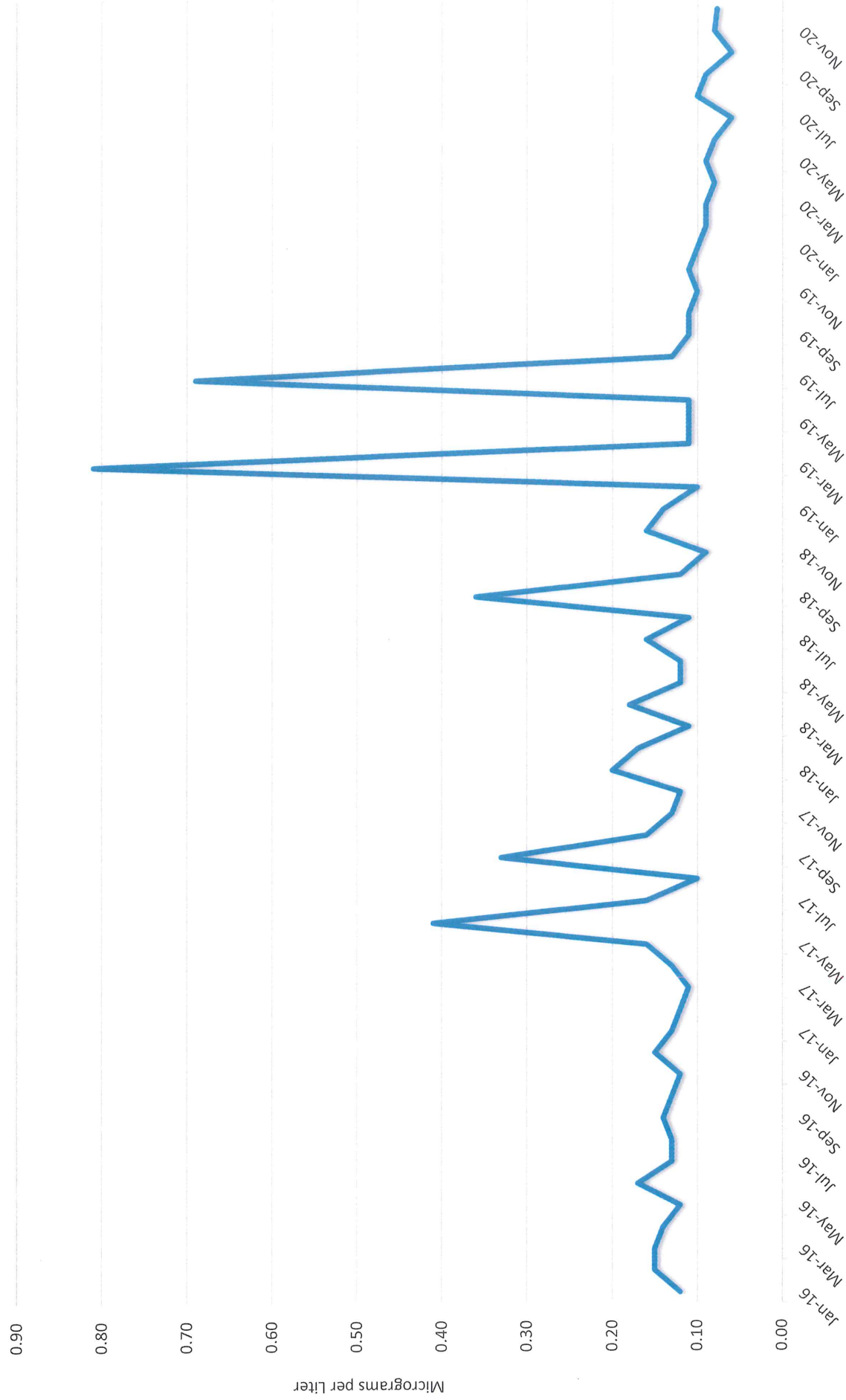
Copper Monitoring Results Effluent 2016-2020



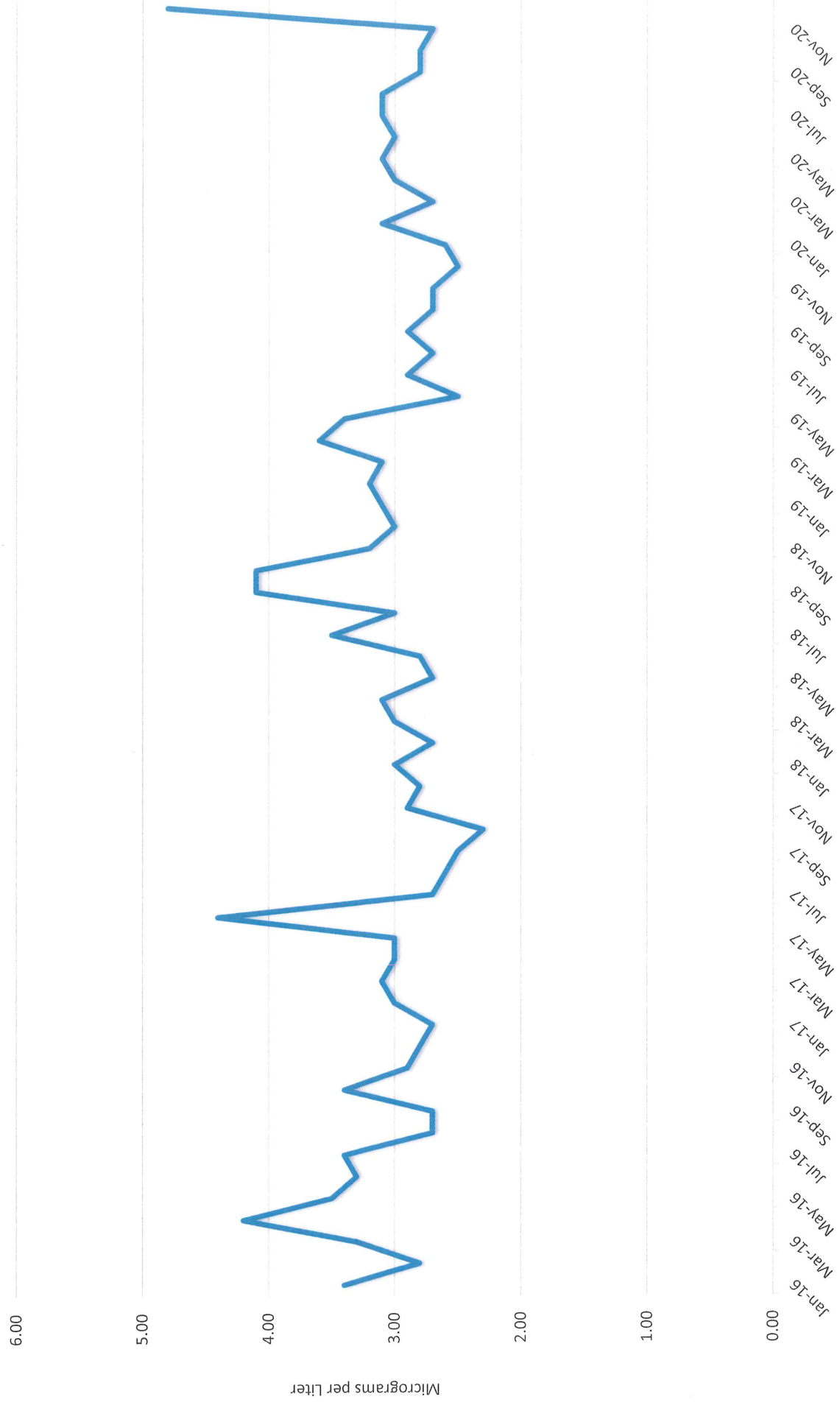
Total Chromium Monitoring Results Effluent 2016-2020



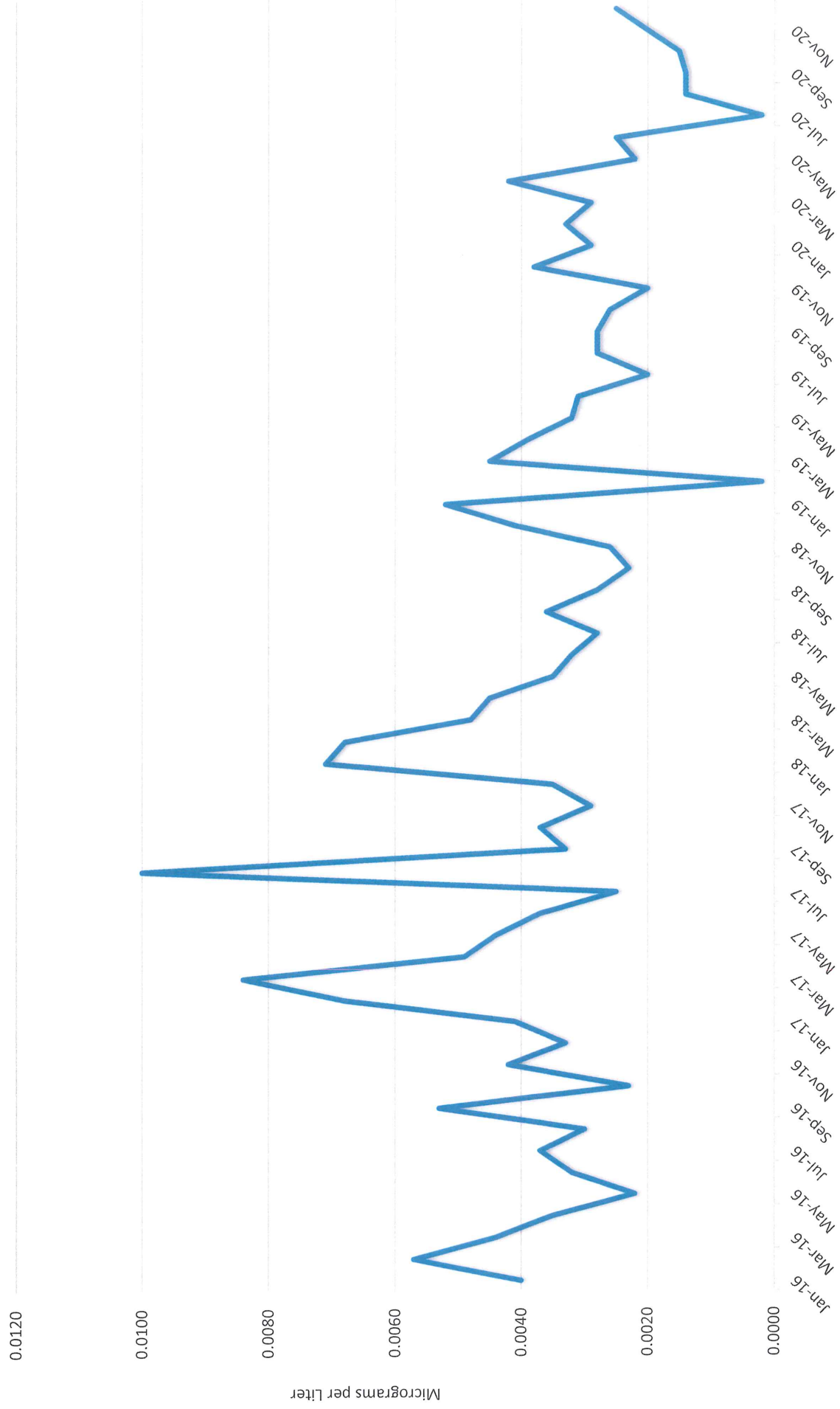
Lead Monitoring Results Effluent 2016-2020



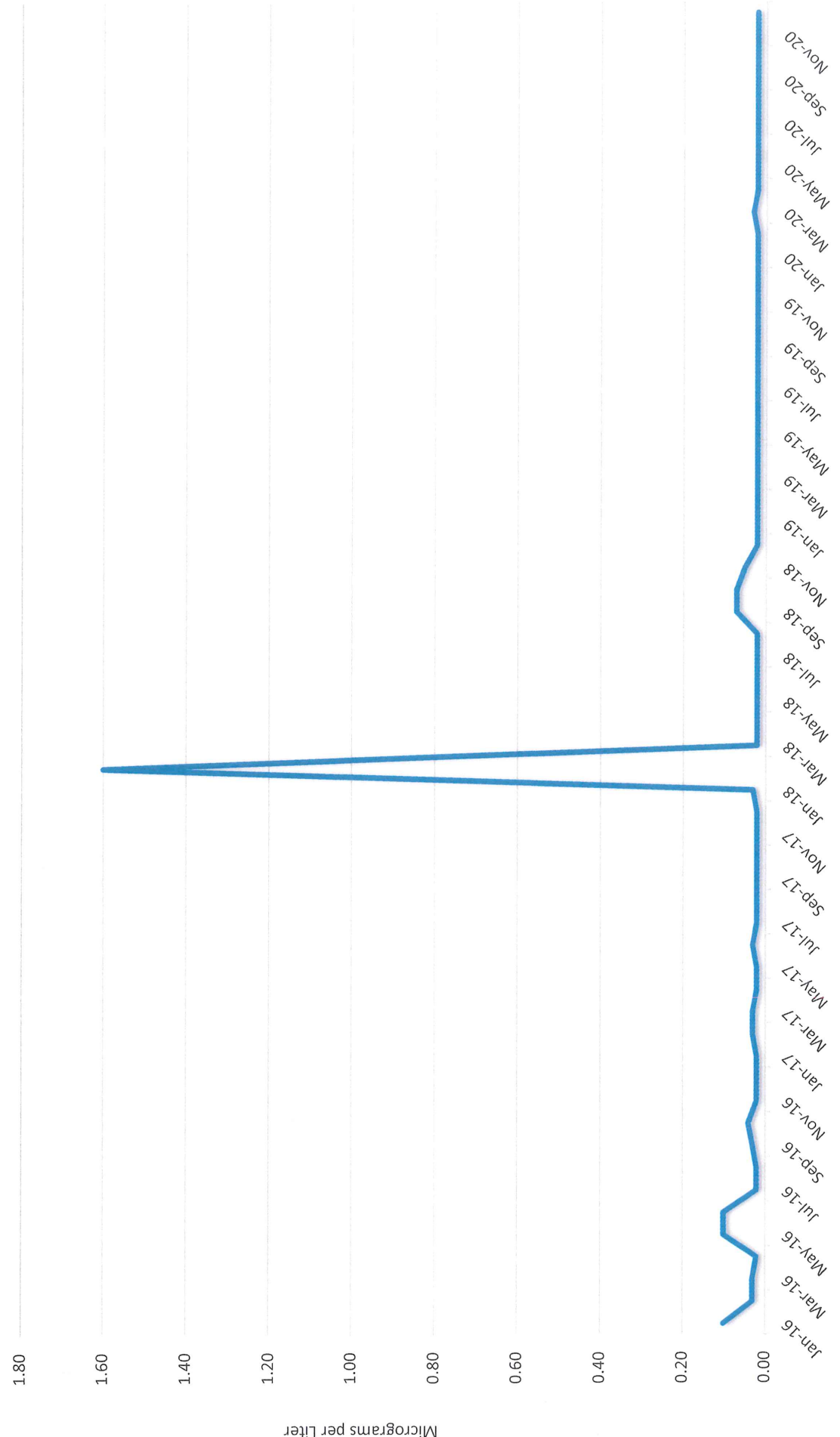
Nickel Monitoring Results Effluent 2016-2020



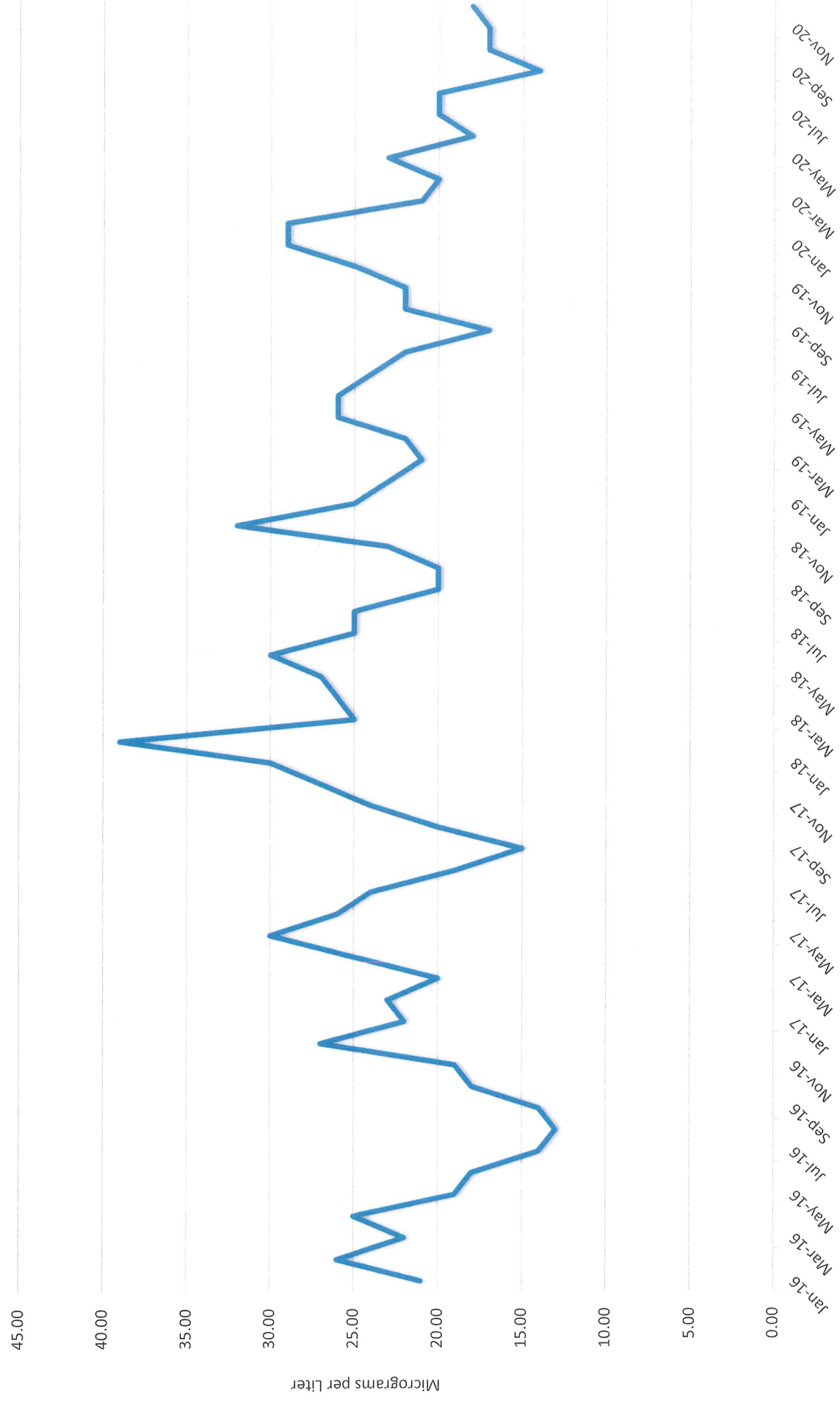
Mercury Monitoring Results Effluent 2016-2020



Silver Monitoring Results Effleunt 2016-2020



Zinc Monitoring Results Effluent 2016-2020

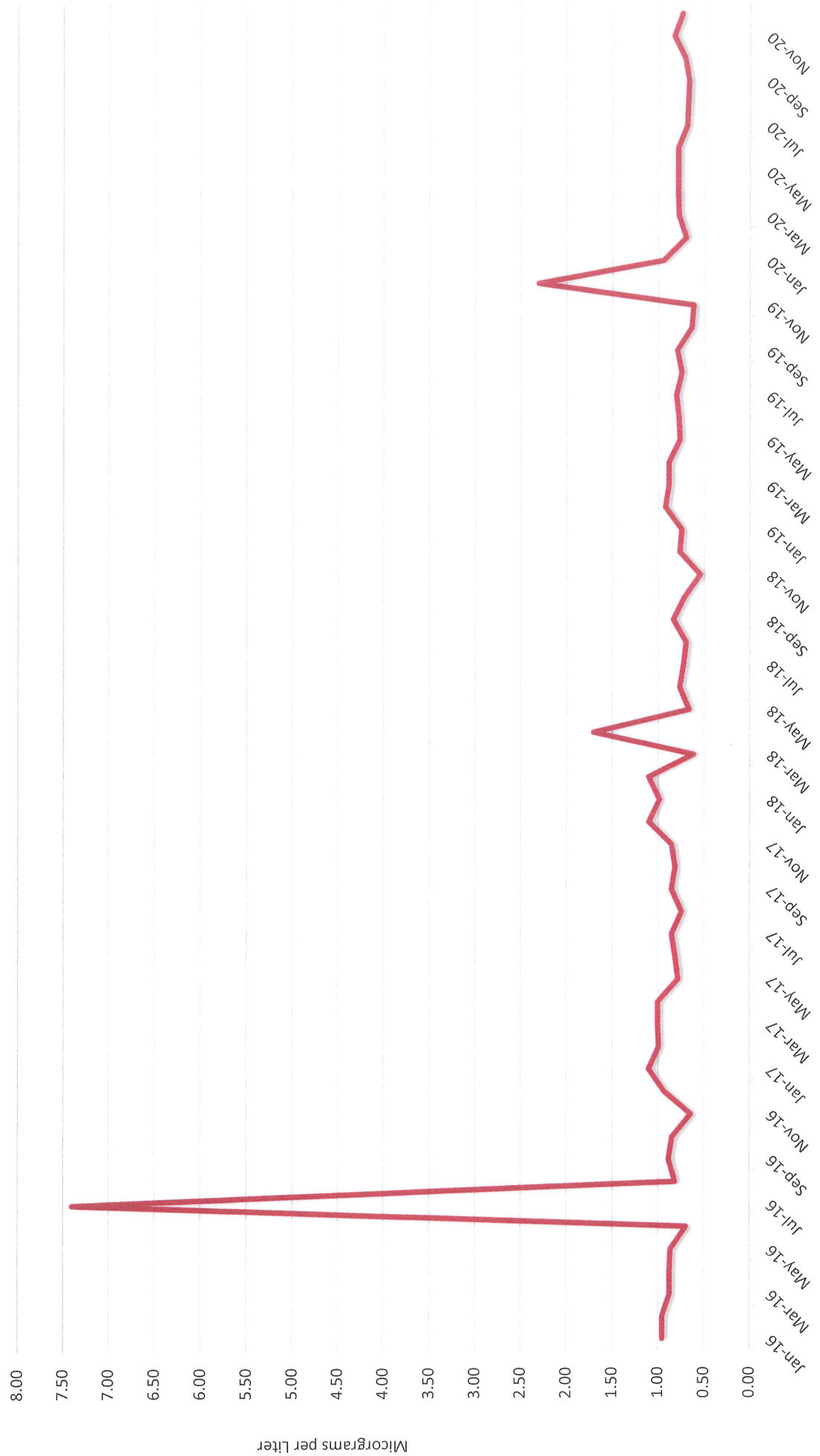


City of Livermore
LWRP Historical Metal Sampling - Influent

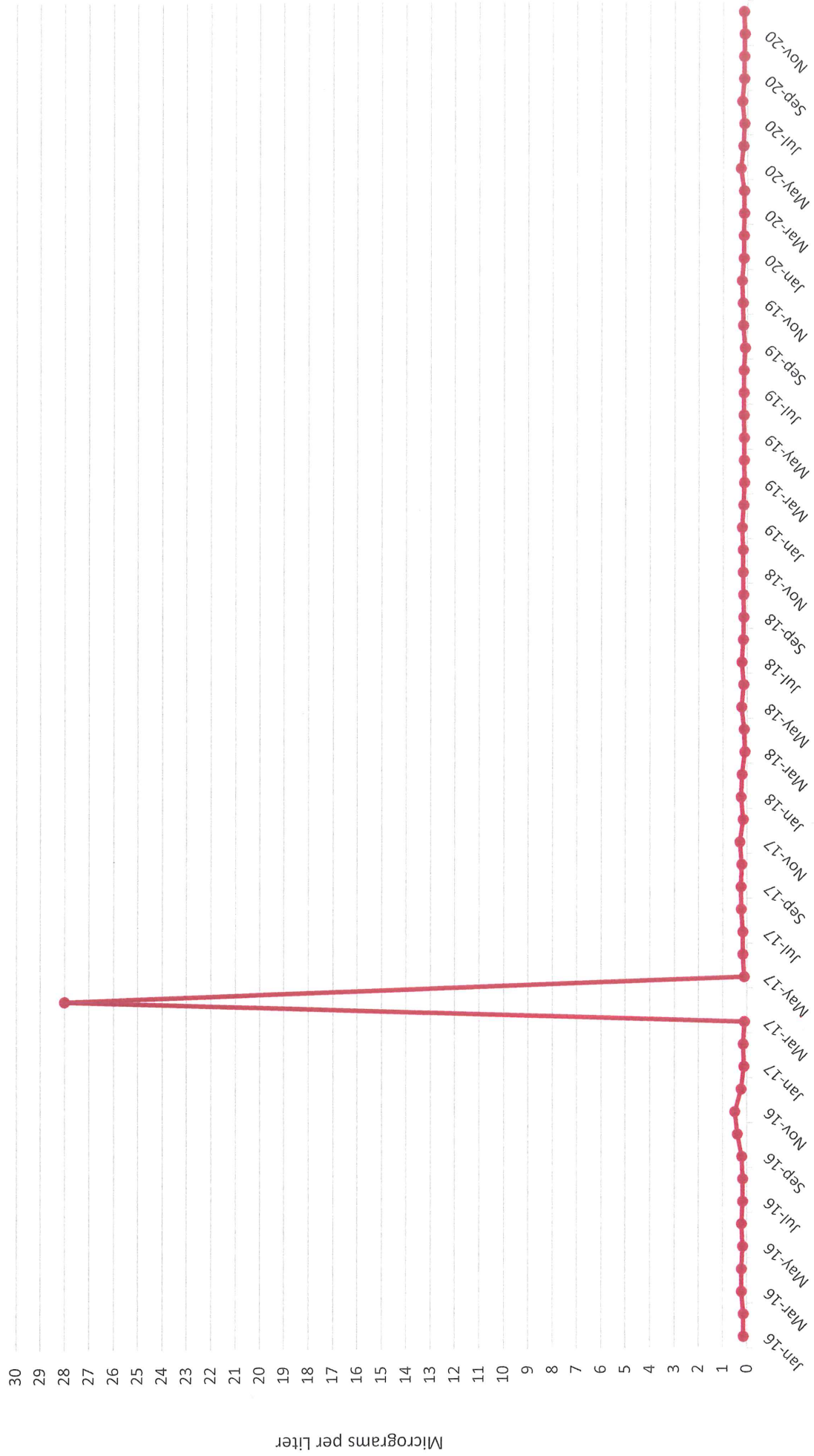
Parameter	Arsenic ug/l	Cadmium ug/l	Total Chromium ug/l	Copper ug/l	Lead ug/l	Mercury ug/l	Nickel ug/l	Silver ug/l	Zinc ug/l
Jan-16	0.95	0.14	3.3	43	1.2	0.051	5.3	0.2	110
Feb-16	0.95	0.14	3.0	51	1.5	0.130	4.2	0.4	130
Mar-16	0.87	0.21	3.0	53	1.9	0.150	5.2	0.5	160
Apr-16	0.87	0.21	3.7	78	1.7	0.140	6.6	0.4	160
May-16	0.86	0.17	2.4	49	1.2	0.072	4.3	0.3	130
Jun-16	0.69	0.21	2.4	69	1.9	0.093	5.1	0.4	160
Jul-16	7.40	0.17	3.1	64	2.5	0.130	6	0.5	160
Aug-16	0.81	0.17	3.0	53	1.6	J 0.045	4.1	0.3	140
Sep-16	0.88	0.2	3.7	60	1.9	0.066	5.6	0.4	160
Oct-16	0.84	0.39	3.6	73	10	0.150	5.6	0.7	270
Nov-16	J 0.64	< 0.5	< 2.7	43	1.3	0.110	3.8	J 0.3	130
Dec-16	0.93	0.23	3.4	66	1.8	0.070	4.8	0.4	180
Jan-17	1.10	0.12	3.0	45	1.5	0.076	5.4	0.2	120
Feb-17	0.99	0.15	3.1	45	1.7	0.150	4.9	0.3	150
Mar-17	1.00	0.1	1.9	27	0.66	J 0.044	4.4	0.2	74
Apr-17	1.00	28	2.6	50	1.3	0.140	4.9	0.2	140
May-17	0.78	0.11	2.7	44	1.2	J 0.045	4.1	0.3	140
Jun-17	0.81	0.17	2.4	42	1.1	0.065	4.5	0.3	150
Jul-17	0.85	0.17	3.4	52	1.7	0.180	4.8	0.3	170
Aug-17	0.74	0.23	3.0	51	2.1	0.087	4.8	0.4	190
Sep-17	0.85	0.24	2.8	50	5.8	0.071	3.9	0.5	150
Oct-17	0.81	0.21	2.9	55	2.7	0.076	5	0.4	180
Nov-17	0.85	0.29	2.9	44	2	J 0.045	4.3	0.4	150
Dec-17	1.10	0.16	2.3	40	1.3	0.095	4	0.3	140
Jan-18	0.98	0.24	2.8	49	1.7	0.180	5.8	0.7	190
Feb-18	1.10	0.2	2.9	46	1.2	0.078	4.1	0.5	140
Mar-18	0.61	J 0.09	1.6	25	0.7	0.320	2.8	0.4	77
Apr-18	1.70	J 0.12	2.6	39	1.4	0.076	4.9	0.3	120
May-18	J 0.66	0.22	3.1	50	7.5	0.094	5.1	0.4	160
Jun-18	0.76	0.14	3.4	46	1.7	0.130	4.6	0.3	140
Jul-18	0.72	0.21	3.0	54	2.1	0.069	5.1	0.7	160
Aug-18	0.69	J 0.16	3.4	48	1.9	0.310	4.5	0.3	150
Sep-18	0.83	J 0.14	2.4	63	1.8	0.120	5	0.6	160
Oct-18	0.71	J 0.15	2.8	66	3.1	0.090	5.1	0.3	160
Nov-18	0.54	0.17	2.2	22	1.6	0.190	8.2	J 0.1	120
Dec-18	0.76	J 0.17	2.7	53	2.4	0.085	4.5	0.4	150
Jan-19	0.74	0.2	3.0	46	2.3	0.070	5.2	0.5	150
Feb-19	0.92	0.15	3.4	43	1.4	0.060	4.7	0.2	110
Mar-19	0.88	0.12	2.6	36	0.99	0.110	4.2	0.2	100
Apr-19	0.88	J 0.13	3.2	53	1.4	J 0.039	4.8	0.3	140
May-19	0.76	0.13	3.5	65	1.1	0.062	4.5	0.2	110
Jun-19	0.77	0.14	2.4	51	1.8	0.074	4.2	0.3	150
Jul-19	0.80	0.14	2.5	49	2.7	0.066	4.6	0.3	170
Aug-19	0.74	0.14	2.1	39	1.4	0.056	3.8	0.2	130
Sep-19	0.79	J 0.09	2.0	41	1.6	0.073	4.2	0.3	150
Oct-19	0.63	0.17	2.0	42	1.6	0.070	4	0.5	140
Nov-19	0.61	J 0.18	1.7	42	1.2	0.120	4.2	0.4	150
Dec-19	2.30	0.21	6.1	50	2.9	0.085	11	0.5	140
Jan-20	0.94	J 0.14	2.5	65	2.4	0.068	4.2	0.3	150
Feb-20	0.69	0.14	2.5	51	1.7	J 0.048	5.2	0.3	150
Mar-20	0.77	J 0.13	2.9	61	1.1	0.630	3.8	0.3	140
Apr-20	0.78	0.13	1.6	45	1.3	0.057	4.2	0.2	120
May-20	0.78	0.26	2.1	53	1.4	0.110	5	0.3	180
Jun-20	0.78	J 0.16	1.7	50	1.1	0.060	4.8	0.4	140
Jul-20	0.68	J 0.12	1.5	47	0.92	0.061	4.3	0.5	140
Aug-20	0.67	0.2	2.0	53	1.8	0.066	4.6	0.3	170
Sep-20	0.66	J 0.13	1.9	43	1.3	0.087	4.1	0.3	130
Oct-20	0.70	J 0.13	2.1	44	1.4	0.150	4	0.3	130
Nov-20	0.82	J 0.11	1.7	47	0.81	J 0.034	3.5	0.2	120
Dec-20	0.73	J 0.14	2.1	51	0.95	0.070	4.4	0.2	150
Averages:	0.958	0.638	2.705	49.583	1.921	0.106	4.780	0.347	145.517

<= Non Detect Reported as less than the detection limit

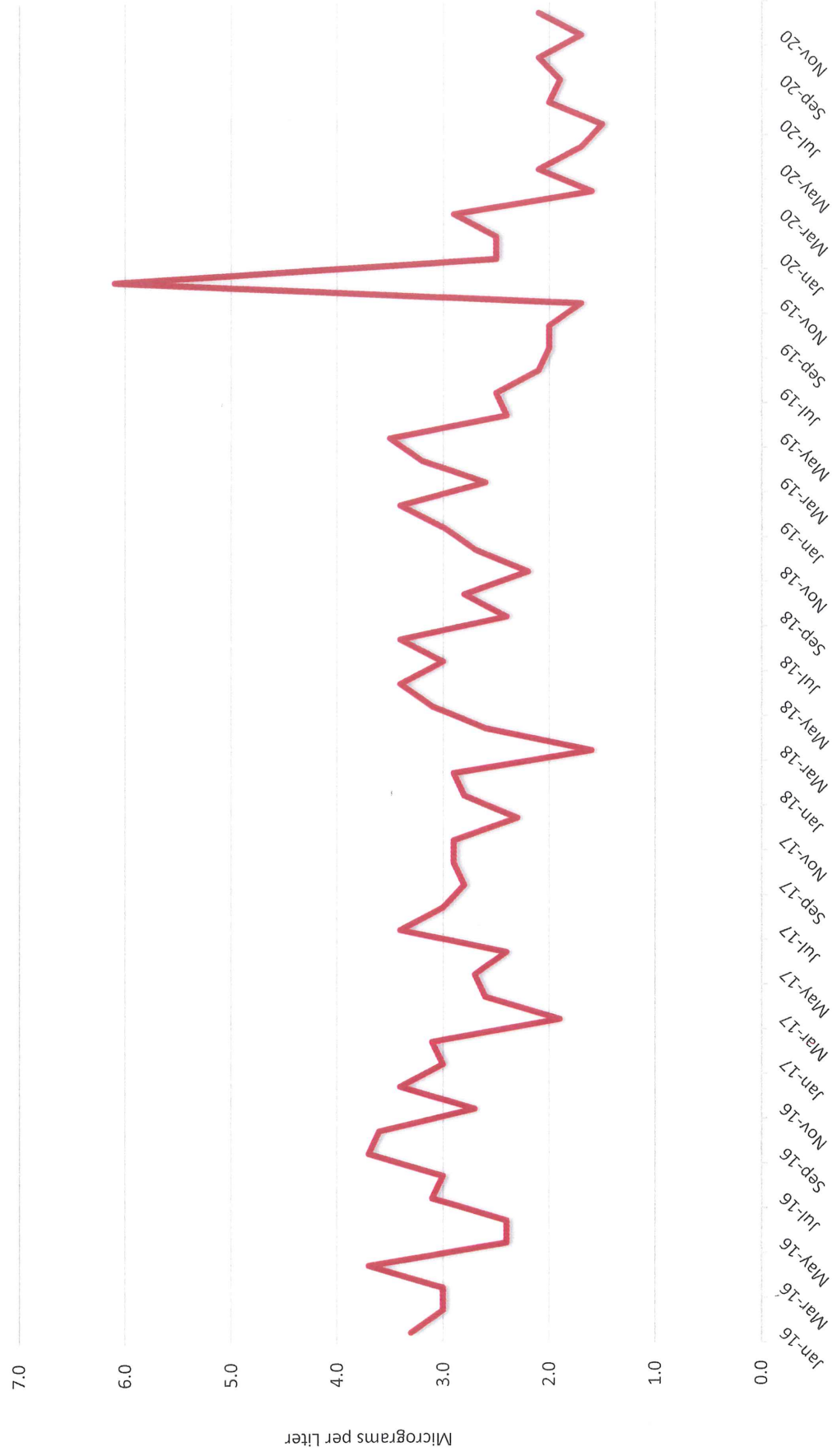
Arsenic Monitoring Results Influent 2016-2020



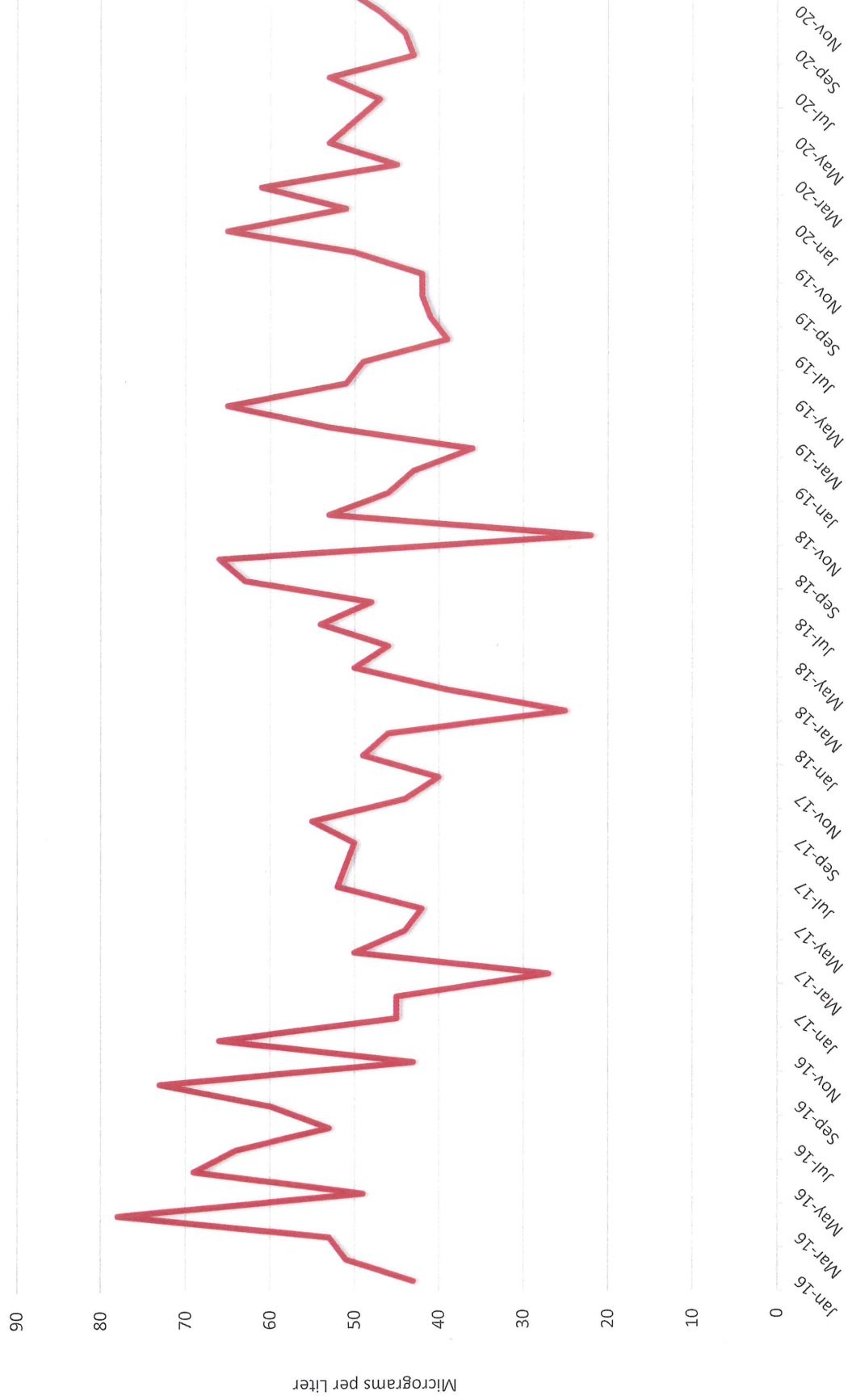
Cadmium Monitoring Results Influent 2016-2020



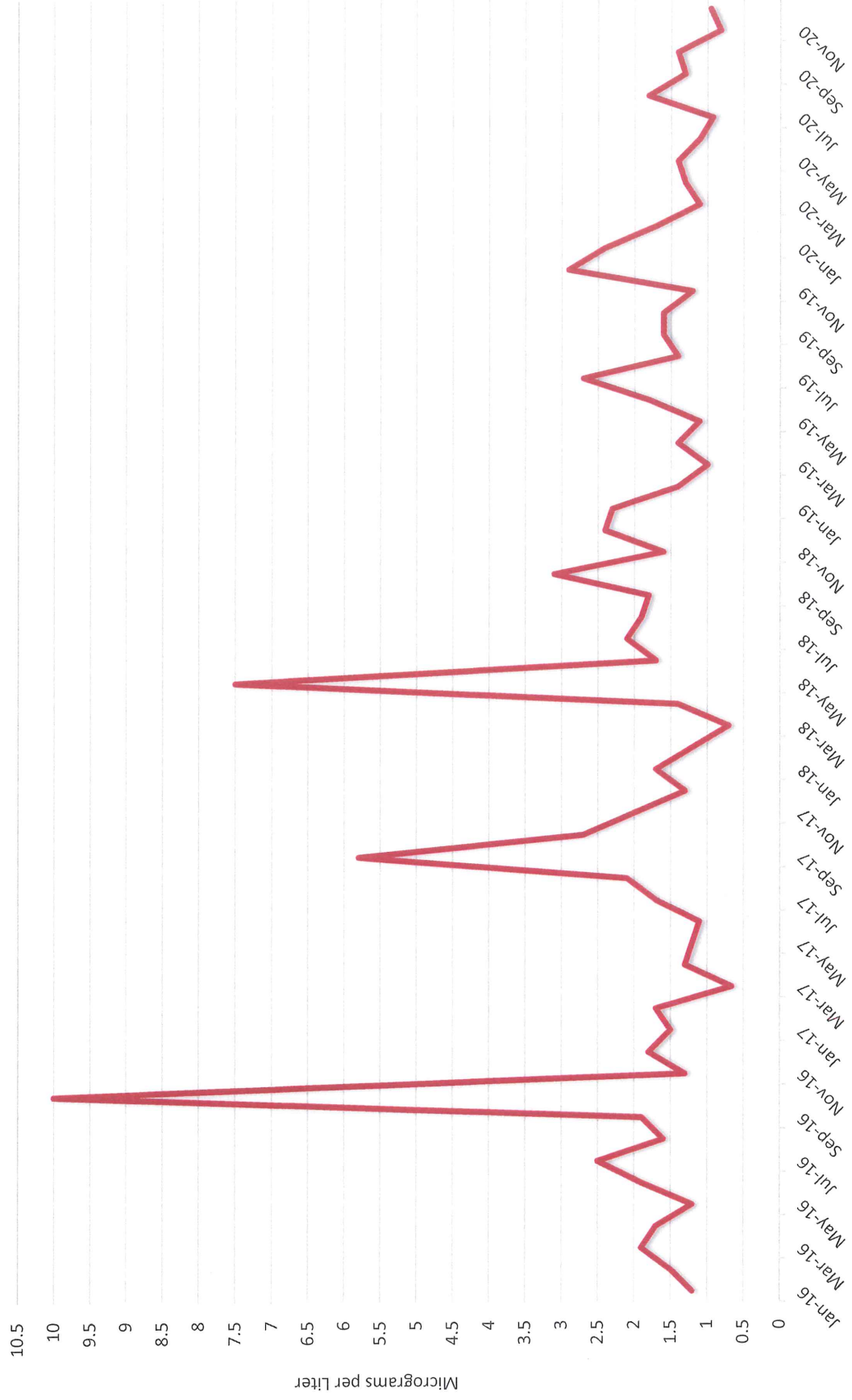
Total Chromium Monitoring Results 2016-2020



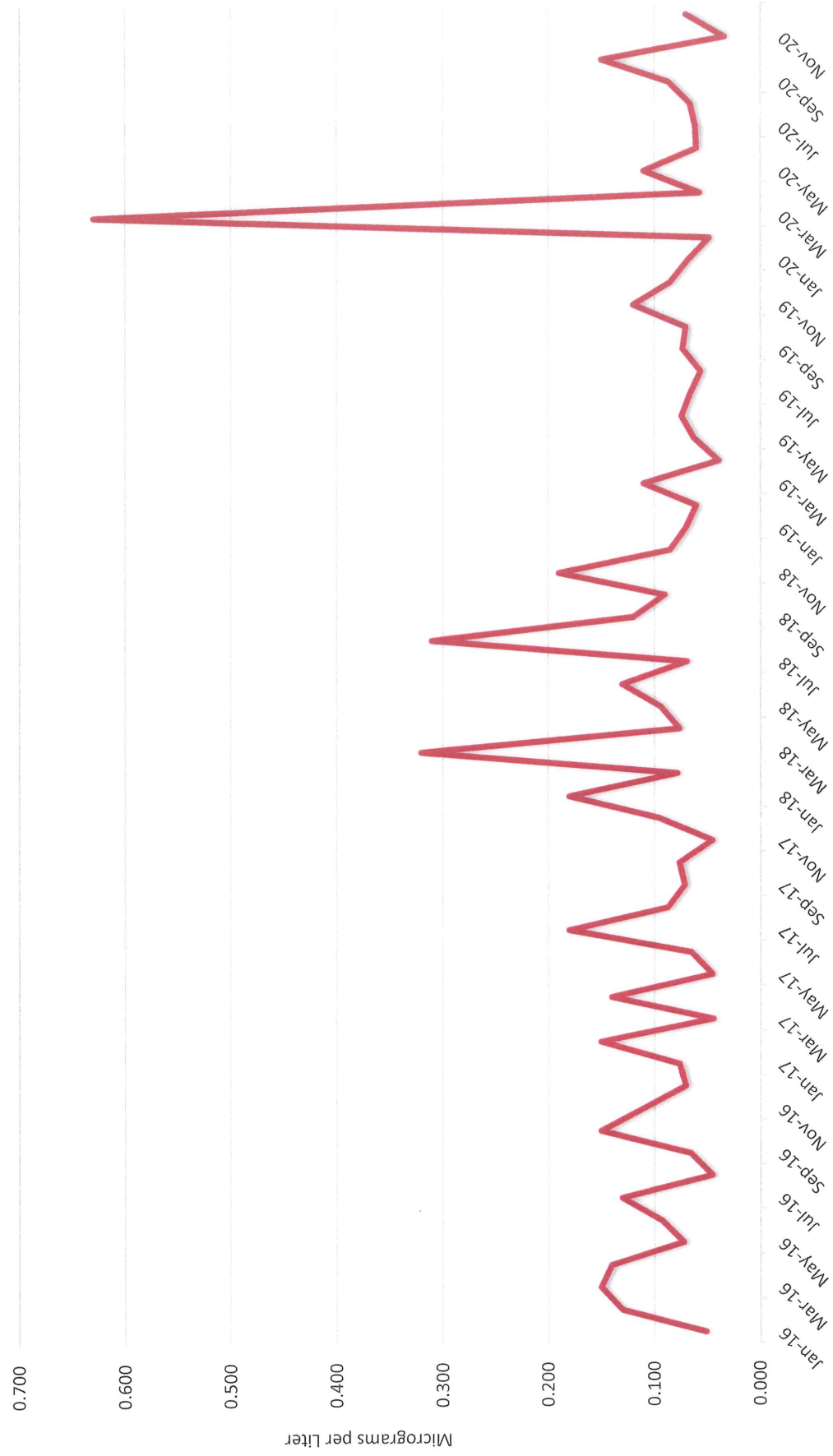
Copper Monitoring Results Influent 2016-2020



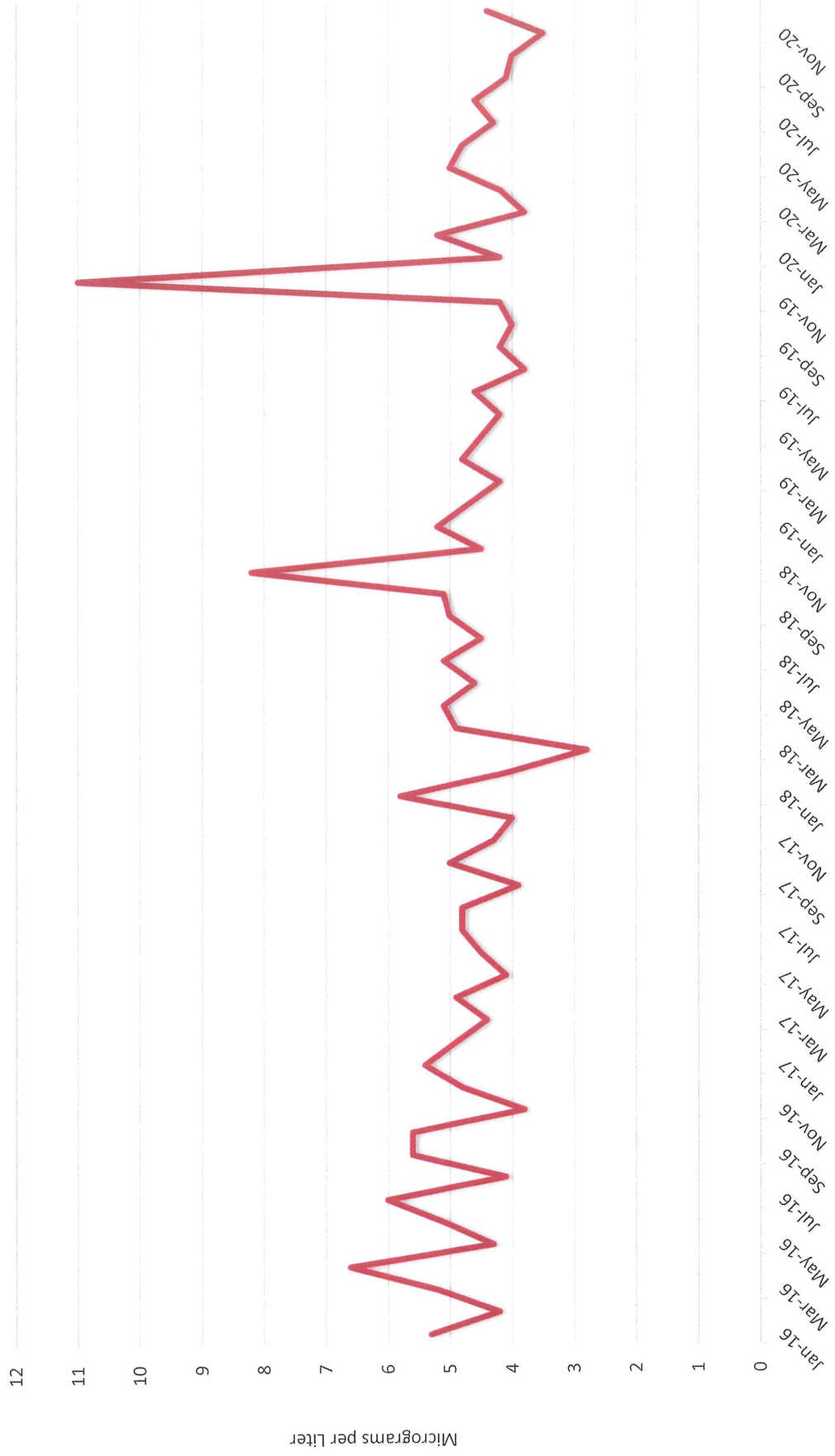
Lead Monitoring Results Influent 2016-2020



Mercury Monitoring Results Influent 2016-2020



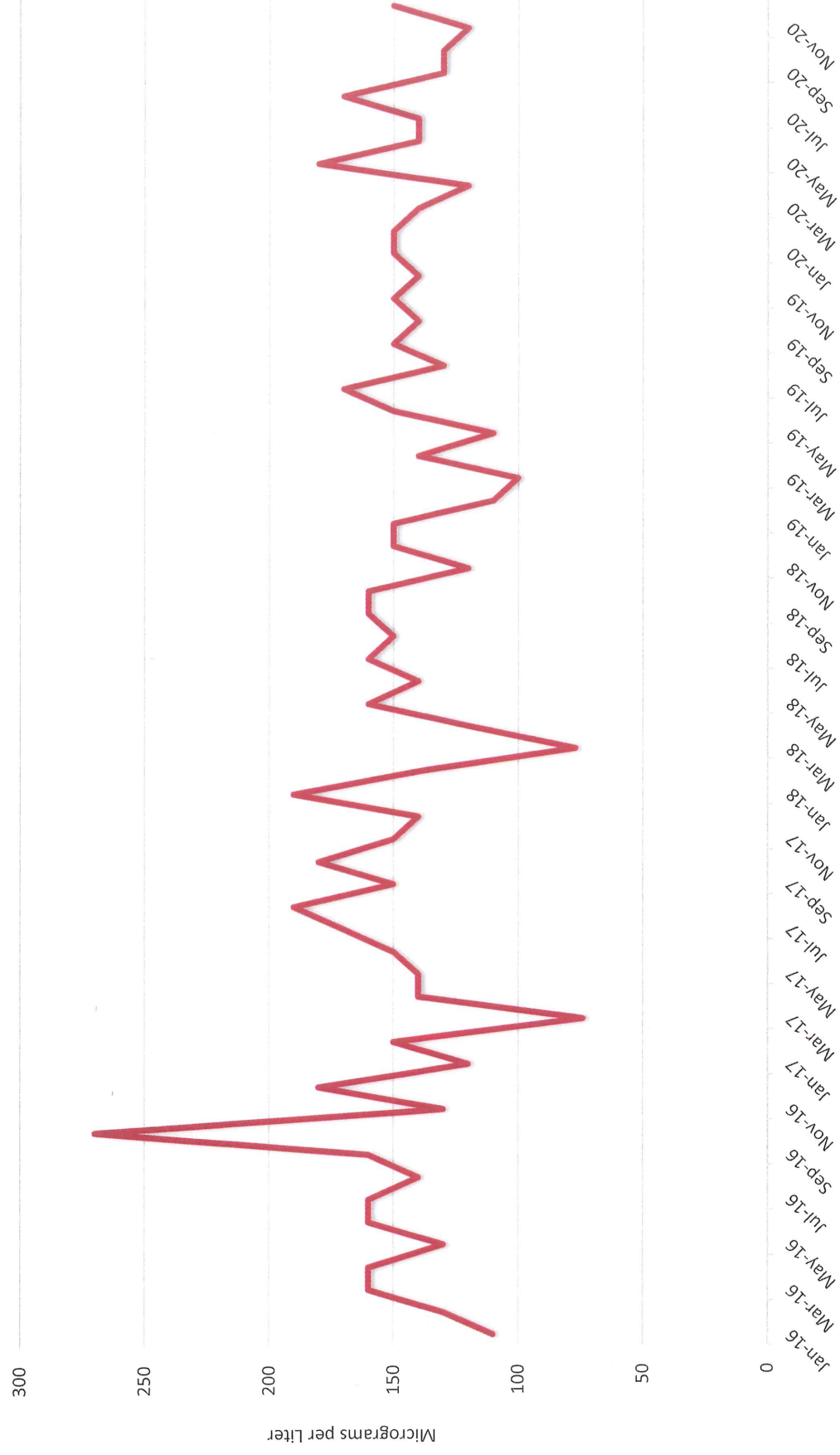
Nickel Monitoring Results Influent 2016-2020



Silver Monitoring Results Influent 2016-2020



Zinc Monitoring Results Influent 2016-2020



CITY OF LIVERMORE INSPECTION/SAMPLING PROGRAM

Objective:

The City of Livermore, in compliance with Federal and State mandated pretreatment regulations, has developed a local pretreatment program to regulate the discharges of wastewater into the sanitary sewer and storm drain systems. To meet the objectives of the pretreatment program the City shall enforce all limitations or prohibitions of certain constituents in wastewater effluent streams. The objectives of this program are as follows:

1. **Hazardous Waste:** Hazardous industrial waste in domestic sewage is excluded from regulation under the Resource Conservation and Recovery Act (RCRA). The pretreatment program shall fill this exclusion to prevent the unregulated disposal of hazardous waste to the sewer system which may otherwise endanger public health and the environment or cause the Livermore Water Reclamation Plant sludge to be a RCRA hazardous waste.
2. **Interference:** To prevent the introduction of pollutants into the LWRP which will interfere with the operations of the LWRP or cause the LWRP to violate its NPDES permit.
3. **Pass Through:** To prevent the introduction of pollutants into the LWRP which will pass through the LWRP without adequate treatment and impair the beneficial uses of receiving waters or cause the LWRP to violate its NPDES permit.
4. **Sludge:** To prevent the accumulation of constituents in the LWRP sludge that would render it unsuitable for affordable disposal or reuse.
5. **Worker Safety:** To prevent the release of material which may be hazardous either to LWRP personnel or the public health.
6. **Air Quality:** To prevent the introduction of volatile compounds into the LWRP which are released to the air during the treatment process.

**City of Livermore
Inspection Policy**

Inspection Policy: In order to effectively investigate and monitor industrial users for compliance with all applicable Federal Pretreatment Standards, state and local regulations all Source Control personnel shall follow the City of Livermore Inspection Policy when conducting scheduled, unscheduled and demand inspections of industrial facilities.

1. Inspection preparation: Background review for information on the industrial user shall be done prior to conducting any Scheduled or Unscheduled inspection. The inspector shall become knowledgeable with all applicable Pretreatment Standards, state and local limitations which apply to the facility. In addition, inspectors shall also review the Industrial Users Permit file to become better familiarized with the type of process, process locations, sampling points, past violations, possible safety hazards and information contained within the permit application to verify compliance with all Federal Pretreatment Standards, state and local limitations.
2. Sampling preparation: All preparation of sampling equipment, containers and sample preservatives, depending on the parameters of pollutants outlined in step 1, shall be completed prior to the inspection. All samples collected must follow City of Livermore chain of custody procedures and are recorded in Sample Logs.
3. Equipment preparation: Preparation of additional equipment which may be required during the inspection such as cameras, schematics of the facility and necessary safety equipment shall be organized prior to conducting the inspection.

Inspectors must abide by all Cal OSHA safety regulations and under no circumstances shall an inspector enter any area which poses a potential health hazard.

4. Notification to the industrial user: For scheduled inspection visits prior notification is given at least 1 week in advance to the industrial user. For unscheduled or demand inspections, the City of Livermore Municipal Code section 13.32.260 requires industrial users to allow the City or their representatives ready access at all reasonable times to all parts of the premises for the purpose of inspection, sampling, record examination or the performance of any of their duties. Therefore, advance notification is not given for unscheduled or demand inspection visits.

However, under no circumstance shall a Source Control Inspector enter any facility without the expressed permission from the facility manager,

corporate officer or other such designated representatives.

5. Inspection of Industrial User: The inspections are generally conducted during normal business hours. Inspectors shall present their City identification card and business card when requesting consent to begin their inspection activities from the facility owner or representative (See identification procedure). Inspectors will use inspection forms for notes, comments and schematic drawings. The inspection form also serves as a check list for areas covered in the inspection (See inspection form). Any evidence of noncompliance either collected or observed shall be recorded in the evidence and photographic report and a copy forwarded to the Water Resources Manager.
6. Prior to conducting an annual or first time inspection of a facility, inspectors shall conduct an opening conference with facility personnel which covers the following topics:
 - A. Inspection Objective. A discussion of the monitoring objective and review of applicable limits and regulations.
 - B. Permit Application. Inspectors will review the permit application with the industrial user to verify information contained in the application. In the case of new industrial users the inspector shall explain the permit application to the industrial user and answer any questions regarding the application.
 - C. Order of Inspection. The inspector shall outline the areas he would like to inspect at the facility (records, processes used, drainage, manifests, etc.). The inspector shall inform the industrial user of their right to receive a split sample of any sample collected during the inspection or other sampling visits.
 - D. Safety Requirements. A discussion of any safety requirements that will be involved with monitoring the facility.
 - E. Establishment of Contact Personnel. The inspector shall establish who the designated contact person is for the facility.
 - F. Special Equipment. The inspector shall request that photographs be allowed to be taken during the inspection visits.
7. Inspection Evaluation: An inspection report is filed which uses all documentation and data collected during the inspection to evaluate the compliance status of the industrial user. If the industrial user is found to be in a state of noncompliance, appropriate enforcement action shall be taken as listed in the Enforcement Response Plan.

Standard Operating Procedures for Chain of Custody

The purpose of this S.O.P. for Chain of Custody is to ensure that all samples taken have their integrity intact for the purpose of defensibility. Even the most serious challenge to the LWRPs' sample results, which may include the possible litigation, must be met. To accomplish this, all procedures must be documented and defensible. This S.O.P. is part of preserving sample integrity.

- I. The Source Control Inspector will maintain a field log book as a permanent record of each sampling event. All entries will be made in ink. Changes or corrections will be initialed. All entries must be legible, clear and concise. Individual sheets may be temporarily kept in the field binder, but will eventually be filed with the Chain of Custody form along with the laboratory results in the industrial users file.
- II. Upon arriving at the laboratory, each sample will be given a consecutive number from the Source Control Program sample log book. This log book remains in the laboratory. The number assigned to a sample follows onto the chain of custody form. The Source Control Inspector has the option of entering the name of the company on the chain of custody form or not.
- III. A Chain of Custody form is filled out after each sample has been assigned its own unique number. If the sample is relinquished to laboratory personnel, the person accepting will sign the C of C form. The sample will be stored in a locked refrigerator to either be analyzed at the WRP laboratory or at an outside laboratory. The only persons having a key to the locked refrigerator are the Source Control Inspector, Technicians, and the 3 laboratory personnel. If a sample is sent out to an independent laboratory, a copy of the C of C form will accompany it. When a stored sample is finally disposed of, the C of C form should be taken out of the file and the date and initials of the person disposing of the sample should be entered on the form. If a split of a sample is made, then indicate the date, and time of the split and who received the split.
- IV. The C of C form, the laboratory results and the field sampling log will be attached and filed together by the Source Control Inspector, after review, in the proper IU file. Duplicate samples, sample spikes, sending splits to two or more laboratories, and checking QA/QC data submitted by contract laboratories will be done to assure precision and accuracy as part of the WRP's QA/QC program.

**City of Livermore
Identification Procedures
For Source Control Inspectors**

Identification Policy: Source Control Inspectors are required to use the following identification procedures prior to entering any facility.

1. Source Control Inspectors shall present their City Identification and City business card to the facility owner, corporate officer or other designated representative upon requesting access to the facility for the purpose of inspection, monitoring or other such task designated to the inspector by the Water Resources Manager.

In the event that additional picture identification is requested, the inspector shall present one additional piece of picture identification. Therefore inspectors must carry at least one other type of picture identification on their persons (Driver's license, Military ID card).

2. Under no circumstance shall a Source Control Inspector enter any facility without the expressed permission from the facility manager, corporate officer or other such designated representative.

3. If entry is not granted, the inspector must request clarification for the reason for denial of entry. If obstacles or misunderstandings cannot be resolved by the inspector and entry is not granted, the inspector must withdraw from the premises and contact their supervisor immediately.

4. All observations pertaining to the denial shall be thoroughly noted by the inspector on the Inspection Form as soon as possible after leaving the facility.

The inspector must document the following information of the inspection form: facility name, address, name and title of person approached for access, authority of person who refused entry, date and time of denial, reason for denial, and any other pertinent information regarding the facility or reasonable suspicions why access was refused.

5. Under no circumstances shall the inspector discuss any potential penalties or do anything that may be construed as coercive or threatening. Inspectors shall use discretion and avoid any situation that may be potentially threatening or inflammatory.

Other Access Problems:

1. Limited access of facility: if, during the course of the inspection, access to some part of the facility is denied, the inspector shall document the areas and the reason for denial on the inspection form. After completing the inspection the inspector shall report the refusal of access to the Water Resources Manager.

2. Withdrawal of consent during monitoring: If the inspector is told to leave the premises after monitoring has begun, the inspector shall use the same procedure as listed above for denial of entry.

City of Livermore Enforcement Response Plan

Enforcement Policy: In order to promote consistent and timely use of enforcement remedies the City has developed the following Enforcement Response Plan. The Enforcement Response Plan defines the range of appropriate enforcement actions based on the nature and severity of the violation and other relevant factors.

Time frame for enforcement actions:

1. All violations identified shall be documented within five working days after becoming aware of the violation.
2. Initial enforcement responses (contacting the industrial user with appropriate enforcement action) shall occur within 15 working days of becoming aware of the violation.
3. Follow up enforcement for continuing or recurring violations shall be taken within 60 days after the initial enforcement action. For all recurring and continuing violations the response must include a compliance schedule.
4. Violations, which threaten the health of the public or environment, are considered emergencies and shall result in the immediate enforcement response such as but not limited to the halting of discharge or termination of service.

Terms and Abbreviations:

SCI – Source Control Inspector

LS – Laboratory Supervisor

WRM – Water Resources Manager

PSD – Public Services Director

CA – City Attorney

SNC – Significant Noncompliance

NOV – Notice of Violation

AO – Administrative Order

Harm Done – Harm done to either the POTW (pass-through, interference or upset) or the environment

No Harm – No harm done to either the POTW or the environment

Civil – Civil litigations against an individual or organization seeking equitable relief and recovery or actual damages

Criminal – Criminal prosecution pursuing punitive measures against an individual or organization through a court of law.

Public Notice – A list of users, which violate one or more pretreatment requirements or standards, shall be annually published.

City of Livermore Guide to Enforcement Actions

This guide to enforcement actions provided a basic description of the various types of enforcement actions available to the City. Industrial users found to be in noncompliance with any Federal Pretreatment Standard, state or local regulation shall have the appropriate enforcement action taken against them as listed within the Enforcement Response Plan. Failure by the industrial user to achieve compliance within the required time frame shall result in an escalation of enforcement to the next highest level of enforcement response.

- A. **Informal Notice:** For minor violations (late reports or inadvertence minor violations of City discharge limitations) notice may be given either by telephone or letter to the industrial user stating the exact nature of the violation. The industrial user is informed that subsequent violations or continued violation will result in an escalation of enforcement action.
- B. **Notice of Violation (NOV):** For violation of pretreatment standards or City discharge limitations, written notification is hand delivered by the Source Control Inspector or may be sent by certified mail to the industrial user.

Within 30 days following the notification of violation the permittee must re-sample for those pollutant parameters for which the violation occurred. The permittee must file a report to the City of Livermore with the results of the second analysis within 30 days following the notification of the violation.

- C. **Citation:** Failure by the industrial user to comply within the time specified will result in a citation being issued which may require a court appearance and a fine of up to \$500.00. Citations are issued by the Water Resources Manager, or the Source Control Inspector.
- D. **Show Cause Hearing:** For significant violations, notification is issued to the industrial user of a “Show Cause Hearing”, generally prior to the City taking formal enforcement action. Written notice of the meeting is served personally or by certified mail to the industrial user at least 10 days before the meeting. The Water Resources Manager oversees the meeting and hears all the facts and testimony he deems pertinent to the meeting before making his decision on the necessary enforcement action to be taken. Notice of the manager’s decision is mailed (certified) to the industrial user within ten days of the conclusion of the meeting. However, it should be noted that the “Show Cause Hearing” is not a required prerequisite for the City before taking a formal enforcement action. The City may elect to enact any of the following enforcement actions:

E. Administrative Order:

1. The City may require the industrial user to complete a compliance schedule, which lists the tasks the industrial user must complete within the designated time frame.
2. The City may suspend wastewater treatment services and/or wastewater permit privileges when such suspension is necessary. This could occur if, in the opinion of the Water Resources Manager, there is an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or

welfare of person or to the environment, causes interference to the POTW, or causes the City to violate any condition of its NPDES permit. As required by Livermore Municipal Code, all industrial users found to be in violation of applicable pretreatment standards and/or City discharge limitations are listed and published in the largest daily newspaper (Valley Times and Herald) within the City.

- F. **Terminate Service:** The City may revoke the permit and discontinue services of any industrial users in order to halt immediately any actual or threatened discharge to the POTW, which may represent an endangerment to the public health, environment, or the POTW. Prior to the revocation of the permit a hearing is held by the Director of Public Services. Written notification of the hearing is delivered to the industrial user either personally or by certified mail at least 120 days prior to the hearing. The Director of Public Services hears all the facts and testimony he deem pertinent to the hearing before making his decision. The decision of the public works director is final. Notice of the decision is mailed (certified) to the industrial user within 10 days of the conclusion of the hearing.
- G. **Legal remedies:** The City Attorney may commence legal actions to enjoin the industrial user from further violations of the permit and to recover damages. In additions, the City may pursue criminal prosecution of the industrial user through the District Attorney's office.

ENFORCEMENT RESPONSE PLAN

UNAUTHORIZED DISCHARGES (NO PERMIT)

Type of Noncompliance	Nature of Violation	Enforcement Response Options	Persons Involved
Unpermitted Discharge	IU unaware of the requirement (no harm)	Phone Call Application Mailed	SCI
	IU unaware of the requirement (harm done)	AO Public Notice	SCI, LS, WRM
	Failure to apply for a permit after notice by POTW	Terminate Service Public Notice	SCI, LS, WRM
Expired Permit (failure to renew)	IU has not submitted application in time	Phone Call	SCI

DISCHARGE LIMIT VIOLATION

Discharge exceeds Federal or Local limit	Isolated, not SNC	Phone Call or NOV Public Notice	SCI
	Isolated, SNC (no harm)	NOV Public Notice AO	SCI, WRM
	Isolated, SNC (harm done)	Citation Public Notice Show Cause Order	SCI, LS, WRM, PSD
	Recurring, SNC (no harm)	Citation Public Notice Show Cause Order	SCI, LS, WRM, PSD
	Recurring, SNC (harm done)	Show Cause Hearing Terminate Service Civil Action Public Notice	WRM, PSD, CA

MONITORING AND REPORTING VIOLATIONS

Type of Noncompliance	Nature of Violation	Enforcement Response Options	Persons Involved
Reporting Violation	Report is not completed properly	Phone Call	SCI
	Report is not completed properly after notice	Citation Public Notice	SCI
	Report past due date (5 working days)	Phone Call	SCI
	Significantly past due date (30 days past due date)	Citation AO Public Notice	SCI, LS, WRM
	Reports are always late or is not delivered	Citation AO Public Notice	SCI, LS, WRM
	Failure to report spill/process change (no harm)	NOV Public Notice	SCI, LS, WRM
	Failure to report a spill or process change (harm done)	Citation AO Public Notice	SCI, LS, WRM
	Repeated failure to report spills	Show Cause Hearing Public Notice	WRM, PSD
	Falsification of reports	Terminate Service Criminal Public Notice	WRM, CA
Failure to Monitor Correctly	Failure to monitor for all required pollutants	NOV Public Notice	SCI
	Recurring Failure to Monitor	Citation AO Public Notice	SCI, LS, WRM
Improper Sampling	Evidence of intent	Terminate Service Criminal Public Notice	WRM, CA

OTHER PERMIT VIOLATIONS

Type of Noncompliance	Nature of Violation	Enforcement Response Options	Persons Involved
Wastestreams are diluted in lieu of treatment	Initial violation	NOV Citation Public Notice	SCI, LS, WRM
	Recurring violation	Citation AO Public Notice	SCI, LS, WRM
Failure to halt noncompliance	(no harm)	NOV Citation Public Notice	SCI, LS, WRM
	(harm done)	Show Cause Hearing Public Notice	WRM, PSD
Failure to operate or maintain any pretreatment device	(no harm)	NOV Citation Public Notice	SCI, LS, WRM
	(harm)	Show Cause Hearing Public Notice	WRM, PSD

VIOLATIONS DETECTED DURING AN INSPECTION

Type of Noncompliance	Nature of Violation	Enforcement Response Options	Persons Involved
Denial of Access	Entry denied or consent withdrawn	NOV Citation Terminate Service	SCI, LS, WRM, CA
Illegal Discharge	(no harm)	Citation AO Public Notice	SCI, LS, WRM
	(harm done)	Show Cause Hearing Public Notice	WRM, PSD
	Evidence of intent /negligence (harm done)	Civil Criminal Public Notice	WRM, PSD, CA
	Violation of AO	Terminate Service Public Notice	WRM, PSD, CA
Improper Sampling	Unintentional sampling at wrong location	Phone Call NOV	SCI

VIOLATIONS DETECTED DURING AN INSPECTION

Type of Noncompliance	Nature of Violation	Enforcement Response Options	Persons Involved
Improper Sampling	Unintentional using wrong sample type	Phone Call NOV	SCI
Inadequate Records	Incomplete records no evidence of intent	Phone Call	SCI
	Recurring	Citation AO Public Notice	SCI, WRM
Failure to report all monitoring	Inspector finds additional files	NOV Public Notice	SCI
	Recurring	AO Public Notice	LS, WRM

MONITORING AND REPORTING VIOLATIONS

Type of Noncompliance	Nature of Violation	Enforcement Response Options	Persons Involved
Failure to install monitoring devices	Delay of less than 30 days (working days)	NOV Public Notice	SCI
	Delay exceeds more than 30 days (working days)	Citation AO Public Notice	SCI, WRM
	Recurring violation of AO	Terminate Service Public Notice	WRM
Compliance Schedule (in Permit)	Miss milestone by less than 90 days and will not affect final milestone	NOV Public Notice	SCI, LS
	Missed milestone by more than 90 days or affects milestone (good cause)	AO Public Notice	LS, WRM
	Missed milestone by more than 90 days or affects milestone (no good cause)	Show Cause Hearing Public Notice	WRM, PSD
	Recurring violation of AO	Terminate Service Public Notice	WRM



Wastewater Discharge Permit / Chemical Storage Permit Part A - Application

Return the completed application by _____. See reverse side for further instruction.

- A1. Applicant Business Name: _____
- A2. Address of premise discharging wastewater:
A. Street: _____
City: _____ State: _____ Zip: _____
- A3. Business Address:
A. Street: _____
City: _____ State: _____ Zip: _____
B. Mailing: _____
City: _____ State: _____ Zip: _____
- A4. Chief Executive Officer:
A. Name: _____ Title: _____
Mailing Address: _____
- A5. Person to be contacted about this application: Phone: _____
A. Name: _____ Title: _____
- A6. Person to be contacted in case of emergency:
A. Name: _____ Title: _____
Day Phone: _____ Night Phone: _____

"I certify under penalty of the law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, and accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature		Date
CITY OF LIVERMORE USE ONLY		
Permit Conditions: <input type="checkbox"/> Yes <input type="checkbox"/> No	Receipt Number: _____	
Date application mailed: _____	Expiration Date: _____	Account Number: _____
Date received: _____	Permit Number: _____	Amount \$ _____
Permit issued: _____	SIC Number: _____	
Comments: _____		

INSTRUCTIONS FOR COMPLETING PART A

SECTION 1. APPLICATION

Type or print the information requested.

- A1. *Applicant Business Name* — Enter the name or title of your business.
- A2. *Address of Premise Discharging Wastewater* — Enter the full street address of the building or premise which is producing the wastewater pertinent to this application.
- A3. *Business Address* — Enter the business street address and the full mailing address.
- A4. *Chief Executive Officer* — Enter the name, title, and full mailing address of the Applicant's Chief Executive Officer in the home office. (This is often not the same address as given in A3.)
- A5. *Person to be contacted about this Application* — Give the name of the person who is thoroughly familiar with the facts reported on these forms and to whom the Agency staff can contact.
- A6. *Person to be contacted in case of an Emergency* — Give the name, title, and telephone number(s) of the responsible person who can be contacted in case of an emergency. (e.g. spilling of a prohibited substance)

Certification — The Application must be signed and dated by an officer, employee, or other agent of the business who has legal authority to bind the Applicant business. Also, print or type the name and title of the person signing the Application.

Return the Application and required Part(s) to:

City of Livermore
Water Resources Division
101 W Jack London Blvd
Livermore, CA 94551
Phone: (925) 960-8100
Fax: (925) 960-8105

SECTION 2. PERMIT

DO NOT COMPLETE THIS PART. IT WILL BE COMPLETED BY THE CITY OF LIVERMORE. THE ORIGINAL WILL BE RETURNED TO YOU



Wastewater Discharge Permit / Chemical Storage Permit

Part B – Business Description

Purpose - The Business Description is primarily used to determine substances, which may enter into the wastewater discharge from the Business Activity. The production quantities are necessary for State and Federal Reports. Further instructions are on reverse side.

B1. Business Activity - Complete a separate Part B for each major business activity occurring on the premise.

Activity: _____
 (a) Product: _____

TYPE OF PRODUCTS	QUANTITIES				
	PAST CALENDAR YEAR			ESTIMATED THIS CALENDAR YEAR	
	Amount		Units	Amount	
	Avg.	Max.		Avg.	Max

(b) Description: Describe the wastewater generating operations. Indicate variations in production and operations during the year. (Use additional sheets as necessary)

(c) Substances Proposed to be discharged: Give common and technical names of any materials or products proposed to be discharged to the sewer. Briefly describe the physical and chemical properties of each substance and product.

NAME	DESCRIPTION

B2. Discharge Period

(a) Discharge occurs daily from _____ to _____
 (b) Check the days of the week that the discharge occurs: ☐S ☐M ☐T ☐W ☐T ☐F ☐S

B3. Variation of Operation: business activity is ☐ Continuous throughout the year ☐ Seasonal
 Discharge occurs during the months of: ☐J ☐F ☐M ☐A ☐M ☐J ☐J ☐A ☐S ☐O ☐N ☐D
 Comments: _____

B4. Liquid Waste Disposal – List the type and volume of liquid waste removed from the premises by means other than community sewers or disposal site.

DESCRIPTION	VOLUME (gal/mo)	REMOVED BY (name and address)	DISPOSAL SITE

INSTRUCTIONS FOR COMPLETING PART B:

General Instructions – Type or print the information. A separate Part B is to be completed for each major business activity. Examples of major business activities are: paint manufacturing, metal plating, and food canning, etcetera.

- B1. Business Activity – Describe the principal activity on the premise. For the purpose of completing this Part, an activity is a major business class of manufacture (see examples above).

- (a) Product – List the types of products, giving the common or brand name and the proper or scientific name. Enter from your records, the average and maximum daily amounts produced for this activity for the previous calendar year, and the estimated production for this calendar year. Attach additional pages if necessary.
- (b) Description – Describe the wastewater generating process occurring on the premises, including any seasonal variation in wastewater discharge volumes, plant operations, raw materials, and chemicals used in process and/or production.

EXAMPLE: At this location we manufacture paints, by a dispersion process in which pigments (magnesium silicates, iron oxides, titanium dioxide and organic pigments) are incorporated into a liquid media consisting of binders (alkyd, phenolic vinyl, acrylate and polyether) and thinners (acetate, aliphatic and/or aromatic hydrocarbons as well as water). All raw materials are purchased from an outside supplier. Production is uniform throughout the year. Wastewater is generated for discharge to the community sewer from the washing of the mixing vats. Consequently, all raw materials and products can find their way into the community sewers.

- (c) Substance Proposed to be Discharged – Give common (brand names) and technical names (chemical, scientific or proper names) of any materials and products proposed to be discharged to the sewer. Under "description", briefly describe the physical and chemical properties of each substance.

- B2. Discharge Period

- (a) Enter the hours of the day during which waste from this Business Activity will be discharged to the sewer: e.g. from 0600 to 1700 hours (not 6 a.m. to 5 p.m.)
- (b) Check the days of the week that the wastewater discharge from this activity occurs.

- B3. Variation in Operation

Indicate whether the business activity is continuous through the year or if it is seasonal. If the activity is seasonal, check the months of the year during which discharge occurs. Make any comments you feel are required to describe the variation in operation of your business activity.

- B4. Liquid Waste Disposal – List the type and volume of liquid wastes removed from the premises other than by the community sewer. Under description, indicate the type of materials (scientific & common names) in the waste. Also, in the column headed "REMOVED BY", write the name and address of the company who hauls this material. If you do your own removal and disposal, indicate by writing your "Business Name".



Wastewater Discharge Permit / Chemical Storage Permit
Part C - Schematic Flow Diagram

Purpose - The Schematic Flow Diagram shows the flow pattern of products through the facility and the various sources of wastewater. This information will enable the City of Livermore to assess the quality, volume and peak flows of the discharge.

Schematic Flow Diagram - For each major activity in which wastewater is generated, draw a diagram of the flow of materials and water from start to completed product, showing all unit processes generating wastewater. Number each unit process having discharges to the community sewer. Use these numbers when showing this unit process in the building layout in Part D. A blueprint or comparable schematic may be attached in lieu of making a diagram below.

☐ Check box if attachments are included.



Wastewater Discharge Permit / Chemical Storage Permit

Part D - Building Layout

Purpose - The Building Layout shows the wastewater generating operations, which contribute to each building sewer. This building layout will also enable the City of Livermore and the applicant to select suitable sampling locations for determining and verifying wastewater strength. Further instructions are on reverse side.

Building Layout – Draw to scale the location of each building on the premises. Show location of all water meters, storm drains, numbered unit processes (from Part C), community sewers and each building sewer connected to the community sewers. Number each building sewer and show sampling locations. A suitable attachment may be used in lieu of drawing the layout below. Note any such attachment in the space below by checking the box. Include chemical storage areas, any laboratories, and aboveground or underground storage tanks in the building layout.

☐ Check box if attachments are included.

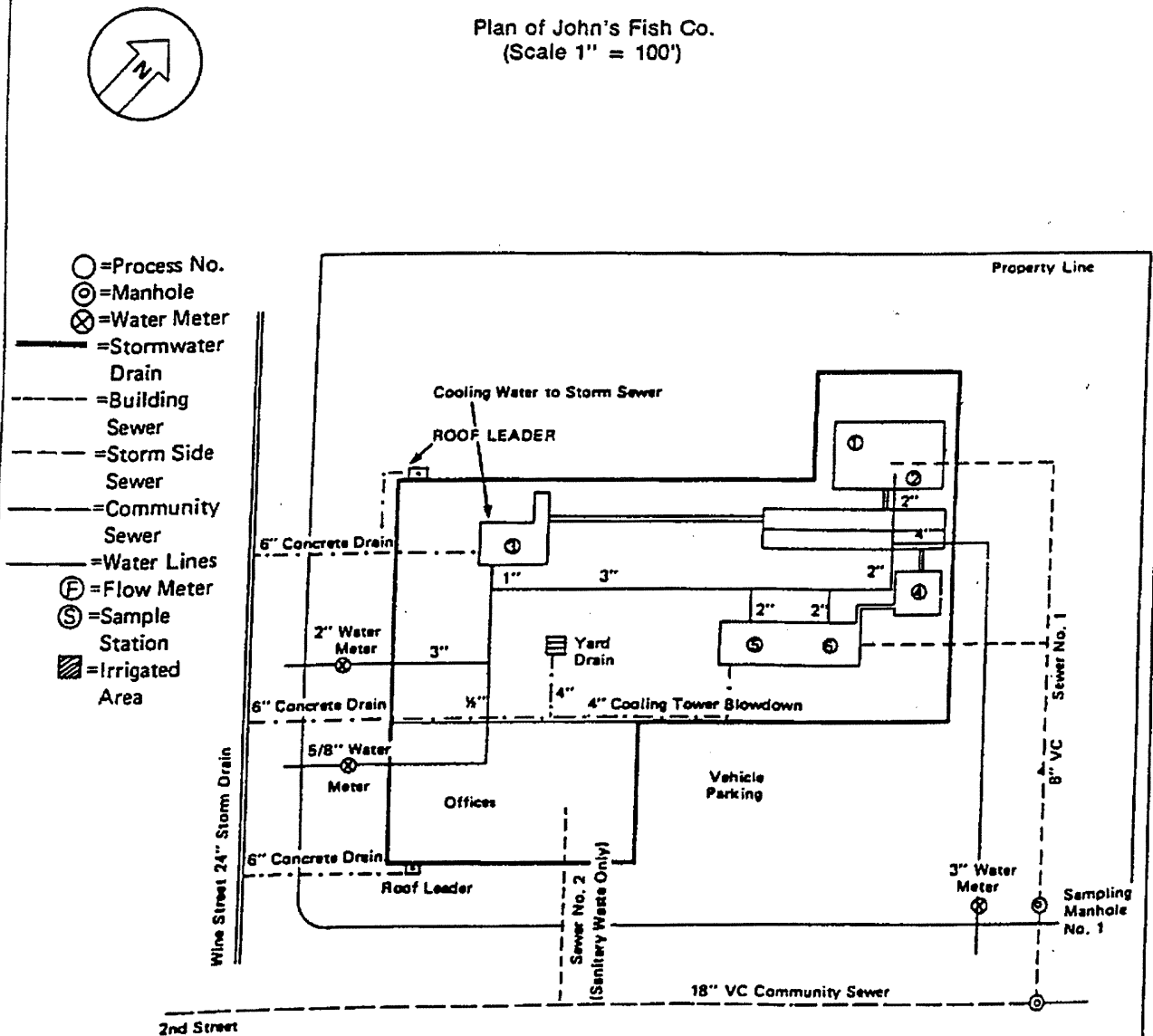
INSTRUCTIONS FOR COMPLETING PART D

General Instructions — Type or print the information.

Building Layout — A building layout or plant site plan of the premise is required to complete Part D. (Building Plans approved by the City of Livermore may be substituted for Part D.) An arrow showing north as well as the map scale must be shown. The location of each existing and proposed sampling manhole and building sewer must be clearly identified as well as all sanitary and wastewater drainage plumbing. Number each unit process discharging wastewater to the community sewer. Use the same numbering system shown in Part C (Schematic Flow Diagram). An example of the drawing required is shown below in figure 2.

FIGURE 2

Plan of John's Fish Co.
(Scale 1" = 100')





Wastewater Discharge Permit / Chemical Storage Permit

Part E – Water Source & Use

Purpose - The Water Source and Use Information will enable the City of Livermore to determine the volumes and sources of wastewater discharged to the community sewer. Further instructions are on reverse side.

E1. Water Use and Disposition - Average quantity of water received and wastewater discharged daily.
Show on separate sheet the method and calculations used to determine the quantities on table.

	SUPPLY FROM			DISCHARGED TO		
		Other (1)		Comm. Sewer	Other (2)	
WATER USED FOR:	gal/day	gal/day	Source	gal/day	gal/day	Disch. To
Sanitary						
Processes						
Boiler						
Cooling						
Washing						
Irrigation						
Product						
Other (3)						
TOTAL	0	0	0	0	0	0

NOTES:

- Enter the quantity and the appropriate code letter indicating the source:
a. well, b. creek, c. estuary, d. bay, e. stormwater, f. reclaimed water
- Enter the quantity and the appropriate code letter indicating the discharge point:
a. well, b. creek, c. estuary, d. bay, e. stormdrain, f. rail, truck, barge, g. evaporation, h. product
- Describe:

E2. Number of Employees: _____

	OFFICE		PRODUCTION (number of employees per shift)					
			DAY SHIFT		SWING SHIFT		NIGHT SHIFT	
	No.	Hours	No.	Hours	No.	Hours	No.	Hours
Weekday		To		To		To		To
Saturday		To		To		To		To
Sunday		To		To		To		To

E3.

WATER METER NUMBER	Percent (%) discharged to building sewer				Total (%) discharged to all sewers
	SEWER No. 1	SEWER No. 2	SEWER No. 3	SEWER No. 4	

INSTRUCTIONS FOR COMPLETING PART E

General instructions: Type or print the information. Part E is to be completed by all dischargers who require a permit.

- E1. Water Use and Disposition — Indicate water received and wastewater discharged in gallon per day for the preceding year. Specify in space provided the name of the agency providing primary water service.

The total supply should be checked using recent water bills to verify the amounts shown. If supply is not metered, show detailed estimate on separate sheet.

- E2. Number of Employees — Enter the average number of office and production employees at the premises daily during the preceding year. If there is more than one shift per day, enter the average number of employees per shift and the duration.

- E3. Source of Wastewater Discharged — Item E3 shows the percentage of source water on each water meter used for computing the sewage disposal service charge.

Step 1: Enter the number of each meter (municipal and private) serving the premise.

Step 2: For each meter enter the percentage of water discharged to each building sewer. If you have more than one building sewer, show on a separate page the method and calculations used to determine the proportioning to the side sewer.

Step 3: Enter the total percentage discharged to all building sewers for each water meter by adding the figures in each building sewer column.



Wastewater Discharge Permit / Chemical Storage Permit

Part F – Building Sewer Discharge

Purpose - The Water Source and Use Information will enable the City of Livermore to determine the volumes and sources of wastewater discharged to the community sewer. Further instructions on reverse side.

F1. Building Sewer No. _____ (From Part D)

F2. Wastewater flow rate

PEAK HOURLY		MAX. DAILY		ANNUAL DAILY AVG.		IF OPERATIONS ARE SEASONAL AVERAGE DAILY (gallons/day)	
gallons/minute		gallons/day		gallons/day		seasonal min.	seasonal max.
A.		B.		C.		D.	E.

F3. If Batch Discharge, Indicate:

- Number of batch discharge: _____ per month
- Time of batch discharges: _____ at _____
(Days of week) (Hours of day)
- Average quantity per batch: _____ gallons.
- Flow rate: _____ gallons/minute.

F4. Wastewater Constituents: Indicate if any of the following constituents, characteristics, or substances is or can be present (x) in your wastewater discharge **as a result of your operations**.

CODE	CONSTITUENTS	X	CODE	CONSTITUENTS	X	CODE	CONSTITUENTS	X
ALGC	Algicides*		FORMA	Formaldehyde		RAD	Radioactivity*	
AL	Aluminum		HC	Hydrocarbons*		SE	Selenium	
NH ₃ N	Ammonia		I-	Iodide		AG	Silver	
SB	Antimony		FE	Iron		NA	Sodium	
AS	Arsenic		PB	Lead		SOLV	Solvents*	
BA	Barium		MG	Magnesium		SO ₄ =	Sulfate	
BE	Beryllium		MN	Manganese		S=T	Sulfide	
B	Boron		HG	Mercury		SO ₃ =	Sulfite	
BR-	Bromide		MO	Molybdenum		MBAS	Surfactants MBAS	
CD	Cadmium		NI	Nickel		TEMP	Temperature	
CA	Calcium		O&G M	Oil & Grease (Min. Orig.)		TI	Titanium	
CL ₂	Chlorine		O&G T	Oil & Grease (Total)		SN	Tin	
CL-	Chloride		PESTC	Pesticides*		V	Vanadium	
CR	Chromium		pH	pH Increase (+)		TVA	Volatile Acids	
CO	Cobalt		pH	pH Decrease (-)		ZN	Zinc	
CU	Copper		PHENL	Phenols		N	Total Nitrogen	
CN	Cyanide		P	Phosphorus		C	Cresols*	
F-	Fluoride		K	Potassium		O	Other*	

*Identify the Chemical Compounds or Elements

Comments:

INSTRUCTIONS FOR COMPLETING PART F

General Instructions – Type or print the information. Part F is to be completed by all businesses who require Wastewater Strength Determination. Use a separate sheet for each building sewer that discharges wastewater to a community sewer. (NOTE: A building sewer is a sewer conveying the wastewater of a discharger from a building or structure to a community sewer).

- F1. Building Sewer No. – Enter the building sewer number for which this sheet of Part F has been completed. Use the same number as shown on Part D.
- F2. Wastewater Flow Rate – Estimate the peak hourly discharge rates from the premise (i.e., the quantity which might be discharged during any one hour). The maximum daily rate is the greatest flow which might be discharged in any one work day. The annual daily average is the flow for an average workday taken over one year of operation. A season is defined as a period of one month or longer. Hourly and daily water supply meter readings may be used, provided the filling and discharge of storage tanks, process vats, et cetera, are taken into consideration.
- F3. Batch Discharge – A batch discharge is one which results from the draining of storage tanks or process tanks; intermittent boiler blowdown, etc., to the building sewer.
- a. Enter the number of batch discharges per month during the operating season of maximum flow.
 - b. Enter the days of the week the discharge occurs and the times of day the discharge usually occurs.
 - c. Enter the average gallons discharged during each batch discharge operation.
 - d. Enter the rate of flow in the side sewer from the batch discharges, i.e.:
$$\text{Rate of flow from the batch discharge} = \frac{\text{No. of gallons in batch discharge}}{\text{duration for a single discharge}}$$
- F4. Wastewater Constituents – Indicate, by checking the appropriate box, if your wastewater discharge contains any of the indicated constituents, characteristics, or substances as a result of the raw materials, processes or products used. Identify the algicides, cresols, hydrocarbons, pesticides, solvents, and radioactivity discharged, or other pollutants not listed, if any, in the waste stream.

Wastewater Discharge Permit / Chemical Storage Permit

Part F – Building Sewer Discharge (continued)

F5. Wastewater Strength Estimates – Enter the average annual and maximum wastewater strength for this building for each of the following for the period covered by the permit. Further instructions are on reverse side.

ELEMENTS OF WASTEWATER STRENGTH	(CODE)	AVERAGE (mg/l)	MAXIMUM (mg/l)
Suspended Solids	(TSS)		
Total Chemical Oxygen Demand	(CODT)		
Filtered Chemical Oxygen Demand	(CODF)		
Oil and Grease	(O>)		
Chlorine Demand (See Instructions)	(Cl ₂ D)		
Biochemical Oxygen Demand	(BOD)		
Total Organic Carbon	(TOC)		

- (1) Any significant deviation from these values can result in termination of the permit.
- (2) If data from a commercial laboratory was used to determine the values, attach the laboratory analysis sheets.

F6. Pollution Abatement Practices

a. Wastewater Pretreatment – Check the type of treatment, if any, given wastewater from this building sewer before it is discharged to the community sewer:

- | | | |
|--|---|---------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Grinding | <input type="checkbox"/> Screening |
| <input type="checkbox"/> Holding tank | <input type="checkbox"/> Sedimentation | <input type="checkbox"/> Chlorination |
| <input type="checkbox"/> Grease trap | <input type="checkbox"/> pH adjustment | <input type="checkbox"/> Other |
| <input type="checkbox"/> Oil/water separator | <input type="checkbox"/> Biological treatment | |

Description – Describe any pretreatment system or device. Include physical size, design, capacity, and actual loading rates to the system or device. Attach a drawing if appropriate. Attach a schedule of routine maintenance for pretreatment systems, pH neutralization systems, or mechanical pretreatment devices.

b. Wastewater Pretreatment Improvements – Describe any changes in treatment or disposal methods planned or under construction for the wastewater carried by this building sewer. Attach a drawing if appropriate.

INSTRUCTIONS FOR COMPLETING PART F (continued)

- F5. Wastewater Strength Estimates – Enter the average and maximum concentration of each of the indicated elements of wastewater strength for this building sewer. The average strength should approximate the flow-composited strength during the year.

$$\text{Flow-composited strength} = \frac{\text{Total milligrams of substance discharged for year}}{\text{Total annual volume of water discharged in liters}}$$

The “Maximum Strength” is the maximum concentration that would be measured in any grab sample taken at any time during the year from this building sewer.

The “Chlorine Demand” of a wastewater is the amount of chlorine required to produce a free chlorine residual of 0.1 mg/l after a contact time of 15 minutes as measured by the Iodometric Method on a sample at a temperature of 20°C in conformance with the Standard Method.

- F6. Pollution Abatement Practices

- a. Wastewater Pretreatment - Check the type of treatment, if any, given the wastewater from this building sewer before it is discharged to the community sewer.

Description - The treatment facility should be described in sufficient detail to enable an estimation of the facility's effectiveness. This will require a description of the physical characteristics and size of the facility. (Attach sheet to show details of pretreatment process.)

- b. Planned Wastewater Treatment Improvements - Attach additional sheets to show details of treatment or changes in wastewater disposal methods planned or under construction.



Wastewater Discharge Permit / Chemical Storage Permit

Part G - Chemical Storage and Disposal

Purpose – To identify all new or used chemicals stored on-site, how stored, where stored, how much stored, ultimate disposal of waste chemicals, and precautions taken to prevent their entry into the sanitary or storm systems.

- G1. Material Safety Data Sheets (MSDS) – Attach an MSDS for each chemical stored on-site whether actually entering or potentially entering the sanitary system.
- G2. Chemical Storage Description - Describe each chemical storage area and above ground or underground storage tanks (all such areas should have been noted on Part D) including physical dimensions, covered or uncovered, bermed or unbermed, height of any berms, quantity of each chemical stored therein and how stored. Note all storm or sanitary drains close to each storage area. Attach sheets as necessary.

- G3. Safety Precautions - Describe all precautions taken to prevent accidental discharge of stored chemicals to the storm or sanitary systems. Include any personnel safety equipment or features.

- G4. Hazardous Waste Disposal - Attach a copy of all hazardous waste hauling manifests for the past calendar year.

INSTRUCTIONS FOR COMPLETING PART G

General Instructions - Type or print the information for Part G. All dischargers applying for a wastewater discharge permit must complete this part.

G1. A Material Safety Data Sheet (MSDS) must be attached for each chemical discharged, proposed to be discharged, or that could accidentally be discharged into the sanitary system. An MSDS should be available from chemical suppliers.

G2. Give a complete description for each chemical storage area. Include in-house laboratories. If the area is bermed, note the height of the berm. Note double containment, special concrete coatings (fiberglass, etc.) or unusual features.

How stored means in drums, pails, bags, above ground tanks, etcetera. Note average quantities of each chemical stored. Note the proximity of all drains and where they discharge to.

G3. Fully describe all safety precautions taken to prevent accidental discharge of pollutants to the sanitary or storm systems. Make note of any personnel safety equipment near the storage area such as eye showers, fire extinguishers and so forth.

G4. If hazardous wastes were hauled from your premises during the past calendar year, then attach a copy of all such manifests.



WASTEWATER DISCHARGE/CHEMICAL STORAGE PERMIT CONDITIONS

1. Sampling

- A. The Permittee is not required to conduct a self-monitoring sample program. All samples will be collected by City staff as indicated in Attachment A-1.
- B. Sampling is not required of Permittees prohibited from discharging process-associated wastewater to the sanitary sewer and/or storm sewer system.

2. Monitoring and Reporting

- A. The Permittee must comply with all local limits for each pollutant, as indicated in Attachment B-1. The Permittee must notify the Livermore Water Reclamation Plant at (925) 960-8100, within 24 hours of discovery of any violation with Federal Categorical Pretreatment Standards, State, local limitations of any condition contained within this permit. The Permittee shall submit, within 5 days of becoming aware of the violation, a report¹ detailing the magnitude and possible causes of the violation. Self-Monitoring sampling and pollutant analysis of those pollutants, which exceeded limitation requirements, must be performed and analytical reports submitted within 30 days of becoming aware of the violation.
- B. The Permittee shall not knowingly make any false statement, representation record, report, plan or other document filed with the City; nor shall Permittee knowingly render inaccurate any monitoring device or method required for determination of compliance with conditions contained within this permit.
- C. The Permittee shall submit all required monitoring results, and reports to WRD at the following address: Water Resources Division, Attention: Steve Aguiar, 101 W. Jack London Boulevard, Livermore, CA 94551.

3. Signatory Requirements

All applications, reports, or information submitted to the City of Livermore must contain the following certification statements and be signed as required in Section (A), (B), (C), or (D) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure

¹ Completion and submittal of the enclosed form titled *Noncompliance/Accidental Discharge Notification* fulfills this reporting requirement.

that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- A. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:
 - 1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation;
- B. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.
- C. By a duly authorized representative of the individual designated in paragraph (A) or (B) of this section if:
 - 1. The authorization is made in writing by the individual described in paragraph (A) or (B);
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager, superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
 - 3. The written authorization is submitted to the City.
- D. If an authorization under paragraph (C) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (C) of this section must be submitted to the City prior to or together with any reports to be signed by the authorized representative.

4. Dilution

The Permittee shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

5. Monitoring Facility

- A.** The City may require the Permittee to construct, at the Permittee's expense, monitoring facilities to allow inspection sampling and flow measurement of building sewer or internal drainage systems, and may also require sampling or metering equipment to be provided, installed, operated or maintained at the Permittee's expense.
- B.** Monitoring facilities are to be maintained free of obstructions, blockage or other hazards, which will affect the quality of the waste stream or pose a safety hazard to City personnel.

6. Pretreatment Facilities

- A.** The Permittee shall, if necessary, provide, maintain, and operate a pretreatment system capable of meeting all applicable limitations. The Permittee shall insure that all pretreatment equipment is in proper working condition at all times. At the discretion of the Water Resources Manager, the Permittee may be required to submit written maintenance schedules for existing or planned pretreatment facilities. Maintenance records for the pretreatment system shall be kept for a minimum of three years or longer when requested by the City.
- B.** Bypass of the required pretreatment facility is prohibited. Pursuant to 40 CFR 403.17 Significant Industrial Users must notify the POTW if a bypass occurs. If a nondomestic discharger knows in advance of the need for a bypass, the discharger is required to submit prior notice to the City, if possible at least 10 days before the date of the bypass. A nondomestic discharger is required to submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards to the POTW within 24 hours from the time the nondomestic discharger becomes aware of the bypass. Written submission must also be provided within 5 days of the time the nondomestic discharger becomes aware of the bypass.

7. Hazardous Waste

The Permittee shall meet all applicable local, state and federal regulations governing the generation, treatment, and storage of hazardous materials or hazardous wastes. Hazardous waste hauling manifests shall be available to Permittee. Refer to Fact Sheet for Generators of Hazardous Materials.

8. Spill Plan

The Permittee shall have a spill prevention and containment plan capable of protecting the sanitary and storm drain systems at all times. The spill prevention and containment plan shall be submitted for review as directed by the Permittee.

9. Accidental Spills and Slug Discharge Reports

The Permittee shall notify the Water Resources Manager immediately upon the occurrence of an accidental discharge of substances prohibited by Livermore Municipal Code Section 13.32.060 of any spills or slug discharges that may enter the public sewer. During normal business hours (8 a.m.-4 p.m.), the Water Resources Manager should be notified by telephone at (925) 960-8100. At all other times, the Livermore Water Reclamation Plant Lead Operator should be notified by telephone at (925) 960-8160. The notification shall include location of discharge, date and time thereof, type of waste including concentration and volume, and corrective action taken. The Permittee's notification of accidental releases in accordance with this section does not relieve it of other reporting requirements that arise under local, State, or Federal laws.

Within five working days following an accidental discharge, the Permittee shall submit to the wastewater manager a detailed report. The report shall specify:

- A. Description and cause of the spill, upset or slug, and the effect on the Permittee's compliance status. The description shall also include location of discharge, type, concentration and volume of discharge.
- B. Duration of non-compliance, including exact dates and times of non-compliance, and if non-compliance continues, the time by which compliance is reasonably expected to occur.
- C. All steps taken, or to be taken, to reduce, eliminate, and prevent reoccurrence of such spill, upset, slug or other conditions of non-compliance.

10. Right of Entry and Inspection

The City shall inspect the facilities of the Permittee to ascertain whether all requirements are being met and the user is compliant with all the requirements. Persons and occupants of premises where wastewater is created or discharged shall allow the City or their representative ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling or the performance of any of their duties. The City, State, and EPA shall have the right to copy records or to set up on the Permittee's property such devices as are necessary to conduct sampling inspection, compliance monitoring and/or metering operations.

Where a Permittee has security measures in force, which would require proper identification and clearance before entry into their premises, the Permittee shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the City, the State and EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

11. Retention of Records

- A.** The Permittee shall retain records of all monitoring information including: all laboratory data, calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the City of Livermore at any time.
- B.** All records that pertain to matters that are the subject of special orders of any other enforcement or litigation activities brought by the City of Livermore Authority shall be retained and preserved by the Permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

12. Permit Modifications

The terms and conditions of this permit may be subject to modification by the City of Livermore during the term of this permit as limitations or requirements identified in Section 13.32.110 of the Livermore Municipal Code are modified or other just cause exists.

13. Duty to Comply

The Permittee shall abide by all applicable provisions of the City of Livermore Municipal Code, the conditions of this permit, and any other local, State, or Federal regulations or codes.

14. Limitation on Permit Transfer

This permit is not transferable without prior written City approval. Permits are issued to a specific Permittee for a specific operation. A permit shall not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without written City approval.

15. Duty to Re-apply

If the Permittee wishes to continue an activity regulated by this permit, the Permittee must submit an application for a new permit at least 60 days before the expiration date of this permit.

16. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

- A. The Permittee has submitted a completed permit application at least 60 days prior to the expiration date of the existing permit.
- B. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the Permittee.

17. Property Rights

Issuance of this permit neither conveys property rights of any sort nor does it authorize injury to public or private property. Issuance of this permit does not convey exclusive privileges or authorize any invasion of personal rights or any violation of Federal, State or local laws or regulations.

18. Compliance Schedule

The Permittee shall accomplish the tasks listed in Attachment C-1 within the designated time period.

19. General Discharge Prohibitions

No person shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will interfere with the operation or performance of the POTW. These general prohibitions apply to all such users of the POTW whether or not the user is subject to National Categorical Pretreatment Standards or any other national, state, or local pretreatment standards or requirements. A Permittee may not contribute the following substances to the POTW:

- A. Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. 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. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides and any other substances which the City, the State or EPA has notified the Permittee is a fire hazard or a hazard to the system.
- B. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, wastepaper, wood, plastics, gas, tar, asphalt residues,

residues from refining, or processing of fuel or lubricating oil, mud, or glass grinding or polishing wastes.

Specifically excluded from the sewers are waste products resulting from the handling, storage and sale of fruits and vegetables from other than retail produce establishments, or other foods not intended primarily for immediate consumption.

- C. Any wastewater having a pH less than 6.0 or greater than 10.5. Wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or personnel of the POTW is also prohibited.
- D. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitutes a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW, or to exceed the limitation set forth in the categorical pretreatment standard. A toxic pollutant includes, but not be limited to, any pollutant identified pursuant to Section 307(a) of the Clean Water Act.
- E. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges, scums, or gases, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the sludge use or disposal criteria developed pursuant to the Solid Waste Disposal Act, or state criteria applicable to the sludge management method being used.
- F. Any noxious or malodorous liquids, gases, or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance, or hazard to life or health, or are sufficient to prevent entry into the sewers for maintenance and repair.
- G. Any waters or wastes which contain more than 100 mg/L of oil and grease (mineral origin) or 300 mg/L of oil and grease (animal/vegetable origin).
- H. Any substance which will cause the POTW to violate its NPDES permit or the receiving water quality standards.
- I. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.
- J. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds forty degrees centigrade (one hundred four degrees Fahrenheit).

- K.** Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which a Permittee knows or has reason to know will cause interference to the POTW.
- L.** Any wastewater containing any radioactive wastes or isotopes at such a concentration or half-life that may exceed the limits established by the state or federal regulatory agency applicable to the POTW user.
- M.** Any wastewater which causes a hazard to human life or health or creates a public nuisance.

When the Water Resources Manager determines that the Permittee(s) is contributing any of the above-enumerated substances in such amounts as to interfere with the operation of the POTW, the Manager shall: (1) advise the Permittee(s) of the impact of the contribution on the POTW; and (2) develop effluent limitation(s) for such Permittee to correct the interference with the POTW.

20. Slug Discharge Control Plan

The City may require the Permittee to obtain a Slug Discharge Control Plan to control upsets and slugs from its facility. The Plan shall contain, at a minimum, the following elements:

- 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 General Discharge Prohibition with procedures for follow-up written notification within five days;
- D.** If necessary, procedures to prevent adverse impact from accidental spills.

21. Revocation of Permit

Any Permittee who violates the following conditions of this permit or applicable State and Federal regulations is subject to having his permit revoked in accordance with the procedures of Livermore Municipal Code 13.32.360-380.

- A.** Failure of a Permittee to factually report the wastewater constituents and characteristics of his discharge;
- B.** Failure of the Permittee to report significant changes in operations, or wastewater constituents and characteristics;

C. Refusal of reasonable access to the Permittee's premises for the purpose of inspection or monitoring; or

D. Violation the conditions of the permit.

22. Enforcement--Penalty

A User who has violated, or continues to violate, any provision of LMC Title 13, an individual wastewater discharge permit, or order issued hereunder, or any other Pretreatment Standard of Requirement shall be liable to the City for a minimum penalty of \$1,000 per violation, per day. In the case of a monthly or other long-term average discharge limit, penalties shall accrue for each day during the period of the violation. The Water Resources Division Manager may recover reasonable attorneys' fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the City. In determining the amount of civil liability, the Court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the User's violation, corrective actions by the Users, the compliance history of the User, and any other factor as justice requires.

The City attorney may commence legal action to enjoin violations of this permit and to recover for damages pursuant to Government Code Section 54740, which states:

(a) Any person who violates any requirement adopted or ordered by a local agency pursuant to paragraph (1) or (2) of subdivision (a) of Section 54739 may be civilly liable in a sum of not to exceed twenty-five thousand dollars (\$25,000) a day for each violation.

(b) The local agency may petition the superior court to impose, assess, and recover the sums provided for in subdivision (a). In determining the amount, the court shall take into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs, and corrective action, if any, attempted or taken by the discharger.

(c) Notwithstanding any other provision of law, all civil penalties imposed by the court for a violation of this section shall be distributed to the local agency.

(d) Remedies under this section are in addition to and do not

supersede or limit any and all other remedies, civil or criminal, but no liability shall be recoverable under this section for any violation for which liability is recovered under Section 54740.5.

23. Modification of Premises or Operations

Each user must notify the Water Resources Division Manager of any significant changes to the user's operations or system, which might alter the nature, quality, or volume of its wastewater at least 30 days before the change. The user may be required to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application pursuant to 13.32.220 of the Livermore Municipal Code.

APPENDIX 7.0

CITY OF LIVERMORE LOCAL EFFLUENT LIMITATIONS

No person shall discharge wastewater containing in excess of:

0.06 mg/L	Arsenic
0.14 mg/L	Cadmium
1.0 mg/L	Copper
0.62 mg/L	Chromium (Total)
0.20 mg/L	Lead
0.01 mg/L	Mercury
0.61mg/L	Nickel
0.20 ¹ mg/L	Silver ¹
3.00 mg/L	Zinc
0.04 mg/L	Cyanide
1.0 mg/L	Total Toxic Organics*
100 mg/L	Oil and Grease (Mineral)
300 mg/L	Oil and Grease (Animal/Vegetable)

From Section 13.32.100 of the Livermore Municipal Code

¹ Note: An alternate limit of 1.0 mg/L silver may be applied to discharges from silver recovery systems which treat spent fixer, developer, or rinse waters from photographic, x-ray, or other similar processes. Samples to demonstrate compliance shall be collected directly from the treatment system effluent prior to combining with other wastestreams.

DISCHARGE LIMITATIONS**METAL FINISHING PRETREATMENT STANDARDS
FOR NEW SOURCE
(40 CFR 433.17)**

POLLUTANT	MAXIMUM FOR ANY 1 DAY (MG/L)	MONTHLY AVERAGE SHALL NOT EXCEED (MG/L)
Cadmium (T)	0.11	0.07
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.2	0.65
TTO*	2.13	----

Self-monitoring for cyanide must be conducted after cyanide treatment and before dilution with other streams.

Total Toxic Organics (TTO as defined by 40 CFR 433.11 (e).

DISCHARGE LIMITATIONS**SEMICONDUCTOR PRETREATMENT STANDARDS
FOR EXISTING SOURCE
(40 CFR 469.16)**

POLLUTANT	MAXIMUM FOR ANY 1 DAY (MG/L)	MONTHLY AVERAGE SHALL NOT EXCEED (MG/L)
TTO*	1.37	----

Total Toxic Organics (TTO as defined by 40 CFR 433.11 (e).

Appendix 11.0- Pretreatment Program Budget

PRETREATMENT PROGRAM BUDGET		FY19	FY19	FY20	FY21
		BUDGET	UPDATED	BUDGET	BUDGET
42010	PERMANENT EMPLOYEES	\$ 262,005.00	\$ 254,823.00	\$ 264,069.00	\$ 274,035.00
42050	OVERTIME	\$ 3,000.00	\$ 3,000.00	\$ 3,090.00	\$ 3,190.00
42170	UNIFORM ALLOWANCE	\$ 456.00	\$ 716.00	\$ 456.00	\$ 456.00
	TOTAL SUPPLEMENTAL PERSONNEL	\$ 193,896.00	\$ 193,303.00	\$ 199,110.00	\$ 205,090.00
43050	PRINTING & BINDING	\$ 3,000.00	\$ 500.00	\$ 520.00	\$ 540.00
43070	POSTAGE & FREIGHT	\$ 1,500.00	\$ 750.00	\$ 780.00	\$ 810.00
43080	TRAVEL	\$ 6,750.00	\$ 6,750.00	\$ 6,960.00	\$ 7,170.00
43090	REPAIRS & MAINT OF EQUIP	\$ 2,000.00	\$ 2,000.00	\$ 2,060.00	\$ 2,130.00
43130	CONTRACT SERVICES	\$ 100,000.00	\$ 40,000.00	\$ 41,200.00	\$ 42,440.00
43150	SUPPLIES - OTHER	\$ 10,000.00	\$ 15,000.00	\$ 15,450.00	\$ 15,920.00
43170	DRY GDS&WEARING APPL-MIS	\$ 2,250.00	\$ 2,250.00	\$ 2,320.00	\$ 2,390.00
43180	GASOLINE & OIL	\$ 1,400.00	\$ 2,000.00	\$ 2,500.00	\$ 2,580.00
43280	TRAINING & EDUCATION	\$ 5,000.00	\$ 5,000.00	\$ 5,150.00	\$ 5,310.00
43350	PUBLIC OUTREACH	\$ 2,500.00	\$ 2,500.00	\$ 2,580.00	\$ 2,660.00
43370	FLEET O&M	\$ 5,422.00	\$ 5,422.00	\$ 5,590.00	\$ 5,760.00
43560	FLEET REPLACEMENT	\$ 6,286.00	\$ 6,286.00	\$ 6,480.00	\$ 6,680.00
44090	MEMBERSHIP & SUBS	\$ 1,450.00	\$ 1,450.00	\$ 1,500.00	\$ 1,550.00
45030	MOTOR VEHICLES			\$ 30,000.00	
TOTAL		\$ 606,915.00	\$ 541,750.00	\$ 589,815.00	\$ 578,711.00



Livermore Valley Joint Unified School District Science Odyssey 2020 Report

Background: This year was the 20th anniversary of the Livermore Valley Joint Unified School District's (LVJUSD) Science Odyssey, which is a science fair for Livermore's 1st - 12th grade students. In 2012, the City of Livermore Water Resources Division (WRD) began tabling at the event and in 2015 began giving the "One Water Award" to recognize students who completed water resources-related science projects. This year, Zone 7 Water Agency (Zone 7) cosponsored the award for the first time.

One Water Award: Projects were judged by Zone 7 Assistant Engineer Wes Mercado and WRD Source Control Inspector Braden Christensen on the morning of the event. This year the judging sheet was simplified, resulting in the amount of time needed to judge the projects dropping from six hours to two. Click to view the [2020 judging sheet](#) and the [2019 judging sheet](#).



Prior to judging, LVJUSD provided WRD with a list of projects that students had self-selected as water related. These projects were first judged on whether the topic fit with WRD and/or Zone 7's missions or services. If the project was not a fit, it was removed from consideration for a One Water Award. Three of the fifteen projects were removed from consideration. All projects that were considered for a One Water Award received a "[Certificate of Achievement in Water Awareness](#)" signed by WRD Water Resources Manager Helen Ling and Zone 7 General Manager Valerie Pryor.

Next, projects were scored in elementary school, middle school, and high school categories. 1st, 2nd, and 3rd place winners in each age group received award ribbons from WRD. 1st place winners also received Amazon gift certificates from Zone 7. The overall winner who received the most points across all the age groups received a trophy from WRD in addition to the other prizes. See *Attachment A* for the 2020 One Water Award winners and *Attachment B* for the winners from 2015-2019.

The gift cards for 1st place and the overall winner trophy were presented at the Science Odyssey Award Ceremony by Livermore Mayor John Marchand and Zone 7 Board President Sandy Figuers. Mayor Marchand also presented a proclamation at the ceremony recognizing Science Odyssey's 20th anniversary.

High school students who were considered for One Water Awards also received [a letter](#) from WRD encouraging them to explore careers in the wastewater industry. Along with the letter was a Livermore Teen Academy application, a [scholarships flyer](#), [an engineering careers brochure](#), and [a skilled trades brochure](#).



Science Odyssey Table: WRD's table was put in Science Classroom #20, along with tables for Zone 7, East Bay Regional Park District, Livermore Library, and Quest. Tabling went from 5:00 – 7:00 p.m. The table was staffed by Communications Representative Natalie Croak and Source Control Inspector Frank Dittrich.

The WRD table focused on two goals, providing high school students with information on water/wastewater careers and educating the general public about stormwater issues. Though most of the science projects were completed by high school students, there were very few high school attendees at the event. Next year WRD's booth will be solely focused on stormwater with activities and giveaways geared towards elementary and middle school students.

Vertical acrylic signs had flyers focused on the WRD customer service survey and careers in the water/wastewater industry. The storm drain model was placed at the front of the table to discuss stormwater with students.

The main activity at the booth was the stormwater spin wheel game. Depending on what number the participant landed on, they were asked a question related to stormwater and watersheds. The questions were adjusted to match the participants age. A map of the Alameda Creek watershed was placed next to the spin wheel to help participants answer the questions. After the participant answered their question, they could select their prize from the promotional items that were brought to the event. The spin wheel game was popular with the students and they had no issues with having to play to receive a prize.

Baywork provided WRD with five handouts focused on water/wastewater careers to use at the event. WRD also created a flyer in-house outlining scholarship opportunities for high school seniors interested in entering the water/wastewater industry. Since there were few high school attendees at this event, WRD will not bring career handouts to next year's event.

Printed Materials	Amount Brought	Amount Given Out	Amount for 2021
Baywork Be an Engineer and Skilled Trades Brochures	30	0	0

Baywork Instrument Tech, Mechanic, and Electrician Flyers	45	2	0
Scholarships Flyer	15	0	0
Clean Water Program Alameda Creek Watershed Management Booklets	10	0	10
Clean Water Program Storm Drain Bifold Brochure	30	0	10
Clean Water Program Bay Begins at Your Front Door Brochure	30	1	10

Promotional items were chosen to appeal to both children and adults while reinforcing the booth's stormwater messaging. Fidget spinners were by far the most popular promotional item. Next year, WRD will bring fewer promotional items to this event.

Promotional Items	Amount Brought	Amount Given Out	Amount for 2021
Clean Water Program Activity Books (K – 3 rd Grade and 4 th – 6 th Grade versions)	200	18	50
WRD Branded Fidget Spinners	1 box	½ box	½ box
Clean Water Program Pencils	1 box	10	50
Seed Packets (California Poppy and Blue/White Wildflowers)	1 box	10	50
Only Rain Down the Storm Drain Magnets	100	5	50
WRD Branded Tote bags	40	16	40

Fiscal Impact:

Category	2020	2019
Ribbons	\$45.55	\$24.31
Trophy	\$100.06	\$100.06
Gift Certificates	\$100.00	N/A
Total	\$145.61 (WRD) \$100 (Zone 7)	\$124.37

Considerations for Next Year:

- The Certificates of Achievement were created prior to judging based on a LVJUSD list of registered water resources science projects. However, some students brought projects without registering, never turned in their project, or didn't register their project partner. Next year WRD should anticipate creating a few certificates

after the event for these types of students. They can be dropped off at the School District office.

- Add information on the back of the Certificates of Achievements that explains what the award is and what WRD and Zone 7 do.
- Schedule judging for 9:00 a.m. – 12:00 p.m. on the day of the event to allow enough time to travel to and from the school.
- Present the 1st place ribbons at the awards ceremony along with the 1st place gift cards and overall winner trophy.
- This year the judging was structured so that the overall winner was also the first-place winner of their age category. Next year WRD should consider splitting them (ex. if a middle school student wins the overall award, the second highest scoring middle school student would then get the 1st place award in the middle school category).

Attachment A: 2020 One Water Award Winners

Award	Prize	Name	School & Grade	Project
1 st Place – Elementary	Award Ribbon \$25 Gift Certificate Certificate of Achievement	Navitha Kadali	Rancho Las Positas, 3 rd	Greywater Purification
2 nd Place – Elementary	Award Ribbon Certificate of Achievement	Dakshina Makesh Kumar	Altamont Creek, 3 rd	How to Filter Water
3 rd Place – Elementary	Award Ribbon Certificate of Achievement	Minh-ky Kawamura & Brian Hsueth	Smith, 3 rd	Tap Water Vs. Recycled Water: Which is Better for Plants?
Participation	Certificate of Achievement	Vibusri Karunamurthy	Altamont Creek, 3 rd	Water Around Us: Experiment with Traps and Plants
Participation	Certificate of Achievement	Nolan McClung & Connor Butherus	Altamont Creek, 3 rd	Water you Waiting for?
1 st Place – Middle & Overall Winner	Water Droplet Trophy Award Ribbon \$50 Gift Certificate Certificate of Achievement	Gali Feigenbaum	Mendenhall, 6 th	Reducing Water Flushed in Toilet by Coating the Bowl's Surface
2 nd Place – Middle	Award Ribbon Certificate of Achievement	Sam Lieberman	East Avenue, 7 th	Don't Drink That!
3 rd Place – Middle	Award Ribbon Certificate of Achievement	Bridget O-Bryan	Christensen, 6 th	Observing Algal Propagation at High and Low PH Ranges
Participation	Certificate of Achievement	Angel Arroyo	Junction Avenue, 7 th	Water Turbidity
1 st Place – High	Award Ribbon \$25 Gift Certificate Certificate of Achievement	Yoav Feigenbaum	Granada, 9 th	Water Usage Calculator

2 nd Place – High	Award Ribbon Certificate of Achievement	Simone Laney	Livermore, 10 th	Effect of Fertilizer Runoff on Algae Growth
3 rd Place – High	Award Ribbon Certificate of Achievement	Nina Nowicki & Wyatt Kmetz	Livermore, 9 th & 10 th	Altamont Creek in a Jar

Attachment B: Past One Water Award Winners

Year	Award	Name	School	Grade	Project
2015	1 st (Water, Middle)	Alisa Bradford & Alexis De Long	Junction Avenue	7 th	Effects of dissolved oxygen and temperature on creek water and fish
2015	2 nd (Water, Middle)	Stefanie Medina & Grace Boyd	Junction Avenue	6 th	Protozoa population size in lake vs. pond water
2015	1 st (Water, High)	Josephine Clements-Cain	Granada	9 th	Human effects on bacterial level of "untouched" water
2015	1 st (Wastewater, High)	Kaela Maloney, Zachary Wakefield, Hunter Solaro	Livermore	10 th	Efficiency of "basic materials" as water filter media
2016	1 st (Elementary)	Nathan Thompson & Luke Jackson	Croce	4 th	Conserving Water at Home
2016	2 nd (Elementary)	Stephanie Kirkpatrick	Jackson Avenue	5 th	Water vs. Water
2016	3 rd (Elementary)	Ryken Mak	Junction Avenue	5 th	What is the effect of water type on plant growth?
2016	1 st (Middle)	Kelly Burke & Miyah Yu	East Avenue	6 th	Solar powered water desalination
2016	2 nd (Middle)	Nicoll Murillo	Junction Avenue	7 th	Can plants tolerate recycling water
2016	3 rd (Middle)	Chelsea Bohling & April Phillips	Junction Avenue	8 th	The grey water effect
2018	1 st (High)	Vishal Venkatehs	Granada	9 th	An Eco-Friendly Replacement for Water Containers
2018	1 st (Middle)	Annelyse Combitsis & Minhnha Kawamura	East Avenue	8 th	Purified Perfection
2019	1 st (High) & Overall Winner	Sfuri Gaudani	Livermore	12 th	The Effect of Acid Rain on Crops
2019	2 nd (High)	Vishal Venkatesh	Granada	10 th	Using a Banana Peel-Based Filter to Extract Heavy Metals from Water
2019	3 rd (High)	Pracica Chellappan	Livermore	9 th	Is your Water Safe?
2019	1 st (Middle)	Charlotte Follett	Christensen	7 th	Water Filters

2019	2 nd (Middle)	Darshini Binduraj	Christensen	6 th	Water Purification Through Filtration and Boiling
2019	Honorable Mention (Elementary)	Minh-Ky Kawamura	Smith	2 nd	Rainwater versus Tap Water

TABLE 7.0

FEDERAL CATEGORICAL LIST

METAL FINISHING POINT SOURCE CATEGORY
Part 433

CATEGORICAL INDUSTRIAL USER METAL FINISHING	NUMBER OF DISCHARGING CATEGORICAL PROCESSES	TYPE OF PROCESS
Lawrence Livermore Nat. Lab 7000 East Avenue Livermore, CA 94550 Permit # 1250	1	40 CFR 433.17
Sandia National Laboratory 7011 East Avenue Livermore, CA 94550 Permit # 1251	1	40 CFR 433.15
RG Plating and Anodizing 6421-F South Front Road Livermore, CA 94550 Permit: 1267	Zero Discharge	40 CFR 433.17
Admedes, Inc 2800 Collier Canyon Road Livermore, CA 94551 Permit #1378	1	40 CFR 433.17
Bonner Metal Processing 6052 Industrial Way Livermore, CA 94550 Permit # 1318	Zero Discharge	40 CFR 433.17
Maas Brothers Powder Coating 285 South Vasco Livermore, CA 94550 Permit: #1291	1	40 CFR 433.17
Maas Brothers Powder Coating #2 275 South Vasco Road Livermore, CA 94550 Permit #1375	Zero Discharge	40 CFR 433.17
Gillig, LLC 451 Discovery Drive Livermore CA Permit # 1399	1	40 CFR 433.17
AI Industries 240 S. Vasco Road Livermore, CA 94551 Permit #1398	1	40 CFR 433.17

TABLE 7.0

FEDERAL CATEGORICAL LIST

ELECTRICAL AND ELECTRICAL COMPONENT POINT SOURCE
Part 469

CATEGORICAL INDUSTRIAL USER SEMICONDUCTOR	NUMBER OF DISCHARGING CATEGORICAL PROCESSES	TYPE OF PROCESS
Lawrence Livermore Nat. Lab 7000 East Avenue Livermore, CA 94550 Permit # 1250	5 (2 sample site)	40 CFR 469.18 40 CFR 469.28
InPhenix 250 N. Mines Road, Livermore, CA 94550 Permit # 1272	1	40 CFR 469.18
Form Factor#1 and #2 501 Lawrence Road 7545 Longard Road Livermore, CA 94550 Permit:1305 (Form Factor #1) Permit #1348 (Form Factor #2)	2	40 CFR 469.18

Table 8.0-CIU Inspection/Sampling/Permitting 2020

Industry Name	Permit Fee	Paid?	x	Inspector	Permit Start Date	Permit Exp Date	Permit Renewal Issue Date	New Permit Start Date	Annual Inspection Completed	Date to send renewal app	X	Sampling Frequency	Date Sampling Completed 2020			
													Qtr 1	Qtr 2	Qtr 3	Qtr 4
Arrowhead Water	\$ 1,456.46	x	G	Braden	4/1/2019	3/31/2020	3/30/2020	4/1/2020	9/28/2020	1/31/2020	x	Annually	N/A	N/A	9/29/2020	N/A
Eight Bridges Brewing, Inc.	N/A		G	Frank	12/17/2019	12/16/2020	CLOSED	CLOSED	7/9/2020	10/17/2020	x	Semi-Annually	N/A	N/A	7/10/2020	10/30/2020
Eurofins Food Integrity & Innovation	\$ 1,456.46	x	G	Frank	4/1/2019	3/31/2020	3/16/2020	4/1/2020	2/25/2020	1/31/2020	x	Annually	2/26/2020	N/A	N/A	N/A
Earl Ising dba Culligan Water	\$ 1,456.46	x	G	Braden	3/20/2019	3/19/2020	3/24/2020	3/20/2020	7/27/2020	1/19/2020	x	Annually	N/A	N/A	7/28/2020	N/A
Turman Commercial Painters	\$ 1,456.46	x	G	Frank	6/10/2019	6/9/2020	5/28/2020	6/10/2020	9/28/2020	4/10/2020	x	Annually	N/A	N/A	9/29/2020	N/A
Wheel Works #356400-8255	\$ 1,632.66	x	G	Braden	9/23/2019	9/22/2020	9/24/2020	9/23/2020	12/3/2020	7/24/2020	x	Annually	N/A	N/A	N/A	12/4/2020
River's End Brewing	\$ 1,409.73		G	Frank	11/25/2019	11/24/2020	11/16/2020	11/25/2020	9/3/2020	9/25/2020	x	Semi-Annually	N/A	N/A	9/4/2020	COVID-19
Arrow Rentals	\$ 250.00	x	GW	Frank	1/11/2019	1/10/2020	12/16/2019	1/11/2020	N/A	11/11/2019	x	N/A	N/A	N/A	N/A	N/A
Maas Brothers-285 S. Vasco	\$ 5,241.61	x	SIU	Frank	10/16/2019	10/15/2020	10/7/2020	10/16/2020	12/8/2020	8/16/2020	x	Quarterly	2/12/2020	6/10/2020	9/17/2020	12/9/2020
Maas Brothers-275 S. Vasco (Zero Discharge)	\$ 1,117.18	x	SIU	Frank	10/28/2019	10/27/2020	10/16/2020	10/28/2020	12/8/2020	8/28/2020	x	Zero Discharge	N/A	N/A	N/A	N/A
RG Plating and Anodizing, LLC	\$ 1,117.18		SIU	Braden	12/10/2019	12/9/2020	12/9/2020	12/10/2020	12/18/2020	10/10/2020		Zero Discharge	N/A	N/A	N/A	N/A
Bernard's Chevron	\$ 1,632.66		WR	Braden	12/11/2019	12/10/2020	12/10/2020	12/11/2020	12/28/2020	10/11/2020		Annually	N/A	N/A	N/A	12/29/2020
Boatmasters	\$ 1,456.46	x	WR	Frank	6/2/2019	6/1/2020	5/15/2020	6/2/2020	11/3/2020	4/2/2020	x	Annually	N/A	N/A	N/A	11/4/2020
Dun-Rite Excavating, Inc.	\$ 1,632.66	x	WR	Frank	11/26/2019	11/25/2020	11/10/2020	11/25/2020	10/28/2020	9/26/2020	x	Annually	N/A	N/A	N/A	12/15/2020
Enterprise Rent-A-Car	\$ 1,456.46	x	WR	Braden	6/25/2019	6/24/2020	6/23/2020	6/25/2020	10/22/2020	4/25/2020	x	Annually	N/A	N/A	N/A	10/23/2020
Happy Daze RV's	\$ 1,632.66	x	WR	Frank	9/1/2019	8/31/2020	8/27/2020	9/1/2020	9/22/2020	7/2/2020	x	Annually	N/A	N/A	9/23/2020	N/A
Henderlong Lewis Building	\$ 1,632.66	x	WR	Braden	7/17/2019	7/16/2020	7/8/2020	7/17/2020	10/12/2020	5/17/2020	x	Annually	N/A	N/A	N/A	10/13/2020
Interstate Storage	\$ 1,632.66	x	WR	Braden	12/1/2019	11/30/2020	11/16/2020	12/1/2020	12/16/2020	10/1/2020		Annually	N/A	N/A	N/A	12/17/2020
Left Coast Diesel	\$ 1,632.66		WR	Frank	11/28/2019	11/27/2020	11/10/2020	11/28/2020	9/30/2020	9/28/2020	x	Annually	N/A	N/A	N/A	10/1/2020
Les Schwab Tire Center #647	\$ 1,456.60		WR	Frank	6/22/2019	6/21/2020	6/8/2020	6/22/2020	9/28/2020	4/22/2020	x	Annually	N/A	N/A	9/29/2020	N/A
Livemore Ford Lincoln-2266 Kitty Hawk	\$ 1,456.46	x	WR	Frank	3/1/2019	2/28/2020	2/11/2020	3/1/2020	8/4/2020	12/30/2019	x	Annually	N/A	N/A	9/9/2020	N/A
Livemore Ford Lincoln-2304 Kitty Hawk	\$ 1,456.46	x	WR	Frank	1/8/2019	1/8/2020	12/16/2019	1/8/2020	8/4/2020	11/9/2019	x	Annually	N/A	N/A	9/9/2020	N/A
Livemore Chevron	\$ 1,456.46	x	WR	Braden	5/10/2019	5/9/2020	5/5/2020	5/10/2020	8/24/2020	3/10/2020	x	Annually	N/A	N/A	N/A	8/25/2020
Livemore Gas and Shop	\$ 1,456.46	x	WR	Frank	6/27/2019	6/26/2020	6/12/2020	6/27/2020	10/5/2020	4/27/2020	x	Annually	N/A	N/A	N/A	10/6/2020
Marshall Brothers Enterprises, Inc.	\$ 1,632.66	x	WR	Frank	7/25/2019	7/24/2020	7/6/2020	7/25/2020	10/7/2020	5/25/2020	x	Annually	N/A	N/A	N/A	10/8/2020
Mountain Cascade, Inc.	\$ 1,632.66	x	WR	Braden	8/7/2019	8/6/2020	8/14/2020	8/14/2020	12/24/2020	6/7/2020	x	Annually	N/A	N/A	N/A	12/25/2020
Pleasanton Truck & Equipment Repair, Inc.	\$ 1,456.46	x	WR	Braden	6/14/2019	6/13/2020	6/10/2020	6/14/2020	10/14/2020	4/14/2020		Annually	N/A	N/A	N/A	10/15/2020
Power Washing Services	\$ 1,632.66		WR	Frank	9/1/2019	8/31/2020	8/27/2020	9/1/2020	10/12/2020	7/2/2020	x	Annually	N/A	N/A	N/A	10/13/2020
SpeeDee Wash	\$ 1,632.66	x	WR	Braden	10/16/2019	10/15/2020	10/15/2020	10/16/2020	12/9/2020	8/16/2020		Annually	N/A	N/A	N/A	12/10/2020
Sunbelt Rentals, Inc.	\$ 1,456.46	x	WR	Frank	4/3/2019	4/2/2020	3/18/2020	4/3/2020	3/10/2020	2/2/2020	x	Annually	3/11/2020	N/A	N/A	N/A
US Foods	\$ 1,632.66		WR	Braden	8/31/2019	8/30/2020	9/9/2020	8/31/2020	11/23/2020	7/1/2020	x	Annually	N/A	N/A	N/A	11/24/2020
R. Lance Towing	\$ 1,456.46		WR	Braden	3/21/2019	3/20/2020	3/24/2020	3/21/2020	8/12/2020	1/20/2020	x	Annually	N/A	N/A	N/A	8/13/2020
Heritage Solutions / Golden West Packaging	\$ 1,632.66	x	G	Frank	7/14/2019	7/13/2020	7/1/2020	7/14/2020	9/22/2020	5/14/2020	x	Annually	N/A	N/A	9/23/2020	N/A
Nieve Distributors (formerly Sabor de mi Tierra)	\$ 2,217.91	x	G	Frank	12/11/2019	12/10/2020	12/2/2020	12/11/2020	12/11/2020	10/11/2020	x	Semi-Annually	1/23/2020	N/A	8/18/2020	N/A
Packaging Innovators	\$ 1,632.66	x	G	Frank	9/18/2020	9/17/2020	9/10/2020	9/18/2020	11/24/2020	7/17/2020	x	Annually	N/A	N/A	N/A	11/25/2020
Protein Research	\$ 1,632.66	x	G	Frank	8/1/2019	7/31/2020	7/21/2020	8/1/2020	10/26/2020	6/1/2020	x	Annually	N/A	N/A	N/A	10/27/2020

Table 8.0-CIU Inspection/Sampling/Permitting 2020

Industry Name	Permit Fee	x	Type	Inspector	Permit Start Date	Permit Exp Date	Permit Renewal Issue Date	New Permit Start Date	Annual Inspection Completed	Date to send renewal app	x	Sampling Frequency	Date Sampling Completed 2020			
													Qtr 1	Qtr 2	Qtr 3	Qtr 4
Sutherland Distillery	\$ 1,409.73		G	Frank	12/9/2019	12/8/2020	11/16/2020	12/9/2020	10/26/2020	10/9/2020	x	Annually	N/A	N/A	N/A	10/27/2020
Working Man's Brewing Company - <i>Not in Business/Check for New Owners</i>	N/A		G	Frank	N/A	N/A	N/A	N/A	N/A	N/A		Semi-Annually	N/A	N/A	N/A	N/A
Livemore Arcade/MOSC	\$ 250.00	x	GW	Frank	3/15/2019	3/14/2020	3/3/2020	3/15/2020	N/A	1/14/2020	x	N/A	N/A	N/A	N/A	N/A
Form Factor-301 Lawrence	\$ 4,701.98	x	SIU	Frank	5/26/2019	5/25/2020	5/12/2020	5/26/2020	8/19/2020	3/26/2020	x	Quarterly	1/15/2020	5/21/2020	8/20/2020	10/29/2020
Form Factor-7545 Longard	\$ 4,701.98	x	SIU	Frank	5/26/2019	5/25/2020	5/12/2020	5/26/2020	8/19/2020	3/26/2020	x	Quarterly	1/15/2020	5/21/2020	8/20/2020	10/29/2020
Bonner Processing, Inc. (Zero Discharge)	\$ 974.00	x	SIU	Frank	4/1/2019	3/31/2020	3/18/2020	4/1/2020	9/21/2020	1/31/2020	x	Zero Discharge	N/A	N/A	N/A	N/A
B & S Hacienda	\$ 1,456.46	x	WR	Frank	1/7/2019	1/6/2020	12/20/2019	1/7/2020	10/6/2020	11/7/2019	x	Annually	N/A	N/A	N/A	10/7/2020
Cactus Car Wash	\$ 1,632.66	x	WR	Frank	11/12/2019	11/11/2020	11/4/2020	11/12/2020	9/14/2020	9/12/2020	x	Annually	N/A	N/A	9/15/2020	N/A
Chevron 4757 First St (AK Services Inc.)	\$ 1,456.46	x	WR	Frank	3/13/2019	3/12/2020	3/2/2020	3/13/2020	3/10/2020	1/12/2020	x	Annually	3/11/2020	N/A	N/A	N/A
Clark Pest Control	\$ 1,456.46	x	WR	Frank	4/29/2019	4/28/2020	4/14/2020	4/29/2020	9/15/2020	2/28/2020	x	Annually	N/A	N/A	9/16/2020	N/A
Cresco Equipment Rental	\$ 962.39	x	WR	Frank	6/1/2019	5/31/2020	5/15/2020	6/1/2020	7/21/2020	4/1/2020	x	Annually	N/A	6/24/2020	N/A	N/A
Hawthorne, LLC	\$ 1,456.46		WR	Frank	6/22/2019	6/21/2020	6/11/2020	6/22/2020	10/14/2020	4/22/2020	x	Annually	N/A	N/A	N/A	10/15/2020
Las Positas Shell	\$ 1,456.46	x	WR	Frank	1/10/2019	1/9/2020	12/19/2019	1/10/2020	6/29/2020	11/10/2019	x	Annually	N/A	6/30/2020	N/A	N/A
Livemore Car Wash	\$ 2,148.16		WR	Frank	2/1/2019	1/31/2020	1/13/2020	2/1/2020	11/30/2020	12/2/2019	x	Annually	N/A	N/A	N/A	12/1/2020
Livemore Harley-Davidson	\$ 1,456.46	x	WR	Frank	2/19/2019	2/18/2020	2/3/2020	2/19/2020	9/30/2020	12/20/2019	x	Annually	N/A	N/A	N/A	10/1/2020
Livemore Honda	\$ 1,456.46	x	WR	Frank	5/3/2019	5/2/2020	4/16/2020	5/3/2020	2/18/2020	3/3/2020	x	Annually	2/19/2020	N/A	N/A	N/A
Jaguar Range Rover of Livemore	\$ 1,456.46		WR	Frank	3/7/2019	3/6/2020	2/27/2020	3/7/2020	2/18/2020	1/6/2020	x	Annually	N/A	6/10/2020	N/A	N/A
Livemore Porsche	\$ 1,632.66	x	WR	Frank	11/19/2019	11/18/2020	11/10/2020	11/19/2020	2/18/2020	9/19/2020	x	Annually	2/19/2020	N/A	N/A	N/A
Livemore Subaru	\$ 1,456.46		WR	Frank	4/15/2019	4/14/2020	3/30/2020	4/15/2020	2/18/2020	2/14/2020	x	Annually	N/A	6/10/2020	N/A	N/A
LPFD Fire Station 10	N/A		WR	Frank	8/26/2019	8/25/2020	8/20/2020	8/26/2020	8/24/2020	6/26/2020	x	Annually	N/A	N/A	N/A	11/18/2020
LPFD Fire Station 6	N/A		WR	Frank	8/26/2019	8/25/2020	8/20/2020	8/26/2020	8/24/2020	6/26/2020	x	Annually	N/A	N/A	8/25/2020	N/A
LPFD Fire Station 7	N/A		WR	Frank	8/26/2019	8/25/2020	8/20/2020	8/26/2020	8/24/2020	6/26/2020	x	Annually	N/A	N/A	8/25/2020	N/A
LPFD Fire Station 8	N/A		WR	Frank	8/26/2019	8/25/2020	8/20/2020	8/26/2020	8/24/2020	6/26/2020	x	Annually	N/A	N/A	8/25/2020	N/A
LPFD Fire Station 9	N/A		WR	Frank	8/26/2019	8/25/2020	8/20/2020	8/26/2020	8/24/2020	6/26/2020	x	Annually	N/A	N/A	N/A	11/18/2020
Norsol Autowash (formerly Autotopia Car Wash)	\$ 1,456.46	x	WR	Frank	8/26/2019	8/25/2020	8/20/2020	8/26/2020	8/24/2020	6/26/2020	x	Annually	N/A	N/A	N/A	11/18/2020
Penske Truck Leasing Co.	\$ 1,632.66	x	WR	Frank	3/29/2019	3/28/2020	3/16/2020	3/29/2020	6/23/2020	1/28/2020	x	Annually	N/A	6/24/2020	N/A	N/A
Roto-Rooter Service Company (Formerly Sanact Inc.)	\$ 1,632.66	x	WR	Frank	10/5/2019	10/4/2020	9/24/2020	10/5/2020	6/29/2020	8/5/2020	x	Annually	N/A	N/A	9/2/2020	N/A
Allamont Beer Works	\$ 1,993.19	x	G	Braden	9/8/2019	9/7/2020	8/31/2020	9/8/2020	11/12/2020	7/9/2020	x	Annually	N/A	N/A	N/A	12/15/2020
Concannon Winery - <i>Waiting on Engineering Final to Issue Permit</i>	\$ 2,316.87	x	G	Braden	1/23/2020	1/22/2021	1/21/2020	1/23/2020	1/16/2020	11/23/2020	x	Semi-Annually	1/31/2020	N/A	7/28/2020	N/A
Bake Fresh	\$ 2,217.29	x	G	Braden	7/25/2019	7/24/2020	7/17/2020	7/25/2020	10/20/2020	5/25/2020	x	Semi-Annually	6/18/2020	N/A	N/A	10/21/2020
Shadow Puppets Brewery	\$ 2,217.29	x	G	Braden	7/18/2019	7/17/2020	7/17/2020	7/25/2020	11/2/2020	5/18/2020	x	Semi-Annually	2/27/2020	N/A	N/A	11/25/2020
Pennymweight Craft Brewing - <i>Not Currently in Business</i>					5/5/2020	5/6/2020	5/6/2020	5/6/2020		3/7/2020						
Intel Corporation (Groundwater @ InPhenix)	\$ 429.68	x	GW	Braden	8/1/2019	7/31/2020	7/29/2020	8/1/2020	N/A	6/1/2020	x	N/A	N/A	N/A	N/A	N/A
Costco Wholesale #146	\$ 1,258.83	x	P	Braden	3/4/2019	3/3/2020	3/3/2020	3/4/2020	8/6/2020	1/3/2020	x	Annually	N/A	N/A	8/7/2020	N/A
AI Industries	\$ 4,477.21	x	SIU	Braden	1/23/2019	1/22/2020	1/30/2020	1/23/2020	1/14/2020	11/23/2019	x	Quarterly	1/15/2020	COVID-19	7/2/2020	10/6/2020
ADWEDS			SIU	Braden	12/5/2020	12/5/2021	12/4/2020	12/5/2020	12/14/2020	10/6/2021	x	Quarterly	COVID-19	6/17/2020	9/25/2020	11/10/2020

Table 8.0-CIU Inspection/Sampling/Permitting 2020

Industry Name	Permit Fee	x	Paid?	Type	Inspector	Permit Start Date	Permit Exp Date	Permit Renewal Issue Date	New Permit Start Date	Annual Inspection Completed	Date to send renewal app	X	Sampling Frequency	Date Sampling Completed 2020			
														Qtr 1	Qtr 2	Qtr 3	Qtr 4
InPhenix, Inc.	\$ 3,417.40		x	SIU	Braden	6/15/2019	6/14/2020	6/16/2020	6/15/2020	9/23/2020	4/15/2020	x	Quarterly	2/19/2020	6/24/2020	9/23/2020	12/22/2020
Bolt Semiconductor (Zero Discharge)	\$ 1,117.18			SIU	Braden	10/2/2019	10/1/2020	11/16/2020	11/16/2020		8/7/2020	x	Zero Discharge	N/A	N/A	N/A	N/A
Gillig	\$ 5,393.68		x	SIU	Braden	5/1/2020	4/30/2021	4/23/2020	5/1/2020	9/25/2020	3/1/2021	x	Quarterly	1/17/2020	6/9/2020	9/1/2020	10/9/2020
California Department of Transportation	\$ 1,632.66			WR	Braden	11/15/2019	11/14/2020	11/16/2020	11/16/2020	12/7/2020	9/15/2020	x	Annually	N/A	N/A	N/A	12/8/2020
Goodfellow / Top Grade	\$ 1,456.46			WR	Braden	3/5/2019	3/4/2020	3/4/2020	3/5/2020	2/24/2020	1/4/2020	x	Annually	2/25/2020	N/A	N/A	N/A
Harris Rebar Northern CA				WR	Braden	5/6/2019	5/5/2020	N/A	N/A	N/A	3/6/2020	na	Annually	N/A	N/A	N/A	N/A
Herc Rental				WR	Braden	12/15/2020	12/14/2021	12/14/2020	12/15/2020	12/21/2020	10/15/2021	x	Annually	N/A	N/A	N/A	12/22/2020
JAM Services	\$ 1,632.66			WR	Braden	12/4/2019	12/3/2020	12/2/2020	12/4/2020	12/4/2020	10/4/2020	x	Annually	N/A	N/A	N/A	12/5/2020
Las Positas Golf Course	\$ 1,632.66		x	WR	Braden	7/29/2019	7/28/2020	7/29/2020	8/1/2020	10/26/2020	5/29/2020	x	Annually	N/A	N/A	N/A	10/27/2020
Livemore Amador Valley Transit Authority (LAVTA)	\$ 1,632.66			WR	Braden	8/20/2019	8/19/2020	8/20/2020	8/21/2020	11/5/2020	6/20/2020	x	Annually	N/A	N/A	N/A	11/6/2020
Livemore Amador Valley Transit Authority (LAVTA)-875 Atlantis	\$ 1,456.46		x	WR	Braden	2/21/2019	2/21/2020	2/21/2020	2/28/2020	3/4/2020	12/23/2019	x	Annually	3/5/2020	N/A	N/A	N/A
Livemore Maintenance Services Center (MSC)	N/A			WR	Braden	8/1/2020	7/31/2020	7/30/1930	8/1/2020	11/9/2020	6/1/2020	x	Annually	N/A	N/A	N/A	N/A
Livemore Municipal Airport	N/A			WR	Braden	8/1/2019	7/31/2020	7/30/2020	8/1/2020	11/17/2020	6/1/2020	x	Annually	N/A	N/A	N/A	11/10/2020
Livemore Police Department	N/A			WR	Braden	7/29/2019	7/28/2020	N/A	N/A	N/A	5/29/2020	x	Annually	N/A	N/A	N/A	N/A
Livemore Sanitation	\$ 1,456.46		x	WR	Braden	6/30/2019	7/1/2020	6/29/2020	7/1/2020	10/7/2020	5/2/2020	x	Annually	N/A	N/A	N/A	10/8/2020
Livemore Toyota	\$ 1,632.66			WR	Braden	10/31/2019	10/30/2020	10/26/2020	10/31/2020	12/29/2020	8/3/2020	x	Annually	N/A	N/A	N/A	12/30/2020
RGW Construction	\$ 1,632.66			WR	Braden	4/30/2019	5/1/2020	4/24/2020	5/1/2020	8/26/2020	3/2/2020	x	Annually	N/A	N/A	9/11/2020	N/A
Royal Restrooms	\$ 1,456.46		x	WR	Braden	5/6/2019	5/5/2020	6/4/2020	6/10/2020	10/22/2020	4/6/2020	x	Annually	N/A	N/A	N/A	10/23/2020
SAB Stanley Shell	\$ 1,456.46		x	WR	Braden	4/4/2019	4/3/2020	3/30/2020	4/4/2020	9/30/2020	2/9/2020	x	Annually	N/A	N/A	N/A	10/1/2020
Specialized Truck Repair	\$ 1,456.46		x	WR	Braden	3/1/2019	2/28/2020	2/26/2020	3/1/2020	2/24/2020	12/30/2019	x	Annually	2/25/2020	N/A	N/A	N/A
Vasco Road Chevron	\$ 1,632.66			WR	Braden	5/28/2019	5/27/2020	5/22/2020	6/1/2020	8/24/2020	3/28/2020	x	Annually	N/A	N/A	8/25/2020	N/A
Wah-Mart Tire & Lube Express	\$ 1,456.46		x	WR	Braden	4/12/2019	4/11/2020	4/4/2020	4/15/2020	9/29/220	2/11/2020	x	Annually	N/A	N/A	9/29/2020	N/A
Zone 7 Water Agency	\$ 1,632.66		x	WR	Braden	7/2/2019	7/1/2020	7/2/2020	7/6/2020	10/14/2020	5/2/2020	x	Annually	N/A	N/A	N/A	N/A
Lawrence Livemore National Laboratory (LLNL)				GW	Steve	1/1/2018	12/31/2020	12/14/2020	1/1/2021		10/24/2020		N/A				
LLNL	\$ 14,161.17		x	SIU	Steve	7/15/2019	7/14/2020	7/15/2020	7/15/2020		5/15/2020	x					
LLNL-B153					Steve					11/4/2020			Annually			11/4/2020	11/3-11/4/2020
LLNL-B196 Outfall					Steve					11/3/2020			Annually				
Sandia National Laboratory (SNL)	\$14,719.29		x	SIU	Steve	8/4/2019	8/3/2020	7/29/2020	8/4/2020		6/4/2020						
SNL-B968					Steve					11/9/2020			Annually			11/9-11/10/2020	
SNL-Outfall					Steve					11/9/2020			Annually			11/9-11/10/2020	
3814 First St (former Avis Budget Group location)				WR	N/A						N/A		N/A				
5340 Brica Street (former Mathew's Machinery location)				WR	N/A						N/A		N/A				
335 Lindbergh (Former Paramedics Plus location) VACANT				WR	N/A								N/A				
Total Permit Fees	\$ 169,453.15																
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Table 8.1

**CITY OF LIVERMORE
CATEGORICAL INDUSTRIAL USER
COMPLIANCE STATUS
01/01/2020 TO 12/31/2020**

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Admedes (2800 Collier Canyon Road)	433.17	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
AI Industries (240 S. Vasco Road)	433.17	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Bonner Metal Processing (6052 Industrial Way, Suite A)	433.17	Q1-20-CC ¹ Q2-20-CC Q3-20-CC Q4-20-IC ²	11/23/20	Reporting	n/a

1. Bonner Metal Processing is permitted under a "Zero Discharge" permit. Bonner Metal is not permitted to discharge any process associated wastewaters to the city's sanitary sewer system. Bonner Metal Processing is required to submit monthly self-monitoring reports along with a self-certification statement certifying that no process wastewater discharge have occurred during the reporting period.
2. Bonner Metal Processing was issued a Notice of Violation on 11/23/2020 for failure to remit wastewater discharge permit fees.

Table 8.1

**CITY OF LIVERMORE
CATEGORICAL INDUSTRIAL USER
COMPLIANCE STATUS
01/01/2020 TO 12/31/2020**

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Bolb Semiconductor (52 Wright Brothers Ave.)	469.18	Q1-20-CC ³ Q2-20-CC Q3-20-CC Q4-20-IC ⁴	11/23/20	Reporting	n/a

3. Bolb Semiconductor is permitted under a "Zero Discharge" permit. Bolb Semiconductor is not permitted to discharge any process associated wastewaters to the city's sanitary sewer system. Bolb Semiconductor is required to submit quarterly self-monitoring reports along with a self-certification statement certifying that no process wastewater discharge have occurred during the reporting period.
4. Bolb was issued a Notice of Violation on 11/23/2020 for failure to remit wastewater discharge permit fees.

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Form Factor- #3	469.18 433.17	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			
(501 Lawrence Dr.)					

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Form Factor- #4	469.18 433.17	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			
(7545 Longard Rd.)					

Table 8.1

**CITY OF LIVERMORE
CATEGORICAL INDUSTRIAL USER
COMPLIANCE STATUS
01/01/2020 TO 12/31/2020**

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Gillig LLC (451 Discovery Drive)	433.17	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
InPhenix (250 N. Mines Rd.)	469.18	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Lawrence Livermore National Laboratory (7000 East Avenue)	433.15 469.18 469.28	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Maas Brothers Powder Coating #1 (285 S.Vasco)	433.17	Q1-20-CC Q2-20-CC Q3-20-IC ⁵ Q4-20-CC	09/17/20	pH	Local

5. Maas Brothers Powder Coating was issued a Notice of Violation for discharging wastewater with a pH<6.0 on September 17, 2020 and for failing to properly maintain Pretreatment Equipment (Final pH recorder). Subsequent monitoring demonstrated a return to compliance status.

Table 8.1

**CITY OF LIVERMORE
CATEGORICAL INDUSTRIAL USER
COMPLIANCE STATUS
01/01/2020 TO 12/31/2020**

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Maas Brothers Powder Coating #2 (275 S.Vasco)	433.17	Q1-20-CC ⁶ Q2-20-CC Q3-20-CC Q4-20-CC			

6. In November 2008, Maas Brothers Powder Coating commenced a non-discharging powder coating operation at 275 S. Vasco Road. This facility shall be referenced as Maas Brothers Powder Coating #2. As this operation falls under the categorical classification of 40 CFR 433.17 and is non-discharging, the City has issued Mass Brothers Powder Coating #2 a Zero-Discharge Permit.

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
RG Plating and Anodizing (formerly Livermore Anodize) (6241 Southfront Rd.)	433.17	Q1-20-CC ⁷ Q2-20-CC Q3-20-CC Q4-20-CC			

7. RG Plating and Anodizing is permitted under a "Zero Discharge" permit. RG Plating and Anodizing is currently not permitted to discharge any process associated wastewaters to the city's sanitary sewer system. RG Plating and Anodizing is required to submit monthly self-monitoring reports along with a self-certification statement certifying that no process wastewater discharges have occurred during the reporting period.

Significant Industrial User	Federal Categories Present	Compliance History	Date of Violation	Type of Violation	Categorical or Local Limit Violation
Sandia National Laboratory (7011 East Avenue)	433.15 469.12	Q1-20-CC Q2-20-CC Q3-20-CC Q4-20-CC			

Compliance Status Key: CC = Consistent Compliance, IC = Inconsistent Compliance, SNC = Significant Non-Compliance, UK = Status Unknown, TS = On Time Schedule, ND = Not Discharging