

AUGUST 2022 MONTHLY REPORT

From The Director's Office:

Technically Based Local Limits for Wastewater Discharge

Over the past 18 months, the City has been developing new Technically Based Local Limits (Local Limits) for our wastewater treatment plant as a requirement of the City's National Pollutant Discharge Elimination System (NPDES) permit.

Local Limits regulate the type and quantity of pollutants, discharged to the wastewater treatment facility by non-domestic users, that could cause pass-through, interference or sludge contamination. Pollutants incompatible with treatment works are a source of major disruptions to the collection system and treatment works as well as contribute to permit violations. Local Limits are part of the City Code Chapter 8—Environment.

Development and implementation of Local Limits is a key aspect of the City's pretreatment program which regulates industrial and commercial facilities wastewater effluent that flows into our plant by limiting the amount of toxins discharging from the facilities. The pretreatment program also protects the health and safety of workers operating the wastewater treatment plant.

Creation of Local Limits is a multi-step process. First, is a review of any relevant report, study or data related to the wastewater plant, treatment processes and previous local limits. Next a sampling and Analysis Plan is created to address: pollutants to be evaluated, sampling locations, parameters to be sampled at each sampling location; sampling frequency and procedures; and analytical methods.

After the sampling data is collected, the maximum allowable industrial loading (MAIL) for each pollutant into the plant is determined. MAIL evaluation is done by assessing the collection system background concentrations and industrial discharges. Plant removal efficiency is calculated for allowable headworks loading followed by a review of the receiving water standards, NPDES permit limits and bio-solids use and standards. To ensure capacity for future growth a safety factor is added to each MAIL.

Once the MAIL numbers are finalized various industrial growth scenarios for the City are evaluated. Conservatively, the City's new Local Limits are set for full buildout to prepare for increased industrial growth.

Local Limits are calculated by allocating the MAIL to the industrial flow. Allocation strategies include: uniform concentration; case-by-case; hybrid approach and other. The proposed Local Limits for each significant industrial user is based on a uniform application. **Continued on Page 2**

PUBLIC WORKS
FIRST RESPONDER

Best Regards,

Delora Kerber, Public Works Director

From the Director's Office, continued

After the analysis was completed the proposed updated Technically Based Local Limits for the City's treatment plant are as shown in the table below. The table compares the new values, previous values and the EPA categorical limits for metal finishers. No matter the City's calculated limit for a constituent, the EPA limit is the maximum amount allowed.

Local Limits

	Basis of Maximum	EPA Categorical		Full Industrial
Pollutant	Allowable	Limits for Metal	Previous Limit	Buildout
	Headworks	Finishers		Calculated Limit
		mg/L	mg/L	mg/L
Arsenic	Sludge Quality	No standard	0.09	1.84
Cadmium	Sludge Quality	0.07	0.05	1.11
Chromium, total	Pass Through	1.7	2.77	205
Copper	Pass Through	20.7	0.54	10.6
Cyanide	Pass Through	0.65	0.59	6.97
Lead	Pass Through	No standard	0.58	0.81
Mercury	Pass Through	No standard	0.015	0.407
Nickel	Sludge Quality	2.38	0.61	10.1
Silver	Pass Through	0.24	0.11	2.3
Zinc	Pass Through	1.48	1.3	3.85
pН		No standard	5.5-10.0	5.5- 10.0

milligrams per liter

The proposed Local Limits were submitted to the Oregon Department of Environmental Quality (DEQ) for review and the City received a conditional approval.

Because the proposed pollutant concentrations are less stringent than the previous limits, this constituted a Substantial Program Modification to our Pretreatment Program which requires a public notice of the intended revisions. A public notice was placed in the Boones Ferry Messenger newspaper allowing 35 days for review and comment. Additionally, each of the City's significant industrial users were notified of the proposed Local Limits.

Next, the Technically Based Local Limits will be the presented to City Council for review, discussion and approval.

After the completion of the public comment period and proof of approval by City Council the Local Limits will be resubmitted to DEQ for final approval.

Implementation of the new Local Limits will be done through the permitting process for the significant industrial users in the City.

Facilities

Welcome Aboard!

Public Works is happy to welcome the newest member of Facilities division, Luke McKinnon, Facility Maintenance Specialist. He started on August 22and has already established a great working relationship with the team. Luke previously worked for Portland Community College where he performed landscape duties, oversaw all greenhouses and nursery stock, and assisted professors in the setting up their workshops. He is also a volunteer firefighter for the Lafayette Fire Department which shows his true commitment in serving the public.



A new face in Public Works—Luke

Wheel Stops

Fleet made a special request to accommodate their electric buses: trim down the plastic wheel stops to accommodate the lower clearance in three parking spaces. After trimming and installing, the buses no longer catch the bumper when leaving for their morning routes.



Shaving off two inches from wheel stop



Completing installation

Facilities cont.

Town Center Park Bus Shelter

Facilities assisted the Transit department with the relocation of a couple of bus shelters, including one designed by local artists featuring whimsical metalwork and brilliantly colored stained glass leaves. The shelter was one of two specially designed shelters—the other was previously relocated to Graham Oaks Nature Park from the WES Transit Center.









Roads & Stormwater

Taking Care of Business

Summertime means hot weather and irrigation diagnostics for the Roads division. Staff stayed busy all month fixing damaged pipes and sprinkler heads and improving the irrigation zones and systems.





Public Works - August 2022

Roads & Stormwater cont.

Beauty & The Bridge Cleanup

One of the biggest projects completed in August was performing maintenance at Beauty and The Bridge on Wilsonville Road near the I-5 overpass. Staff trimmed back vegetation, washed the tiled mural and cleaned the sidewalks.

Staff also performed landscape maintenance around the City monument signs.







Utilities—Water

Action-packed August

Another busy month for the Water crew. The high temperatures and dry conditions contributed to a number of investigations for high consumption accounts and potential irrigation system leaks. Technicians stayed busy with replacing water meters, adjusting the packing on distribution pumps, collecting bacteriological samples for new constructions projects, and replacing an antenna on one of the booster pump stations.







Utilities-Water cont.

Put a Ring on It!

The biggest event of the month was the repair of a water main leak on a 14" Ductile Iron pipe. The repair took place at the southwest corner of the intersection at Boeckman Road and Parkway Avenue. It required all hands on deck. Roads and Stormwater staff conducted flagging of the intersection, while the Utilities crew cut through the concrete, hydro-excavated down to the leak and made the repair with a band over the pipe. It was technically complex repair due to number of conflicting utilities in the trench and proximity to a busy intersection. The trench was then backfilled and temporarily patched until a more permanent repair to the concrete road can be scheduled.









Utilities—Wastewater

Bushwhacking and Excavating

The wastewater crew spent a number of days this month bushwhacking along the Boeckman Creek greenspace, uncovering and re-marking manholes in the area. This work was done in preparation for surveying and design of the future trail that will be built through this corridor.



At the request of the Engineering Department, the crew performed main line cleaning and manhole locating in Charbonneau in preparation and design of future Charbonneau Consolidated Improvement projects. One of the manholes that the crew hunted down and unearthed was located in an easement that ran along the side of a resident's home. Over the years the manhole had been so deeply covered with landscape that we had to excavate down approximately 29" to locate the manhole lid. The crew then raised the manhole back up to grade using grade rings.

