

Explanation of Environmental Compliance Program Requirements Sewer Use Ordinance and Local Limit Tables

The Industrial Pretreatment Program for Genesee County Drain Commissioner Division of Water and Waste Services (GCDCWWS) is subject to both Federal and State regulations. The Federal regulations are found in 40 CFR (Code of Federal Regulations), Chapter I, Subchapter N, Part 403, 40 CFR Part 403 contains the general and specific prohibited discharge standards that GCDCWWS must incorporate into their Environmental Compliance Program.

The general prohibitions specify that pollutants introduced into the Publicly Owned Treatment Works (POTW) by a Nondomestic source shall not pass through the POTW or interfere with the operation or performance of the treatment works. GCDCWWS must develop and enforce specific limitations (local limits) to implement the general prohibitions against interference, pass-through and biosolids contamination. The specific prohibitions specify prevention of the discharge of pollutants that cause any of the following conditions to occur at the POTW: fire or explosion hazard, corrosion, obstruct flow in the POTW, discharge of pollutants that may cause interference or pass-through at the treatment plant, heat in amounts causing inhibition of biological activity, pollutants resulting in the presence of toxic gasses, vapors or fumes in the POTW.

In order for GCDCWWS to successfully impose and enforce Federal pretreatment requirements, its ordinance must either include these requirements verbatim or incorporate them by reference. In addition to including Federal requirements, the GCDCWWS ordinance must clearly authorize enforcement of more stringent discharge requirements (local limits) adopted to prevent pass-through and interference. Local limits become Federal pretreatment standards if properly adopted pursuant to 40 CFR Part 403.

The State of Michigan has the responsibility of overseeing the implementation of the Federal pretreatment program requirements. This responsibility is set forth in Part 23 of Act 451 of Public Acts of 1994. The Michigan Department of Environmental Quality (MDEQ) is in charge of implementing the part 23 requirements. Part 23, rule 5 requires that POTWs with a National Pollutant Discharge Elimination System (NPDES) permit, treatment plant, design flow greater than 5 million gallons per day, and accept discharge from nondomestic (industrial) users shall have an approved Industrial Pretreatment Program (IPP) since April 10, 1985.

Rule 3 of Part 23 requires that POTWs with an approved IPP review and update the local limits as required in a NPDES application. GCDCWWS was required to review and update the GCDCWWS local limits as part of the NPDES renewal application. This review resulted in changes to the existing limits. Rule 3 also requires that local limits shall not be adopted without public notice and an opportunity to respond. The proposed local limits must be included in the sewer use ordinance of GCDCWWS. Since the local limits would need to be changed in the existing ordinance, GCDCWWS took this opportunity to update the language in the sewer use ordinance. Rule 9 of Part 23 requires that changes to local limits and sewer use ordinances be submitted to the MDEQ for approval.

It is important to understand that the Sewer Use Ordinance limitations are not arbitrary, but rather are the product of a mathematically based exhaustive process known as a Maximum Allowable Headworks Loading (MAHL) study. Basically this study examines the ultimate fate of pollutants once they enter the Treatment Plant in the influent sewage.

GCDCWWS has three Wastewater Treatment Plants; AR Treatment Plant, Linden Water Resource Recovery Facility, and Argentine (District 7) Treatment Plant, each with their own set of local limits. The Ordinance divides the local limits into three categories based on which Treatment Plant the nondomestic user discharges into.

Locally Developed Pretreatment Standards
Discharges to AR Treatment Plant

Parameter	IMC (mg/l)	Daily Max. (mg/l)	Monthly Avg. (mg/l)
Arsenic	---	0.62	---
Cadmium	---	0.11	---
Chromium (T)	---	4.1	---
Copper	---	1.0	---
Cyanides (T)	0.22	---	---
Lead	---	1.8	---
Mercury	---	NQ	---
Molybdenum	---	1.7	---
Nickel	---	1.6	---
PH	6.5 minimum	---	---
PH	9.5 maximum	---	---
PCB	---	NQ**	---
Selenium	---	0.23	---
Silver	---	0.16	---
Zinc	---	1.14	---
Acetone	60	---	---
Methyl Ethyl Ketone	105	---	---
Ammonia Nitrogen (NH3 as N)	---	100	---
BOD5	---	1000	---
Phosphorous (T)	---	100	---
TSS	---	1000	---
FOG	100	---	---

Locally Developed Pretreatment Standards
Discharges to District 7 (Argentine) Wastewater Treatment Plant

Parameter	IMC (mg/l)	Daily Max. (mg/l)	Monthly Avg. (mg/l)
Arsenic	---	0.14	---
Cadmium	---	0.11	---
Chromium (T)	---	4.1	---
Copper	---	0.63	---
Cyanides (T)	0.22	---	---
Lead	---	0.33	---
Mercury	---	NQ*	---
Molybdenum	---	0.18	---
Nickel	---	1.3	---
PH	6.5 minimum	---	---
PH	9.5 maximum	---	---
Selenium	---	0.23	---
Silver	---	0.11	---
Zinc	---	1.14	---
Acetone	60	---	---
Methyl Ethyl Ketone	105	---	---
Ammonia Nitrogen (NH3 as N)	---	43	---
BOD5	---	860	---
Phosphorous (T)	---	23	---
TSS	---	540	---
FOG	100	---	---

Locally Developed Pretreatment Standards
Discharges to Linden Water Resource Recovery Facility

Parameter	IMC (mg/l)	Daily Max. (mg/l)	Monthly Avg. (mg/l)
Arsenic	---	0.24	---
Cadmium	---	0.11	---
Chromium (T)	---	4.1	---
Copper	---	0.63	---
Cyanides (Available)	0.175	---	---
Lead	---	1.8	---
Mercury	---	NQ	---
Molybdenum	---	0.32	---
Nickel	---	1.6	---
PH	6.5 minimum	---	---
PH	9.5 maximum	---	---
Selenium	---	0.145	---
Silver	---	0.11	---
Zinc	---	1.14	---
Ammonia Nitrogen (NH3 as N)	---	100	---
BOD5	---	1000	---
Phosphorous (T)	---	100	---
TSS	---	1000	---
FOG	100	---	---
Acetone	60	---	---
Methyl Ethyl Ketone	105	---	---
Benzene	0.021	---	---
Ethylbenzene	0.11	---	---
Toluene	0.70	---	---
Xylene	0.62	---	---
1,2,4-Trimethylbenzene	0.39	---	---
1,3,5-Trimethylbenzene	0.27	---	---
Methyl tert-Butyl Ether	0.62	---	---
Naphthalene	0.88	---	---
2-Methylnaphthalane	0.13	---	---

IMC = Instantaneous Maximum Concentration. (Grab samples)

T = Total

*NQ = Mercury Non-quantifiable concentration, defined as at or above the quantification level of 0.2 ug/l using U.S. EPA Method 245.1 Mercury sampling procedures, preservation and handling, and analytical protocol for compliance monitoring of a User's discharge shall be in accordance with U.S. EPA method 245.1.

**NQ = PCB sampling procedures, preservation and handling, and analytical protocol for compliance shall be in accordance with U.S. EPA method 608. The quantification level shall be 0.1 ug/l. Total PCBs shall be defined as the sum of the Aroclors 1016, 1221, 1232, 1242, 1248, 1254 and 1260. In addition, any detected Aroclor-specific measurements shall be reported.