

Local Limits-What and Why?

Local Limits are the numerical limits in milligrams per liter (mg/l) units of measurement of particular parameters. These limits are to protect the (POTW) Publicly Owned Treatment Works owned by the City of Henderson's Water Utility.

Our wastewater treatment plants are primarily designed to treat domestic household wastes or biological waste streams. However, industry inevitably becomes part of our communities. We must have industry to provide jobs and build a community that survives and experiences growth, however when industries produce their products, often they create wastes that must be treated and disposed of.

Unfortunately, not all waste streams are capable of being broken down with biological treatment, this being the case with many industrial sources of waste. It is important that our industries are aware that the local limit applies at the immediate point at which their wastewater enters our lines in the collection system. Industrial responsibility to public health begins at that point. The time for the Industry's proper treatment of their wastewater is prior to entering the City's collection system, the reason for the term 'pretreatment.'

There are many things that can occur when industrial waste streams enter a sewer or 'collection system.' The collection system is the network of underground sewer lines that carry wastes to the wastewater plant. Negative things can occur when unregulated industrial wastes are sent into the sewer, such as, but not limited to, corrosion of the collection system or the treatment plant structures, explosions, toxic substance exposure and hazardous fumes to the public as well as employees of the City. Interference with the treatment plant and the pass-through of the toxic pollutants into a public watercourse (river) can also occur.

There are Federal Limits that regulate certain types of industrial wastes, however federal standards sometimes do not address all pollutants that may be received in the system and they are applied only to certain types of process. The EPA regulated certain pollutants of concern such as metals which include the following; Cadmium (Cd), Chromium (Cr), Copper (Cu), Lead (Pb), Mercury (Hg), Cyanide (Cn), Nickel (Ni), Silver(Ag), Zinc (Zn) and various others.

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For this reason, Local Limits must be in place to protect the wastewater plant from industries that might not fall under the Federal Categorical standards.

The Code of Federal Regulations (40 CFR) 403.2, 403.5(Subpart C), and 403.5(Subpart D) cover the General Pretreatment Regulations, the authority that requires our City to have a Pretreatment Program and the legal framework for the local limits to be used in Industrial Discharge permits.

Ideally, Local Limits are to be designed and tailored specifically to the individual wastewater plant's design, their solids disposal process, their State Discharge Permit limits and the State and Federal Water Quality Standards. Even pollutants that a wastewater plant is designed to treat can cause problems if they are left unchecked. These are called conventional pollutants and they are BOD (Biochemical Oxygen Demand, COD (Chemical Oxygen Demand), Ammonia as N (NH₃n), TSS (Total Suspended Solids), and O & G (Fats, Oils & Greases).

These pollutants in untreated quantities can cause 'pass-through' at the municipal wastewater plant and/or 'interference', each of which is a violation. Every municipal wastewater plant that discharges to a public waterway has a Discharge Permit from the State (KPDES) and it has specific numerical limits that the plant(s) must adhere to in order to avoid violations and Fines levied by the Division of Water.

In fact, a municipality's Local Limit reviews are recommended by the State every five (5) years and if changes are required based on the local limits calculations, the Division of Water (DOW) must review and approve the limits. If the limits are less stringent than previous limits, the State will publish them for not less than thirty (30) days as cited in the federal regulations. That time period is for public awareness and for industry to respond or comment. After the public notice period has been fulfilled, the municipality (City of Henderson) must adopt the limits and put them on record. At that point, they become an enforceable part of the Sewer Use Ordinance (SUO) and the Industrial Discharge Permits.

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To sum it all up, Local Limits are a required necessity for municipalities in order to protect the public, their personnel, the municipal collection systems, treatment plants, and most importantly, the waterway that receives the treated effluent.

As of November 2011, our Local Limits have been re-calculated and re-submitted to the Commonwealth for review and approval.

If you have any questions, please contact:

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