

There is a lot of dicussion in the community about drinking water safety and various other environmental issues related to public utilities including the City Water and Waste Water Teatment Plants and the Local Development Finance Authority. The City of Cadillac takes these matters seriously and wants to ensure the public understands the actions the City takes on a daily basis to protect the public health, safety and welfare of its residents. This packet of information summarizes the operations of these critical municipal operations.

# **Utilities Department Operational Highlights & PFAS**

The following facts highlight the primary operations of the City's Utilities Department and the PFAS issue.

#### PFAS and the City's Water Facilities, Waste Water Facilities, and LDFA

- The City of Cadillac has tested non-detect in all its drinking water wells for all PFAS since the first test in 2018. Water wells are tested annually.
- Wastewater is tested three times annually, and the last three samples show PFAS levels lower than the State water standards. Discharge from the WWTP is not considered drinking water.
- Biosolids are EQ Class A Biosolids. To retain this designation Biosolids are tested four times annually and must be below 20 ug/kg. PFOS is non-detect and PFAS is non-detect.
- The discharge from the LDFA groundwater treatment process is below the proposed EPA drinking water standard, which is below the standard otherwise allowed, since the discharge from the LDFA is not considered drinking water.

### **LDFA Groundwater Cleanup Plant Facts**

- Cleanup operations went online in 1996.
- Locally funded and special laws passed by the State to establish facility to clean up a superfund site of volatile organic compounds (VOC) and hexavalent chrome.
- This system has air stripping towers and activated carbon to remove the contaminants, in addition to a soil vapor extraction (SVE) cleanup system.
- The SVE system accomplished its goal and was shut down in 2016.
- Since treatment started, approximately 37,000 pounds of VOCs have been removed from groundwater.

# LDFA Groundwater Cleanup Plant Facts (Continued)

- Currently working with the EPA to determine how close the LDFA is to reaching its cleanup goals. Hexavalent chrome cleanup criteria have been or are very close to being met.
- PFAS is not a contaminant that is included in the LDFA's groundwater cleanup program, and the City is not the party responsible for any groundwater contamination. The City is fully engaged in the issue, and is collaborating with the U.S. Environmental Protection Agency, the State's Department of Environment, Great Lakes and Energy, and the Michigan PFAS Action Response Team, which is the specific agency responsible for running the local areas of study and getting resources to people in need. Additional information is available at: https://www.cadillac-mi.net/493/PFAS-Resources

# **Water System Facts**

- Cadillac's first water plant took water directly from Lake Cadillac.
- Lake water was only crudely filtered. Various organic matter could be found in the water.
- The first water mains in the system were wooden, and the system had communal spigots on various street corners.
- The first modern water plant was built on Eight Street in 1963. This well field was operational until 2022.
- Cadillac's water plant is a D-2, S-1 plant. This designation means the system has the second highest limited treatment system and the highest distribution system types in the State of Michigan.
- In 2012, a second well field was created on Crosby Road, and three of the system's wells are located at this site.
- In 2022, the second phase of well field relocation was completed. The other three wells were moved to the site on 44 Road, including the Water Operations Center.
- It is important to note that either of the two new wellfields can supply 100% of Cadillac's daily water needs. This redundancy of source water ensures extra safety for the water customers of Cadillac.
- The City won the Best Tasting Water in Michigan Award in 2018.
- The City placed in the top five in the nation for best tasting water in 2018.
- Maintain 76-miles of water main and a one-million-gallon water tank.
- 6 well houses that can produce 1,000 gallons of water each minute per well.

#### **WWTP Facts**

Cadillac has treated sewage for over 100 years. In 1908, the first plant was built that consisted of five filter beds that used slag for filter media.

In 1923, a new plant was built. This facility used a septic tank with a capacity of 444,312 gallons, a 5600 sq. ft sludge bed and contact filter with 118,272 cu. ft. of slag filter. In 1939, 5½ acres of sand filters were added.

In 1962, a new "Activated Sludge Treatment Plant" was built. The plant saw expansions in 1975, 1989 and 1996, and significant upgrades at the facility were made in 2003 and 2007.

Today's WWTP is a Class A, advanced tertiary treatment plant. The treatment process is comprised of several state-of-the-art technologies that include:

- Grit removal
- Primary and secondary treatments (activated sludge\*)
- Rotating biological contactors (RBCs) that remove ammonia and other nitrogenous compounds using biological processes that can be summarized as follows:
  - Wastewater flows through tanks with rotating shafts that have discs covered in microorganisms.
  - o These microorganisms consume ammonia and other pollutants in wastewater.
  - The microorganisms grow on the discs until they are sloughed off by the rotating discs.
  - o The sloughed solids settle in a clarifier before being recycled or removed.
- Cloth media filtration and ultraviolet (UV) disinfection
- Finished, treated product (effluent) is discharged into the Clam River which is designated as a cold-water trout stream several miles from our discharge location.
- WWTP produces clean water, methane gas and EQ Class A biosolids.
- Cadillac is one of approximately four plants in Michigan with this level of biosolid certification.
- Cadillac has approximately 63 miles of sewer main
- The system has 14 lift stations.

\* All solids are removed from the primary tanks to the anaerobic digester. From the primary digester, solids are transferred to a secondary covered digester which is not heated. This tank is used for solids separation and supernatant withdrawal. Solids from this tank are pumped to one of two storage tanks, and the City contracts with a sludge application firm for solids injection on farmlands. This Biosolid product is designated as Exceptional Quality (EQ) Class A Biosolids. Cadillac is one of five plants in Michigan that produces Biosolids of this quality.

Additional Information: <a href="https://www.cadillac-mi.net/PFAS">https://www.cadillac-mi.net/PFAS</a>

# **PFAS Contact List**

City of Cadillac Municipal Water & the Local Development Finance Authority (LDFA) Jeff Dietlin, Director of Utilities, City of Cadillac: 231-779-7346 - <u>idietlin@cadillac-mi.net</u>

#### EGLE's Residential Well Sampling in the Cadillac Industrial Area of Interest

Brandi Wheeler, EGLE's district project manager: 23-1878-8066 - WheelerB5@Michigan.gov Megan Cynar, EGLE's Superfund project manager: 517-256-2681 - CynarM@Michigan.gov Mike Jury, EGLE, PFAS Specialist: 517-242-9578 - JuryM1@Michigan.gov Miranda Triolet, EGLE, Analyst: 517-290-2201- TrioletM@Michigan.gov

What your drinking water result means; health concerns related to PFAS Chelsea Gary, DHHS toxicologist: 517-582-1657 - GaryC2@Michigan.gov

Home filters, Sampling Wells for Other Contaminants, Well Permitting or Abandonment Robert Crane, District Health Department #10: 231-519-7541 - <a href="mailto:rcrane@dhd10.org">rcrane@dhd10.org</a>

Information about the Superfund Site & PFAS in the Cadillac Industrial Park Area Catherine Nield, EPA: 312-353-6318 - nield.catherine@epa.gov

**Questions about the Haring Township Municipal Water Including Connections, the Wexford ISD Tech Center and Homes Nearby** 

Bob Scarbrough, Haring Township Supervisor: 237-775-0048 - caroscar@netonecom.net

### **US 131 & Mackinaw Trail Investigation**

Dave Maynard, EGLE site lead: 231-429-1656 - MaynardD@Michigan.gov

#### **Acronyms**

**EGLE** - (Department) Environment Great Lakes & Energy (Michigan Agency)

**EPA** - Environmental Protection Agency (Federal Agency)

**LDFA** - Local Development Finance Authority (City of Cadillac)

**WTTP** - Waste Water Treatment Plant (City of Cadillac)