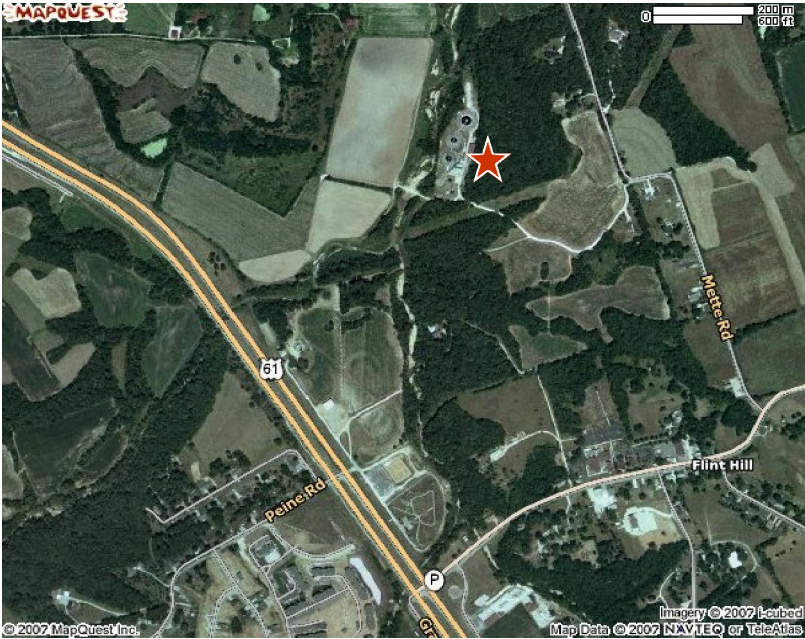


CITY OF WENTZVILLE

WATER RECLAMATION CENTER INFORMATIONAL BROCHURE



WELCOME TO THE CITY OF WENTZVILLE WATER RECLAMATION CENTER



DIRECTIONS

We are located in Flint Hill, MO, approximately one-quarter mile east on Highway P, north on Mette Road.

MAILING ADDRESS

Wentzville Water Reclamation Center
2355 Mette Road
Wentzville, MO 63385

OFFICE HOURS

Monday thru Friday, 7:00am to 3:30pm

CONTACTS

Treatment Plant Phone:	636-327-4174
Treatment Plant Fax:	636-639-2075
After-Hour Emergency	636-327-5102

WENTZVILLE WATER RECLAMATION CENTER WASTEWATER PERSONNEL

The Wastewater Department is staffed by ten full-time employees:

Water/Wastewater Superintendent	Senior Laboratory Analyst
Plant Supervisor	(2) Plant Operator I
Plant Operator II	Collections Operator I
Collections Operator II	(2) Operator

WATER RECLAMATION CENTER SITE

The current site of the Wentzville Water Reclamation Center was established in 1978 outside of Flint Hill, MO. The Reclamation Center is situated on a 54 acre tract along McCoy Creek.

The Reclamation Center underwent major improvements in 1982 to accommodate General Motors coming to Wentzville and also expanded in 1999 to accommodate for future growth of the area.

Again in 2007 the City expanded the facility to increase plant capacity and comply with upcoming, more stringent environmental regulations.

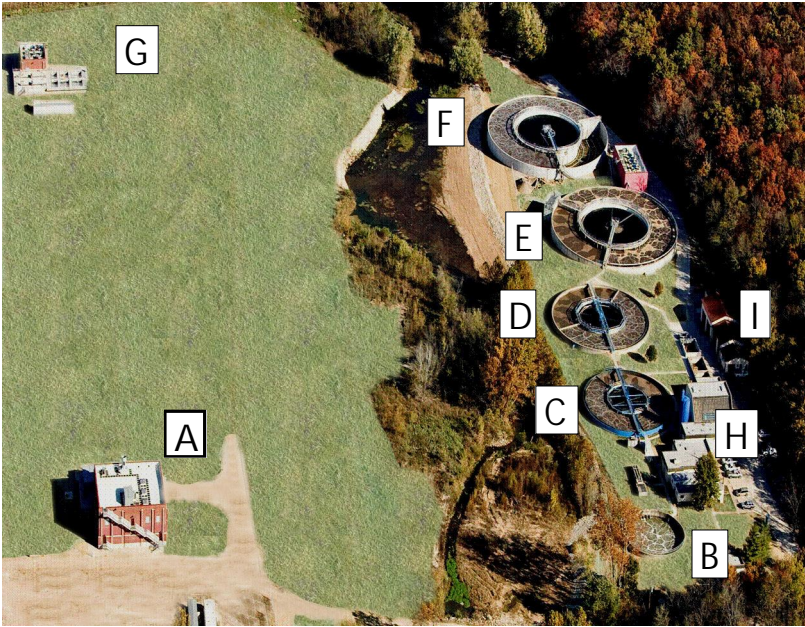
Another expansion is tentatively scheduled for 2010/2011 to continue accommodating for growth in our area.

WATER RECLAMATION CENTER POLICY

The Wentzville Water Reclamation Center works closely with the Missouri Department of Natural Resources (DNR) and the U.S. Environmental Protection Agency (EPA) to ensure that strict rules regarding the ultimate disposal of municipal wastewater and biosolids are being followed for the protection of the public health and the environment.

The plant currently receives an average daily flow of 3,303,113 gallons and is designed to treat up to 5,100,000 gallons per day. The plant is also designed to treat 700 dry tons of biosolids a year and currently handles 336 dry tons. Beneficial reuse of biosolids for agricultural purposes is accomplished safely by following State and Federal Guidelines.

WATER RECLAMATION CENTER LAYOUT



- A. Headworks Building
- B. Equalization Tank
- C. Treatment Unit #1
- D. Treatment Unit #2
- E. Treatment Unit #3
- F. Treatment Unit #4
- G. UV and Post-Aeration
- H. Control Building and Lab
- I. Maintenance Shop

TREATMENT PROCESS

COLLECTIONS

The City maintains approximately 210 miles of gravity sewer lines and force mains. Wastewater flows to the treatment plant by gravity whenever possible and is assisted by lift stations when necessary. The City currently maintains 32 lift stations in its collections program.

PRIMARY TREATMENT

When wastewater arrives at the treatment plant, it flows first to the Headworks Building. A mechanical bar screen removes debris, such as rags and plastics, which travel down a conveyer to a dumpster. Next, the flow travels through a vortex to remove grit, which is inorganic matter such as sand and gravel. The flow is then directed to the equalization basin to aerate and mix the wastewater.

SECONDARY TREATMENT

From the equalization basin, the flow is divided between four extended aeration units. Activated sludge organisms are mixed with the wastewater and aerated, which speeds up the decomposition of waste as the microorganisms consume organic solids. The flow then travels to the center clarifier. The solids settle to the bottom, where they are circulated back into the aeration chamber. The clean water exits the clarifier over the weirs and is directed to the tertiary treatment.

TREATMENT PROCESS, CONTINUED

TERTIARY TREATMENT

From the treatment units, the clean water, called effluent, is directed to the UV Building where it is disinfected by flowing through ultraviolet lights. The effluent is then aerated again to add oxygen before flowing into McCoy Creek.

SOLIDS HANDLING

In the aeration chambers, the solids concentration is maintained at optimal levels by “wasting” solids into the digesters. Once the solids reach a concentration of 3% in the digesters, they are pulled to holding tanks. From there, the biosolids are land applied as a liquid or pressed into a cake. Both forms of biosolids serve as a fertilizer for neighboring farms.

MONITORING

Ultimately, the effluent and biosolids from a wastewater treatment plant must be disposed of back to the environment. The City of Wentzville Water Reclamation Center ensures that all environmental guidelines and regulations are met through daily testing and monitoring. The Reclamation Center employees take great pride in the facility and invite residents, schools, and clubs to schedule visits or tours.

WENTZVILLE WATER RECLAMATION CENTER ACHIEVEMENTS

- Recipient of the 2003, 2005, 2006 and 2007 Missouri Water Environment Association (MWEA) Biosolids Management Award
- Nationally recognized for Infiltration Corrective Program in *American Public Works Association Reporter*, August 2003
- Recipient of the 2004 and 2008 MWEA Safety Award
- Member of the MWEA Golden Manhole Society and Crystal Crucible Society
- Recipient of the 2006 MWEA Laboratory Analyst Excellence Award
- Recipient of the 2006 MWWC and 2008 MWEA Operator of the Year Awards
- Member of Missouri Stream Team since 1998, McCoy Creek Basin, Team # 1062





2007 Biosolids Award Recipients

City of Wentzville
Water Reclamation Center
2355 Mette Road
Wentzville, Missouri
63385

