

# Lafayette Wastewater Treatment Plant



## Meeting the Challenge

Bowen Engineering Corporation was the successful bidder on this \$55.7 million project, one of the largest of its kind in Indiana. Through extensive planning and teamwork, Bowen Engineering was able to install the new treatment process and upgrade the existing process and administrative facilities without disrupting the operation of the existing plant.

Over the course of the two years required to construct the facility upgrades in and around the old treatment plant, the treatment of the flow of 22 MGD was never interrupted. There were two critical challenges that the Bowen team had to overcome in order to achieve this level of success:

First, the design required construction of several structures that were in direct conflict with the existing primary effluent line. To solve this, the flow was rerouted through temporary piping and tie-ins made for bypass pumping. This temporary bypass piping remained in place for two years before the plant was switched over to the new facilities.

Second, the installation of the new chlorine contact tank & effluent pump station could not allow for interruption in the treatment being provided by the existing structures.

## Innovation on Demand

Bowen Engineering was innovative in constructing the project by first thoroughly understanding the plant's treatment process and flow requirements and creatively changing the sequence of construction to expedite the project schedule. A formal "sequence of construction" was provided in the contract documents by the design engineer to assist the contractor and owner in building the project while maintaining the existing plant process.

By installing a temporary manhole and secondary aeration primary effluent line, the team was able to perform a bypass pumping operation designed and estimated to take weeks - in just two days. It was through this kind of creative planning and teamwork that Bowen was able to construct the new plant within the existing plant without incident.

## CONTRACTOR OF CHOICE

### HIGHLIGHTS

**Total Contracts**  
\$56,000,000

**Project Location**  
Lafayette, IN

**Client Contact**  
Brad Talley  
City of Lafayette  
765-807-1800



# ***Lafayette Wastewater Treatment Plant Operations / Administration Facility***

**CONTRACTOR OF CHOICE**

## **HIGHLIGHTS**

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\$56,000,000

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In addition to the over 25 treatment tanks and building that were constructed or modified by Bowen, the project also included a new state-of-the-art operations/administration facility. This new facility is a three-story building constructed on/over the existing administration building.

The massive undertaking included moving the plant staff and treatment laboratory into temporary facilities during construction and required fast tracking approach to minimize impact to the owner.

The new building added several new amenities, which included a fully-controlled operator console, process treatment quality control laboratory, break and locker room area for operation/maintenance staff, record drawings and equipment operation manual archives, over 10 fully-furnished offices, and a new maintenance and equipment fleet center.

This new operations/administration building will allow the City of Lafayette to run and maintain its collection and treatment process well into the 21st century!



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Revised 11/30/09