

IEPA Log No.: **C-0659-07**
CoE appl. #: **2007-292**

Public Notice Beginning Date: June 8, 2011
Public Notice Ending Date: July 8, 2010

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Facility Evaluation Unit
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: City of Fairfield, 109 NE Second St., Fairfield, IL. 62837-2029

Discharge Location: Sec.5, T2S, R9E, 3rd P.M. Wayne County

Name of Receiving Water: Little Wabash River

Project Description: Installation of new raw water intake structure on the Little Wabash River

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Keith Runge at 217/782-3362.

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Fact Sheet for Antidegradation Assessment
RE: City of Fairfield County: Wayne
IEPA Log #C-0659-07
COE Log #LRL-2007-292
Contact: Mark T. Books at 217/558-2012
June 8, 2011

The applicant has applied for Section 401 water quality certification for the installation of a new raw water intake structure on the Little Wabash River, and a new pumping station. Approximately 160 linear feet of the river bank will be excavated down to a bed elevation of 358 feet, resulting in the removal of 127 cubic yards of material in order to install the new pumping station. The intake structure will be protected by two 15 foot diameter cells constructed with sheet piling. The cells will be filled with gravel and sand and then capped with a 5 foot concrete cap. The sheet piles will be driven 5 feet below the river bottom.

The Applicant's initial 401 water quality certification request also included the construction of an 11 acre side channel reservoir expansion. By letter dated March 8, 2011 the Applicant withdrew their plan to construct the side channel reservoir expansion, this application is now only dealing with the Applicant's new raw water intake structure and pumping station.

Identification and Characterization of the Affected Water Body.

The Little Wabash River is a General Use Water with a 7Q10 flow of 3.6 cfs at this location. Little Wabash River, Waterbody Segment IL_C-33, is listed in the Illinois Integrated Water Quality Report and Section 303(d) List-2010 as impaired for aquatic life, public water supply use and fish consumption. The potential causes of impairment for aquatic life are dissolved oxygen, temperature and atrazine. The potential causes of impairment for public water supply use are atrazine and manganese. The potential cause of impairment for fish consumption is mercury. The Little Wabash River is not an enhanced water body pursuant to the dissolved oxygen water quality standard. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the Little Wabash River is not listed as biologically significant stream nor has it received an integrity rating at the project location. The Little Wabash River is designated by the IDNR, over virtually its entire length, as the *Little Wabash River Illinois Natural Areas Inventory (INAI) Site*. The Little Wabash River has a drainage area of approximately 1,792 square miles at the project site.

The IDNR WIRT System did not list any state threatened or endangered aquatic species residing in the project area.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The pollutant load increases that would occur from this project include some possible increases in suspended solids during the construction of the project. Erosion control measures will be utilized to minimize any increase in suspended solids.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. Erosion control measures will be utilized to minimize any increase in suspended solids and prevent further impact to the stream. Aquatic life uses of this portion of the river will be negatively impacted during construction, but in time will recover and will support approximately the same community structure as is now found.

Although the Applicant withdrew the portion of this project dealing with building the side channel reservoir expansion the Applicant is still required to complete their Wetland Mitigation Management Plan and their Stream Mitigation Plan (both revised January, 2010). This mitigation work is necessary to compensate for the work that was done in preparing for the side channel reservoir expansion during March & April, 2007 and for the impacts of the Applicant's new water intake structure and pumping station. The Mitigation Plans include construction monitoring conditions, reporting monitoring conditions to the USACE, short and long term management and maintenance requirements, and financial assurance conditions.

According to the applicant the Stream Mitigation Plan includes 4,000 L.F. of intermittent streams to be enhanced by improving the rapid Bioassessment score of an existing stream located just south of the City of Fairfield along Highway 45. Improvements will be made to the existing stream by increasing the overall length of the stream, constructing natural erosion control, improving epifaunal substrate and planting grassy buffer zones and trees to prevent soil and chemical runoff from the surrounding agricultural field, and provide habitat for local fauna.

According to the applicant the Wetland Mitigation Plan includes 7.3 acres of trees to be planted between the east berm of the side channel reservoirs and the Little Wabash River. Streams damaged outside of the reservoir basin will be mitigated according to plans with efforts to restore the streams to the pre-impacted state. In addition 26 acres of Palustrine Forested wetlands will be restored 7 miles south of the City of Fairfield located on Interstate I-64, for a combined total of over 33 acres of restored wetlands.

Purpose and Social & Economic Benefits of the Proposed Activity.

The Applicant has stated the following reasons for a new raw water pumping system;

- The existing pump station equipment is old and needs to be replaced;
- The existing equipment is not fixed to the river bottom and when it floats around in the river it has occasionally become blocked with floating debris;
- The existing equipment within the river is not protected from floating debris in the river; and
- The new pump will be larger (approximately a 21% increase from current 1.73 MGD pumping ability to 2.1 MGD).
- IEPA, Marion Field Office staff has inspected Fairfield's raw water intake structure and concurs that the existing structure needs to be replaced and updated.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The construction of the proposed project will follow conditions set forth by the Agency and USACE. Erosion control measures will need to be implemented to prevent impacts to the stream.

Concerning pumping water from the Little Wabash River, which is impaired for public water supply use, the Applicant provides the following statements:

"The City will pump from the Little Wabash when water quality and quantity allow. This is current practice, and will not change. For example, during the spring when atrazine is likely to be detectable in the Little Wabash due to agricultural activities, pumping from the Little Wabash is limited. The side channel reservoir is not filled during atrazine season. Or, immediately after rain events when the river level rises quickly, pumping from the Little Wabash is also limited due to elevated suspended solids".

The Applicant looked at three alternatives to this proposed project (the No-build Alternative, using Sam Dale Lake for raw water source, and the use of Alluvial Wells).

- The No-build Alternative was not selected because of the reasons indicated above.
- The use of Sam Dale Lake for a raw water supply would require the building of a new pumping station at the lake location and installation of 28 miles of transmission line. This option was determined to be too costly and difficult to build.
- Applicant has stated that Alluvial Well(s) installation in the Little Wabash River Bottoms is not expected to provide the necessary water supply volume. Developing a well field in the Wabash River Bottoms was determined to be too costly due to the distance a water line would have to be constructed.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

In a letter from Keith Shank dated June 7, 2010 the IDNR indicated that an initial report generated through their EcoCAT website indicated the presence of protected resources in the vicinity of the project location. Further review by the IDNR staff concludes that adverse impacts to the protected resources are unlikely. Consultation is terminated.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this antidegradation review summary was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving waters will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by improving the City's drinking water raw water supply. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.