Indiana Department of Environmental Management
Office of Water Quality - Mail Code 65-42
Municipal NPDES Permits Section
100 North Senate Avenue
Indianapolis, IN 46204-2251

May 11, 2018

Mr. John Donnellan, Permit Manager:

Re: Danville (Town) WWTP, NPDES IN0020070
1) Approval Request for a Site-Specific Water Effect Ratio for Copper
2) Permit Modification Request for Copper and Lead Limits and Requirements

The current NPDES Permit for The Town of Danville (the Town) includes a 36-month schedule of compliance (SOC) for both copper and lead at Outfall 001. Interim requirements include quarterly effluent monitoring/reporting and periodic progress reports. The final effluent limits are scheduled to become effective no later than February 1, 2020.

Based on new and updated information (including site-specific information), the Town believes that a reasonable potential to exceed (RPE) the water quality based effluent limits for lead and copper at Outfall 001 does not exist. This letter and associated attachments comprise two requests:

- An approval request for a Site-Specific Water Effect Ratio (WER) for Total Copper;
- An NPDES Permit modification request for removal of the monitoring requirements and effluent limits for lead and copper at Outfall 001. This request includes submission of the following information:
- Site-specific receiving stream hardness information
- New/expanded lead and copper datasets

These requests are made in keeping with the Part I.C.5 and Part I.C.6 reopening clauses of the Permit and, for the site specific information, 327 IAC 2-1-8.9.

In accordance with IC 13-18-20-12, a fee of $50 is included to cover the permit modification application fee.

If you have any questions, contact me (317)745-4180, ext. 2001 or at jcrisp@danvilleindiana.org

Certification:
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering in the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Gerald Crisp
Wastewater Superintendent

Enclosures:
Attachment 1 Request Summary
Attachment 2 Results of the Site Specific Streamlined Water Effects Ratio for Copper
Attachment 3 Results of the Study Plan for Dissolved Metals and Hardness
Attachment 4 Forms (3) and Location Map (1)
Attachment 5 Application Fee

Cc: Leigh Voss (IDEM), Paul Higginbotham (IDEM), John Elliott (IDEM)
ATTACHMENT 1:
Requests Summary
ATTACHMENT 1: Requests Summary

Background
The current NPDES Permit for the Town of Danville (the Town) includes a 36-month schedule of compliance (SOC) for lead and copper at Outfall 001. Interim requirements include quarterly monitoring and reporting and periodic progress reports. The final water quality based effluent limits (WQBELs) are scheduled to become effective no later than February 1, 2020.

The WQBELs are based on a reasonable potential to exceed (RPE) analysis using the permit renewal dataset and default receiving stream hardness and water effects ratio values. Under the SOC and in keeping with the Part I.C.5 and Part I.C.6 reopening clauses of the NPDES Permit, the Town developed and executed two Study Plans1 in order to 1) expand the copper and lead datasets to include dissolved metals data, and 2) develop site-specific information (receiving stream hardness and a copper water effects ratio). The overall objective was to provide new information for use in updated RPE evaluations for lead and copper that demonstrate no RPE exists.

Request 1: Site-Specific WER (for Copper) Approval
Attachment 2 includes the results of the previously submitted and approved Study Plan for a Site-Specific Streamlined Water Effect Ratio (WER) for Copper. Based on the results, a WER of 4.7 for total copper is applicable to the Town’s discharge. The Town requests approval of the copper WER as allowed by 327 IAC 2-1-8.9. The Town understands the overall process is as follows:

- The request is allowed under 327 IAC 2-1-8.9(a)(1)(B)(i).
- The application requirements are not defined in 327 IAC 2-1-8.9(b) other than to indicate they are determined on a case-by-case basis.
- The actions by IDEM upon receipt of the request will include public notice, comment, and as requested, a public meeting. In addition, materials will be made available through the IDEM website.
- The actions by IDEM upon approval include public notice, material availability, and incorporation in the next revision of the water quality standards. Because of the applicability of 327 IAC 2-1-8.9(d), U.S. EPA approval is not required.
- IDEM may use the WER for NPDES/CWA purposes without U.S. EPA approval since it meets the exception criteria under 327 IAC 2-1-8.9(f).

Subsequent to WER approval, the Town requests the site-specific WER for copper be used directly to modify the criteria used for development of Permit limits for the Town and a new

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1 The previously submitted Study Plan for Dissolved Metals and Hardness was approved by IDEM in February 2017. The previously submitted Study Plan for a Site-Specific Streamlined Water Effect Ratio for Copper was approved by IDEM in August 2017.
RPE evaluation for copper be performed as detailed in Request 2 (utilizing the site-specific WER, site-specific receiving stream hardness information, and an expanded total copper dataset).

**Request 2: Permit Modification to Remove Outfall 001 Lead and Copper Limits**

Attachment 3 includes the results of the previously submitted and approved Study Plan for Dissolved Metals and Hardness. The results of the study demonstrate the following:

- A site-specific receiving stream hardness of 309 mg/L (as CaCO3) is applicable to the West Fork of White Lick Creek;
- No reasonable potential to exceed the lead water quality criteria exists for the Outfall 001 discharge. This is based on a new RPE evaluation performed using dissolved lead data and either the default receiving stream hardness (250 mg/L) value or the site-specific receiving stream hardness (309 mg/L) value; and
- No reasonable potential to exceed the copper water quality criteria exists for the Outfall 001 discharge. This is based on a new RPE using total copper data, the site-specific receiving stream hardness (309 mg/L) value and a site-specific WER (4.7) for copper.

As a result, the Town requests the following Permit modifications:

1. Removal of Outfall 001 lead limits and monitoring requirements based the information provided in Attachment 3.
2. Removal of Outfall 001 copper limits and monitoring requirements based the information provided in Attachments 2 and 3.

**Timing Considerations**

The Town recognizes that the evaluation and approval of the necessary components to demonstrate no RPE for lead may require less time than for copper since an extra component (approval of the site-specific WER for copper) is needed for copper. Given this, the Town requests that if extensive delays are encountered with approval of the site-specific WER for copper, IDEM proceed with the permit modification request in two phases:

- **Stage 1 Permit Modifications:**
  - Removal of lead limits & monitoring based on the no RPE demonstration
  - Revision of the final copper limits based on revised permit limit development using the site-specific receiving stream hardness data (note the associated compliance schedule, interim requirements, and reopening clauses would remain as currently written)
- **Stage 2 Permit Modification**
  - Removal of copper limits and monitoring based on the no RPE demonstration w/application of the approved WER for copper (and previously applied site-specific receiving stream hardness data)