

National Pollutant Discharge Elimination System (NPDES) Permit Program

F A C T S H E E T

Regarding a Modification to an NPDES Permit To Discharge to Waters of the State of Ohio  
for the Union Wastewater Treatment Plant

Public Notice No.: 09-10-031  
Public Notice Date: October 22, 2009  
Comment Period Ends: November 20, 2009

OEPA Permit No.: 1PB00030\*FD  
Application No.: OH0021644

Name and Address of Applicant:

City of Union  
118 North Main Street  
Union, Ohio 45322

Name and Address of Facility Where  
Discharge Occurs:

City of Union Wastewater Treatment Plant  
120 Randolph Street  
Union, Ohio

Receiving Water: Stillwater River

Subsequent  
Stream Network: Great Miami River, Ohio River

Introduction

Development of a Fact Sheet for NPDES permits is mandated by Title 40 of the Code of Federal Regulations, Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Ohio Environmental Protection Agency, as well as the methods by which the public can participate in the process of finalizing those actions.

This Fact Sheet is prepared in order to document the technical basis and risk management decisions that are considered in the determination of water quality based NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, instream biological, chemical and physical conditions, and the relative risk of alternative effluent limitations. This Fact Sheet details the discretionary decision-making process empowered to the Director by the Clean Water Act and Ohio Water Pollution Control Law (ORC 6111). Decisions to award variances to Water Quality Standards or promulgated effluent guidelines for economic or technological reasons will also be justified in the Fact Sheet where necessary.

Procedures for Participation in the Formulation of Final Determinations

The proposed modification is tentative but shall become final on the effective date unless (1) an adjudication hearing is requested, (2) the Director withdraws and revises the proposed modification after consideration of the record of a public meeting or written comments, or (3) upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty (30) days of publication of this notice, any person may submit written comments, a statement as to why the proposed modification should be changed, a request for a public meeting on the proposed modification and/or a request for notice of further actions concerning the modification. All communications timely received will be considered in the final formulation of the modification. If significant public interest is shown a public meeting will be held prior to finalization of the modification.

Within thirty (30) days of the issuance of the proposed modification any officer of an agency of the state or of a political subdivision, acting in his representative capacity or any person aggrieved or adversely affected by issuance of it may request an adjudication hearing by submitting a written objection in accordance with Ohio Revised Code

Section 3745.07. Since all other conditions of the permit remain in effect, a hearing may not be requested on any issues other than the proposed modification. If an adjudication hearing is requested, the existing NPDES permit will remain in effect until the hearing is resolved. Following the finalization of the modification by the Director, any person who was a party to an adjudication hearing may appeal to the Environmental Review Appeals Commission.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed to:

**Legal Records Section  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

Interested persons are invited to submit written comments upon the proposed modification. Comments should be submitted in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

**Ohio Environmental Protection Agency  
Attention: Division of Surface Water  
Permits and Compliance Section  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

The OEPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. The first 250 pages copied are free. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

For additional information about this fact sheet or the draft permit, contact Gary Stuhlfauth, (614) 644-2026, [gary.stuhlfauth@epa.state.oh.us](mailto:gary.stuhlfauth@epa.state.oh.us).

Location of Discharge/Receiving Water Use Classification

The Union wastewater treatment plant discharges at river mile 0.45 to an unnamed tributary of the Stillwater River. The unnamed tributary enters the Stillwater River at river mile 11.75. The approximate location of the facility is shown in Figure 1.

This segment of the Stillwater River is described by Ohio EPA River Code: 14-200, U.S. EPA River Reach #: 05080001-14-05, County: Montgomery, Ecoregion: Eastern Corn Belt Plains. The Stillwater River is designated for the following uses under Ohio's Water Quality Standards (OAC 3745-1-21): Exceptional Warmwater Habitat (EWH), Agricultural Water Supply (AWS), Industrial Water Supply (IWS), and Primary Contact Recreation (PCR).

Facility Description

The Union wastewater treatment plant has an average daily design flow of 1.0 MGD (million gallons per day). Wet stream processes are screening and grit removal, activated sludge aeration (contact stabilization), secondary clarification, chlorination and dechlorination. Solid stream processes are aerobic digestion and sludge disposal by land application at agronomic rates.

The City has a separate sanitary sewer system.

#### Description of Existing Discharge

Table 1 presents unaltered discharge monitoring report data for Union outfall 1PB00030001 for the period October 2004 through September 2009.

#### Basis of the Modification

The City of Union filed an appeal of its November 2006 NPDES permit renewal, 1PB00030\*ED; ERAC case number 575984 (Environmental Review Appeals Commission). The primary reason for the appeal was a permit requirement for the Union wastewater plant to begin phosphorus removal. The permit included a 118 month compliance schedule for the plant to meet the phosphorus wasteload allocation established in the *Total Maximum Daily Loads for the Stillwater River Basin, Final Report* (TMDL; April 2004, Ohio EPA; approved by U.S. EPA on June 15, 2004).

U.S. EPA approved a revised TMDL report for the Stillwater River watershed on September 10, 2009. The revised TMDL does not include a phosphorus wasteload allocation for the Union wastewater treatment plant.

Ohio EPA is proposing this permit modification, which does not include a compliance schedule for phosphorus reduction or a requirement to meet effluent limits for phosphorus, as part of the Joint Stipulation and Settlement Agreement for the City's permit appeal.

The revised TMDL report for the Stillwater River watershed is available through the following Ohio EPA Internet site: <http://epa.ohio.gov/dsw/tmdl/index.aspx>.

#### *Other Changes Proposed in the Modification*

- Delete monitoring for dissolved hexavalent chromium at final outfall 001 This parameter has been below detection in 59 samples analyzed over the past five years. There is no known source of hexavalent chromium discharging to the plant.
  
- Delete Part II, Item Q This was a special condition to submit an annual report on the phosphorus load discharged by the wastewater plant and on any alternate disposal methods used to minimize the discharge of phosphorus.

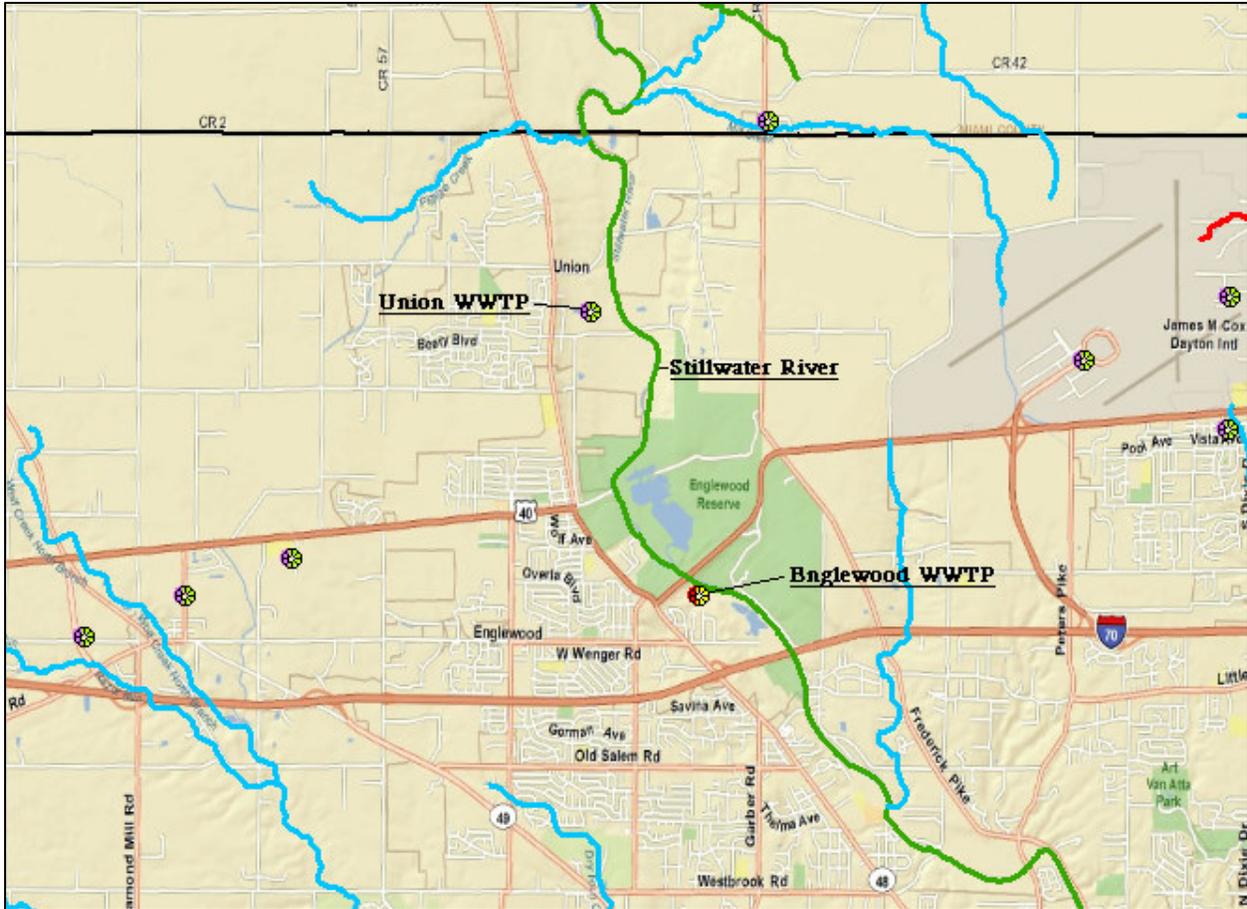


Figure 1. Approximate location of the Union and Englewood wastewater treatment plants.

**Table 1. Effluent Characterization Using Self-Monitoring Data**

Summary of unaltered discharge monitoring report data for Union outfall 1PB00030001 (October 2004 – September 2009). All values are based on annual records unless otherwise indicated.

Parameter	Season	Units	# Obs.	Percentiles		Data Range
				50 <sup>th</sup>	95 <sup>th</sup>	
Water Temperature	Annual	C	1221	18	26	3-29
Dissolved Oxygen	Summer	mg/l	612	6.05	7.8	4.4-9.3
Dissolved Oxygen	Winter	mg/l	609	7.9	9.8	4.5-12.2
Chemical Oxygen Demand )	Annual	mg/l	254	33	74	12-110
pH, Maximum	Annual	S.U.	520	7.5	7.9	7-8.4
pH, Minimum	Annual	S.U.	520	7.4	7.7	6.7-7.9
Total Suspended Solids	Annual	mg/l	764	8	28	1-56
Oil and Grease, Freon Extr	Annual	mg/l	59	0	0	0-0
Nitrogen, Ammonia (NH3)	Summer	mg/l	378	12.6	21.6	0.24-26
Nitrogen, Ammonia (NH3)	Winter	mg/l	388	10.6	17.8	2.54-21.9
Nitrogen Kjeldahl, Total	Annual	mg/l	59	12.3	25.4	0-26.4
Nitrite Plus Nitrate, Total	Annual	mg/l	762	0.4	2.5	0-172
Phosphorus, Total (P)	Annual	mg/l	378	1.54	2.47	0.643-4.31
Cyanide, Free	Annual	mg/l	27	0	0	0-0
Nickel, Total Recoverable	Annual	ug/l	59	0	0	0-0
Zinc, Total Recoverable	Annual	ug/l	59	15.7	30.4	0-43.4
Cadmium, Total Recoverable	Annual	ug/l	59	0	0	0-0.8
Lead, Total Recoverable	Annual	ug/l	59	0	0	0-0
Chromium, Total Recoverable	Annual	ug/l	59	0	0	0-39
Copper, Total Recoverable	Annual	ug/l	59	8.7	17.2	0-23
Chromium, Dissolved Hexavalent	Annual	ug/l	59	0	0	0-0
Fecal Coliform	Annual	#/100 ml	377	8	100	0-9800
Flow Rate	Summer	MGD	883	0.64	1.03	0.15-2.62
Flow Rate	Winter	MGD	906	0.802	1.56	0-4.11
Flow Rate	Annual	MGD	1789	0.71	1.33	0-4.11
Chlorine, Total Residual	Annual	mg/l	882	0.01	0.02	0-0.04
Mercury, Total (Low Level)	Annual	ng/l	22	0	0	0-0.2
pH, Maximum	Annual	S.U.	701	7.9	8.1	7.1-8.7
pH, Minimum	Annual	S.U.	701	7.8	7.9	6.5-8.2
CBOD 5 day	Summer	mg/l	377	9	27.2	1-42
CBOD 5 day	Winter	mg/l	388	10	20	1-29
Mercury, Total Recoverable	Annual	ug/l	25	0	0	0-0