John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

December 29, 2014

RE: Ohio EPA Permit No.: 1IO00004*ID
Facility Name: USDOE Fernald Closure Project

USDOE Fernald Closure Project
10995 Hamilton-Cleves Highway
Harrison, OH 45013

Ladies and Gentlemen:

Transmitted herewith is one copy of the public notice, draft permit, and fact sheet if major permit in the above referenced matter.

The public has been invited to submit comments regarding this draft permit. If sufficient public interest is indicated, a public meeting will be held.

The permit as drafted will be issued as a final action unless the director revises the permit after consideration of all written comments received during the 30-day period following public notice and consideration of the record of a public meeting, if one is held, or unless the draft is disapproved by the Regional Administrator, U.S. Environmental Protection Agency.

You should note that a general condition of your permit states that issuance of a NPDES permit does not relieve you of the duty of complying with all applicable federal, state, and local laws, ordinances, and regulations.

Sincerely,

Ed Swindall

Ed Swindall, Supervisor
Permit Processing Unit
Division of Surface Water

ERS/kep

Enclosure

CERTIFIED MAIL

Application No. OH0009580

Issue Date:

Effective Date:

OHIO EPA
DRAFT PERMIT
SUBJECT TO REVISION

Expiration Date: March 31, 2019 (Proposed)

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

U.S. Department of Energy

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Fernald Preserve wastewater treatment works located at 7400 Willey Road, Harrison, Ohio, Hamilton County and discharging to the Great Miami River and Paddys Run in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

In accordance with the antidegradation rule, OAC 3745-1-05, I have determined that a lowering of water quality is necessary. Provision (D)(1)(d) was applied to this application. This provision excludes the need for the submittal and subsequent review of technical alternatives and social and economic issues related to the degradation. Other rule provisions, however, including public participation and appropriate intergovernmental coordination were required and considered prior to reaching this decision.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

_____
Craig W. Butler
Director

Totqal Pages: 35

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 1IO00004001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Grab	All
00300 - Dissolved Oxygen - mg/l	-	5.0	-	-	-	-	-	2/Week	Grab	All
00530 - Total Suspended Solids - mg/l	30.0	-	-	20.0	931	-	621	1/Day	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10.0	-	-	10.0	310	-	310	2/Week	Grab	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	Continuous	Continuous	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	Continuous	Continuous	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
80082 - CBOD 5 day - mg/l	30.0	-	-	20.0	931	-	621	2/Week	24hr Composite	All
82581 - pH Range Excursions, > 60 Minutes - Number/Day	0	-	-	-	-	-	-	1/Day	Total	All
82582 - pH Range Excursions, Monthly Total Duration - Minutes	446	-	-	-	-	-	-	1/Month	Total	All

Notes for Station Number 1IO00004001:

- Effluent loadings based on average design flow of 8.2 MGD. Note that this is an increase in flow from the previous permit of 6.7 MGD, resulting in increased allowable loadings of TSS, Oil and Grease, and CBOD5.

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, select the "No

Discharge" check box on the data entry form. PIN the eDMR.

- pH - See Part II, Item D.

- Mercury - See Part II, Items I and J

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 1IO00004003. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 003 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00056 - Flow Rate - GPD	-	-	-	-	-	-	-	2/Year	24hr Total Estimate	Semi-annual
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	2/Year	Grab	Semi-annual
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	2/Year	Grab	Semi-annual

Notes for Station Number 1IO00004003:

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, select the "No Discharge" check box on the data entry form. PIN the eDMR.

- Stormwater - See Parts IV, V, and VI

- Mercury - See Part II, Item J.

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 1IO00004007. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 007 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00056 - Flow Rate - GPD	-	-	-	-	-	-	-	When Disch.	Estimate	All

Notes for Station Number 1IO00004007:

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, select the "No Discharge" check box on the data entry form. PIN the eDMR.

- This discharge shall be reported when the emergency overflow from the treatment biowetland is flowing.

Part I, B. - UPSTREAM MONITORING REQUIREMENTS

1. Upstream Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, upstream of the point of discharge at Station Number 1IO00004801, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Upstream Monitoring - 801 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly

NOTES for Station Number 1IO00004801:
- Mercury - See Part II, Items I and J

Part I, B. - DOWNSTREAM-NEARFIELD MONITORING REQUIREMENTS

2. Downstream-Nearfield Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, downstream of the point of discharge, at Station Number 1IO00004902, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Downstream-Nearfield Monitoring - 902 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly

NOTES for Station Number 1IO00004902:
- Mercury - See Part II, Items I and J

Part II, OTHER REQUIREMENTS

A. Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
1IO00004001	Final effluent (Lat: 39N 17 ' 39 "; Long: 84 W 39 ' 58 ")
1IO00004003	Stormwater runoff discharge to Paddys Run
.	(Lat: 39N 17 ' 17 "; Long: 84 W 41 ' 32 ")
1IO00004007	Biowetland emergency overflow to Paddys Run
.	(Lat: 39N 18 ' 00 "; Long: 84 W 41 ' 44 ")
1IO00004801	Upstream from outfall 1IO00004001 at the Venice Bridge
.	(River mile 26.2)
1IO00004902	Downstream from outfall 1IO00004001 at the Blue Rock
.	Road bridge in New Baltimore (River Mile 21.4)

B. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved.

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

C. In the event that the permittee's operation requires the use of cooling or boiler water treatment additives that are discharged to surface waters of the state, written permission must be obtained from the director of the Ohio EPA prior to use. Discharges of these additives must meet Ohio Water Quality Standards and shall not be harmful or inimical to aquatic life. Reporting and testing requirements to apply for permission to use additives can be obtained from the Ohio EPA, Central Office, Division of Surface Water, Industrial Permits Unit. This information is also available on the DSW website:

http://www.epa.ohio.gov/dsw/policy/policy_index.aspx.

D. On outfalls where pH is monitored continuously, the permittee shall maintain the pH of such wastewater within the range specified in this permit. Excursions from the range are permitted subject to the following limitations.

1. The total time during which pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in a calendar month.

2. No individual excursion from the range of pH values shall exceed 60 minutes.

3. The permittee shall keep a record at the facility for each monitoring station where pH is monitored continuously for the following:

a. the number of pH excursions;
b. the duration of each excursion;
c. the date of each excursion;and
d. the total time of all excursions combined.

E. There shall be no detectable amount of any priority pollutant attributable to cooling tower maintenance chemicals in the cooling tower blowdown wastewater.

F. Composite samples shall be comprised of at least three grab samples proportionate in volume to the sewage flow rate at the time of sampling and collected at intervals of at least 30 minutes, but not more than 2 hours, during the period that the plant is staffed on each day for sampling. Such samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance.

G. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.

H. Water quality based permit limitations in this permit may be revised based on updated wasteload allocations or use designation rules. This permit may be modified, or revoked and reissued, to include new water quality based effluent limits or other conditions that are necessary to comply with a revised wasteload allocation, or an approved total maximum daily loads (TMDL) report as required under Section 303 (d) of the Clean Water Act.

I. Sampling for these parameters at station 1IO00004001, 1IO00004801, and 1IO00004902 shall occur the same day.

J. The permittee shall use either EPA Method 1631 or EPA Method 245.7 promulgated under 40 CFR 136 to comply with the effluent mercury monitoring requirements of this permit.

K. The permittee shall maintain a permanent marker on the stream bank at each outfall that is regulated under this NPDES permit and discharges to the Great Miami River and Paddys Run. This includes final outfalls, bypasses, and combined sewer overflows. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall be not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible. If the outfall is normally submerged the sign shall indicate that. If the outfall is a combined sewer outfall, the sign shall indicate that untreated human sewage may be discharged from the outfall during wet weather and that harmful bacteria may be present in the water.

PART III - GENERAL CONDITIONS

1. DEFINITIONS

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Average weekly" discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. Each of the following 7-day periods is defined as a calendar week: Week 1 is Days 1 - 7 of the month; Week 2 is Days 8 - 14; Week 3 is Days 15 - 21; and Week 4 is Days 22 - 28. If the "daily discharge" on days 29, 30 or 31 exceeds the "average weekly" discharge limitation, Ohio EPA may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"Average monthly" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net Load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specifically identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specifically identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specifically identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in section 6111.01 of the Revised Code. "Sewage sludge" includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, animal manure, residue generated during treatment of animal manure, or domestic septage.

"Sewage sludge weight" means the weight of sewage sludge, in dry U.S. tons, including admixtures such as liming materials or bulking agents. Monitoring frequencies for sewage sludge parameters are based on the reported sludge weight generated in a calendar year (use the most recent calendar year data when the NPDES permit is up for renewal).

"Sewage sludge fee weight" means the weight of sewage sludge, in dry U.S. tons, excluding admixtures such as liming materials or bulking agents. Annual sewage sludge fees, as per section 3745.11(Y) of the Ohio Revised Code, are based on the reported sludge fee weight for the most recent calendar year.

2. GENERAL EFFLUENT LIMITATIONS

The effluent shall, at all times, be free of substances:

A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;

B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;

C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;

D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;

F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

A. Monitoring data required by this permit shall be submitted monthly on Ohio EPA 4500 Discharge Monitoring Report (DMR) forms using the electronic DMR (e-DMR) internet application. e-DMR allows permitted facilities to enter, sign, and submit DMRs on the internet. e-DMR information is found on the following web page:

http://www.epa.ohio.gov/dsw/edmr/eDMR.aspx

Alternatively, if you are unable to use e-DMR due to a demonstrated hardship, monitoring data may be submitted on paper DMR forms provided by Ohio EPA. Monitoring data shall be typed on the forms. Please contact Ohio EPA, Division of Surface Water at (614) 644-2050 if you wish to receive paper DMR forms.

B. DMRs shall be signed by a facility's Responsible Official or a Delegated Responsible Official (i.e. a person delegated by the Responsible Official). The Responsible Official of a facility is defined as:

1. For corporations - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

2. For partnerships - a general partner;

3. For a sole proprietorship - the proprietor; or,

4. For a municipality, state or other public facility - a principal executive officer, a ranking elected official or other duly authorized employee.

For e-DMR, the person signing and submitting the DMR will need to obtain an eBusiness Center account and Personal Identification Number (PIN). Additionally, Delegated Responsible Officials must be delegated by the Responsible Official, either on-line using the eBusiness Center's delegation function, or on a paper delegation form provided by Ohio EPA. For more information on the PIN and delegation processes, please view the following web page:

http://epa.ohio.gov/dsw/edmr/eDMR.aspx

C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest. DMRs submitted on paper must include the original signed DMR form and shall be mailed to Ohio EPA at the following address so that they are received no later than the 15th day of the month following the month-of-interest:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Surface Water - PCU
P.O. Box 1049
Columbus, Ohio 43216-1049

D. Regardless of the submission method, a paper copy of the submitted Ohio EPA 4500 DMR shall be maintained onsite for records retention purposes (see Section 7. RECORDS RETENTION). For e-DMR users, view and print the DMR from the Submission Report Information page after each original or revised DMR is submitted. For submittals on paper, make a copy of the completed paper form after it is signed by a Responsible Official or a Delegated Responsible Official.

E. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Section 5. SAMPLING AND ANALYTICAL METHODS, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

F. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported to the Ohio EPA, but records shall be retained as specified in Section 7. RECORDS RETENTION.

5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)

B. The person(s) who performed the sampling or measurements;

C. The date the analyses were performed on those samples;

D. The person(s) who performed the analyses;

E. The analytical techniques or methods used; and

F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years except those records that pertain to sewage sludge disposal, use, storage, or treatment, which shall be kept for a minimum of five years, including:

A. All sampling and analytical records (including internal sampling data not reported);

B. All original recordings for any continuous monitoring instrumentation;

C. All instrumentation, calibration and maintenance records;

D. All plant operation and maintenance records;

E. All reports required by this permit; and

F. Records of all data used to complete the application for this permit for a period of at least three years, or five years for sewage sludge, from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period, or five year period for sewage sludge, for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.

C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

A. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 11.B and 11.C.

B. Notice

1. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

2. Unanticipated Bypass - The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24 hour notice).

C. Prohibition of Bypass

1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph 11.B.

2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

12. NONCOMPLIANCE NOTIFICATION

A. Exceedance of a Daily Maximum Discharge Limit

1. The permittee shall report noncompliance that is the result of any violation of a daily maximum discharge limit for any of the pollutants listed by the Director in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.state.oh.us
Southwest District Office: swdo24hournpdes@epa.state.oh.us
Northwest District Office: nwdo24hournpdes@epa.state.oh.us
Northeast District Office: nedo24hournpdes@epa.state.oh.us
Central District Office: cdo24hournpdes@epa.state.oh.us
Central Office: co24hournpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site under the Monitoring and Reporting - Non-Compliance Notification section:

http://epa.ohio.gov/dsw/permits/individuals.aspx

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;

b. The limit(s) that has been exceeded;

c. The extent of the exceedance(s);

d. The cause of the exceedance(s);

e. The period of the exceedance(s) including exact dates and times;

f. If uncorrected, the anticipated time the exceedance(s) is expected to continue; and,

g. Steps taken to reduce, eliminate or prevent occurrence of the exceedance(s).

B. Other Permit Violations

1. The permittee shall report noncompliance that is the result of any unanticipated bypass resulting in an exceedance of any effluent limit in the permit or any upset resulting in an exceedance of any effluent limit in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.state.oh.us
Southwest District Office: swdo24hournpdes@epa.state.oh.us
Northwest District Office: nwdo24hournpdes@epa.state.oh.us
Northeast District Office: nedo24hournpdes@epa.state.oh.us
Central District Office: cdo24hournpdes@epa.state.oh.us
Central Office: co24hournpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site:

http://www.epa.ohio.gov/dsw/permits/permits.aspx

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;

b. The time(s) at which the discharge occurred, and was discovered;

c. The approximate amount and the characteristics of the discharge;

d. The stream(s) affected by the discharge;

e. The circumstances which created the discharge;

f. The name and telephone number of the person(s) who have knowledge of these circumstances;

g. What remedial steps are being taken; and,

h. The name and telephone number of the person(s) responsible for such remedial steps.

2. The permittee shall report noncompliance that is the result of any spill or discharge which may endanger human health or the environment within thirty (30) minutes of discovery by calling the 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee shall also report the spill or discharge by e-mail or telephone within twenty-four (24) hours of discovery in accordance with B.1 above.

C. When the telephone option is used for the noncompliance reports required by A and B, the permittee shall submit to the appropriate Ohio EPA district office a confirmation letter and a completed noncompliance report within five (5) days of the discovery of the noncompliance. This follow up report is not necessary for the e-mail option which already includes a completed noncompliance report.

D. If the permittee is unable to meet any date for achieving an event, as specified in a schedule of compliance in their permit, the permittee shall submit a written report to the appropriate Ohio EPA district office within fourteen (14) days of becoming aware of such a situation. The report shall include the following:

1. The compliance event which has been or will be violated;

2. The cause of the violation;

3. The remedial action being taken;

4. The probable date by which compliance will occur; and,

5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all other instances of permit noncompliance not reported under paragraphs A or B of this section on their monthly DMR submission. The DMR shall contain comments that include the information listed in paragraphs A or B as appropriate.

F. If the permittee becomes aware that it failed to submit an application, or submitted incorrect information in an application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;

2. The addition of any new significant industrial discharge; and

3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

18. PERMIT MODIFICATION OR REVOCATION

A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;

2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At anytime during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. SOLIDS DISPOSAL

Collected grit and screenings, and other solids other than sewage sludge, shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state, and in accordance with all applicable laws and rules.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than $25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Not withstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan (plan) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

1. The plan for a storm water discharge associated with industrial activity:

   a. shall be prepared within six months of the effective date of this permit (and updated as appropriate);
   b. shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.

2. Upon a showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

B. Signature and Plan Review.

1. The plan shall be signed in accordance with Part VI, and be retained on-site at the facility which generates the storm water discharge.

2. The permittee shall make plans available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. The permittee may claim any portion of a storm water pollution plan as confidential in accordance with 40 CFR Part 2 and does not have to release any portion of the plan describing facility security measures (such as provided for in Part IV.D.7.b.(8) of this permit). An interested party wishing a copy of a discharger's SWP3 will have to contact the Ohio EPA to obtain a copy.

C. Keeping Plans Current.

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the State or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 of this permit, or otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.B above.

D. Contents of Plan. The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team - Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

2. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

a. Drainage.

(1) A site map indicating an outline of the drainage area of each storm water outfall, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IV.D.2.c of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle

and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Flows with a significant potential for causing erosion shall be identified.

b. Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c. Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility after the date of three years prior to the effective date of this permit.

d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.

e. Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources at the following areas: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concerns shall be identified.

3. Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

a. Good Housekeeping - Good housekeeping requires the maintenance of a clean, orderly facility.

b. Preventive Maintenance - A preventive maintenance program shall involve inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

c. Spill Prevention and Response Procedures - Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

d. Inspections - In addition to or as part of the comprehensive site evaluation required under Part IV.4. of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

e. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

f. Recordkeeping and Internal Reporting Procedures - A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

g. Non-Storm Water Discharges

(1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify in accordance with Part IV.A of this permit.

(2) Except for flows from fire fighting activities, sources of non-storm water listed in Part VI of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

h. Sediment and Erosion Control - The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion.

i. Management of Runoff - The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Parts IV.D.2.(b), (d) and (e) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: including vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

4. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d, in no case less than once a year. Such evaluations shall provide:

a. Material handling areas and other potential sources of pollution identified in the plan in accordance with paragraph IV.D.2 of this permit shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural storm water management measures, sediment and control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.2 of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph IV.D.3 of this permit shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.

c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.b of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years. The report shall be signed in accordance with Part VI.B of this permit.

5. Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more.

   In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

6. Consistency with other plans. Storm water pollution prevention plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under section 311 of the Act or Best Management Practices (BMP) Programs otherwise required by a NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.

7. Additional requirements for storm water discharges associated with industrial activity from facilities subject to SARA Title III, Section 313 requirements are not applicable to Section 313 water priority chemicals in gaseous or non-soluble liquid or solid [at atmospheric pressure and temperature] forms. In addition to the requirements of Parts IV.D.1 through 4 of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under SARA Title III, Section 313 for chemicals which are classified as "Section 313 water priority chemicals" in accordance with the definition in Part VI of this permit, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:

   a. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

      (1) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or
      (2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind blowing.

   b. In addition to the minimum standards listed under Part IV.D.7.a of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:

      (1) Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals.

         (a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

         (b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

(2) Material storage areas for Section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind blowing shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

(3) Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

(4) In facility areas where Section 313 water priority chemicals are transferred, processed or otherwise handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall be designed as described in paragraphs (a), (b) and (c) of this section. Additional protection such as covers or guards to prevent wind blowing, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system, and overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

(5) Discharges from areas covered by paragraphs (1), (2), (3) or (4).

(a) Drainage from areas covered by paragraphs (1), (2), (3) or (4) of this part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

(b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

(c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.

(d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(6) Facility site runoff other than from areas covered by (1), (2), (3) or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3) or (4)), from which runoff which may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

(7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage area shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or non-containment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to the drainage system, corrective action shall be immediately taken or the unit or process shut down until corrective action can be taken. When a leak or non-containment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

(8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(9) Training. Facility employees and contractor personnel using the facility shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

8. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile within two years of the effective date of this permit. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. **Coal Pile Runoff Effluent Limitations.** Any discharge of coal pile runoff is authorized to discharge as of the effective date of this permit and shall comply with the following effluent limitations as expeditiously as practicable, but no later than three years after the effective date of this permit. Coal pile runoff shall not be diluted with storm water or other flow in order to meet these limitations.

Units	Parameter	Daily Minimum	Daily Maximum
mg/l	Total Suspended Solids	-	50
S.U.	pH	6.0	9.0

Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with 10 year, 24-hour rainfall event shall not be subject to the limitation for Total Suspended Solids. It is the permittee=s responsibility to demonstrate to the Ohio EPA that a 10-year, 24-hour rainfall event has occurred and the volume of the overflow to which the Total Suspended Solids effluent limitation does not apply.

B. **Monitoring Requirements.** Only the activities described in the following matrix and associated definitions are required to conduct monitoring. The monitoring required in the following matrix shall be conducted annually. Monitoring shall be initiated within twelve months of the effective date of this permit and henceforth on an annual basis, weather conditions permitting. A permittee may, in lieu of annual monitoring, certify that industrial materials are not exposed to storm water; such certification shall be submitted to the Ohio EPA upon request of the Director.

1. MONITORING REQUIREMENTS MATRIX

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a	b[1,3]	c	d	e	f	g	h	i[2]	j	k	l[1]
mg/l	Oil and Grease		X	X	X	X	X	X	X	X	X	X	X
mg/l	5-day Biochemical Oxygen Demand		X							X		X	
mg/l	Chemical Oxygen Demand		X	X	X	X	X		X	X			X
mg/l	Total Suspended Solids		X		X	X	X	X	X	X	X	X	X
mg/l	Total Kjeldahl Nitrogen			X								X	
mg/l	Phosphorus											X	
S.U.	pH		X	X	X	X	X	X	X	X	X	X	X
TU_a	Acute Toxicity												
Hours	Duration of Storm Event		X	X	X	X	X	X	X	X	X	X	X
Inches	Precipitation		X	X	X	X	X	X	X	X	X	X	X
Hours	Duration Between Storm Events*		X	X	X	X	X	X	X	X	X	X	X
Gallons	Volume (est)		X	X	X	X	X	X	X	X	X	X	X
mg/l	Nitrate-Nitrogen												
mg/l	Nitrite-Nitrogen												
µg/l	Lead, Total		X	X					X				
µg/l	Cadmium, Total		X[3]	X									
µg/l	Copper, Total		X[3]				X	X	X		X		
µg/l	Arsenic, Total		X[3]	X			X						
µg/l	Chromium, Total		X[3]	X			X						
mg/l	Ammonia												
µg/l	Magnesium, Total			X									

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a	b[1,3]	c	d	e	f	g	h	i[2]	j	k	l[1]
µg/l	Magnesium, Dissolved			X									
mg/l	Total Dissolved Solids			X									
mg/l	Total Organic Carbon			X									
µg/l	Barium, Total			X									
mg/l	Cyanide, Total			X									
µg/l	Mercury, Total			X									
µg/l	Selenium, Total			X									
µg/l	Silver, Total			X									
µg/l	Pentachlorophenol				X								
µg/l	Nickel, Total							X			X		
µg/l	Zinc, Total							X			X		
#/100ml	Fecal Coliform											X	

* Time between the storm event when sampling is being conducted and the last storm event producing rainfall greater than 0.1 inches.

(1) and any pollutant limited in an effluent guideline or categorical pretreatment standard which the facility is subject.

(2) and the primary ingredient used in the deicing materials used at the site (e.g., ethylene glycol, urea, etc.).

(3) Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for this parameter.

2. Industrial Activity Categories Definitions

a. Section 313 of SARA Title III Facilities. As of the effective date of this permit, facilities with storm water discharges associated with industrial activity that are subject to requirements to report releases into the environment under Section 313 of SARA Title III for chemicals which are classified as 'Section 313 water priority chemicals' are not (as they may have been in a previous permit) required to monitor storm water that is discharged from the facility unless required by paragraphs V.B.2.b through B.2.l.

b. Primary Metal Industries. Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility.

c. Land Disposal Units/Incinerators/BIFs. Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump without a stabilized final cover that has received any industrial wastes from a facility with a Standard Industrial Classification (SIC) of between 20-39 (manufacturing); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility.

d. Wood Treatment Using Chlorophenolic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

e. Wood Treatment Using Creosote Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

f. Wood Treatment Using Chromium-Arsenic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

g. Coal Pile Runoff. Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility.

h. Battery Reclaimers. Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility.

i. Airports. At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility.

j. Coal-fired Steam Electric Facilities. Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 423 - which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility.

k. Animal Handling / Meat Packing. Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility.

l. Additional Facilities. Facilities with storm water discharges associated with industrial activity that:

(1) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);

(2) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;

(3) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;

(4) are from oil handling sites at oil fired steam electric power generating facilities;

(5) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411 - which are not eligible for coverage under this permit);

(6) are from ready-mixed concrete facilities; or

(7) are from ship building and repairing facilities;

are required to monitor such storm water discharged from the facility.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

3. Sample Type. Take a minimum of one grab sample from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable.

4. Sampling Waiver. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

5. Representative Discharge. When a facility has two or more outfalls that, based on a consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. **Toxicity Testing.** Not Required.

D. **Alternative Certification of "Not Present or No Exposure."** You are not subject to the analytical monitoring requirement of this part provided: you make a certification for a given outfall, or on a pollutant-by-pollutant basis in lieu of monitoring required under this part, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period; and your certification is signed in accordance with Attachment VI.G and retained in the SWP3. If you cannot certify for an entire period, you must note the date exposure was eliminated and perform any monitoring required up until that date.

Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION

A. **Failure to Certify.** Any facility that is unable to provide the certification required under paragraph IV.D.3.g.(1) (testing for non-storm water discharges), must notify the Director within 180 days of the effective date of this permit. Such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible.

B. **Signatory Requirements.** See Part III.28.

C. **Definitions.**

"Section 313 water priority chemical" means a chemical or chemical categories which are: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Act at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

"Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

"Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Definition of Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 373;

Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION (continued)

C. (continued)

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but not limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity - This category of industrial activity is not regulated under this permit.

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x)).

"SWPPP" means storm water pollution prevention plan to be completed as a condition of this permit (see Part IV of this permit).

"Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

"Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

"10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in "Weather Bureau Technical Paper No. 40,", May 1961 and "NOAA Atlas 2," 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

National Pollutant Discharge Elimination System (NPDES) Permit Program

FACT SHEET

Regarding an NPDES Permit To Discharge to Waters of the State of Ohio
for Fernald Preserve (FP)

Public Notice No.: 15-01-003
Public Notice Date: January 5, 2015
Comment Period Ends: February 5, 2015

Ohio EPA Permit No.: 1IO00004*ID
Application No.: OH009580

Name and Address of Applicant:

U.S. Department of Energy -
Fernald Preserve
10995 Hamilton-Cleves Hwy
Harrison, Ohio 45030

Name and Address of Facility Where Discharge Occurs:

U.S. Department of Energy -
Fernald Preserve
7400 Willey Road
Fernald, Ohio 45013
Butler and Hamilton Counties

Receiving Water: Paddys Run/Great Miami River

Subsequent
Stream Network: Ohio River

Introduction

Development of a fact sheet for NPDES permits is mandated by Title 40 of the Code of Federal Regulations (CFR), 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 (Ohio EPA), 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 (CWA) and Ohio Water Pollution Control Law, Chapter 6111 of the Ohio Revised Code (ORC). Decisions to award variances to water quality standards (WQS) or promulgated effluent guidelines for economic or technological reasons will also be justified in the fact sheet where necessary.

Effluent limits based on available treatment technologies are required by Section 301(b) of the Clean Water Act. Many of these have already been established by the United States Environmental Protection Agency (U.S. EPA) in the effluent guideline regulations (a.k.a. categorical regulations) for industry categories in 40 CFR Parts 405-499. Technology-based regulations for publicly-owned treatment works are listed in the secondary treatment regulations (40 CFR Part 133). If regulations have not been established for a category of dischargers, the director may establish technology-based limits based on best professional judgment (BPJ).

Ohio EPA reviews the need for water-quality-based limits on a pollutant-by-pollutant basis. Wasteload allocations (WLAs) are used to develop these limits based on the pollutants that have been detected in the discharge, and the receiving water's assimilative capacity. The assimilative capacity depends on the flow in the water receiving the discharge, and the concentration of the pollutant upstream. The greater the upstream flow, and the lower the upstream concentration, the greater the assimilative capacity is. Assimilative capacity may represent dilution (as in allocations for metals), or it may also incorporate the break-down of pollutants in the receiving water (as in allocations for oxygen-demanding materials).

The need for water-quality-based limits is determined by comparing the WLA for a pollutant to a measure of the effluent quality. The measure of effluent quality is called Projected Effluent Quality (PEQ). This is a statistical measure of the average and maximum effluent values for a pollutant. As with any statistical method, the more data that exists for a given pollutant, the more likely that PEQ will match the actual observed data. If there is a small data set for a given pollutant, the highest measured value is multiplied by a statistical factor to obtain a PEQ; for example if only one sample exists, the factor is 6.2, for two samples - 3.8, for three samples - 3.0. The factors continue to decline as samples sizes increase. These factors are intended to account for effluent variability, but if the pollutant concentrations are fairly constant, these factors may make PEQ appear larger than it would be shown to be if more sample results existed.

Summary of Permit Conditions

The effluent limits and monitoring requirements proposed for the following parameters are the same as in the current permit, although some monitoring frequencies have changed: flow, dissolved oxygen, total phosphorus, nitrite+nitrate, pH, and mercury.

FP has requested increased allowable flows through outfall 1IO00004001. The previous included flows and loadings based on a design flow of 6.7 million gallons per day (MGD); the associated flows and loadings have been increased to 8.2MGD. FP has submitted an Antidegradation Addendum which includes requested increases in daily and monthly loadings for 5-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), and oil and grease. Associated loadings are based on the current allowable concentrations.

Monitoring for Sum of Total Dissolved Solids (Parameter Code 70301) has been changed to Total Filterable Residue (Parameter Code 70300). Monitoring for Total Filterable Residue (TDS) has been included in this permit to keep consistency in monitoring for TDS across the lower Great Miami watershed, as all other facilities in this region have been monitoring TDS under Total Filterable Residue monitoring (Parameter Code 70300).

Current monitoring requirements for Free Cyanide, Fluoride, Manganese, and Bis(2-ethylhexyl) phthalate are being removed at outfall 1IO00004001 because effluent data shows that they no longer have the reasonable potential to contribute to exceedances of water quality standards.

Current monitoring requirements for Manganese and Mercury are being removed at outfalls 1IO00004801 and 1IO00004902 because effluent data shows that they no longer have the reasonable potential to contribute to exceedances of water quality standards.

Table of Contents

List of Figures

List of Tables

Procedures for Participation in the Formulation of Final Determinations

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are invited. Evidence may be presented by the applicant, the state, and other parties, and following presentation of such evidence other interested persons may present testimony of facts or statements of opinion.

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 discharge permit. 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 Processing Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

The Ohio EPA 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 Mary Osika, (937)285-6101, mary.osika@epa.ohio.gov., or Andy Bachman, (614)644-3075, andrew.bachman@epa.ohio.gov.

Information Regarding Certain Water Quality Based Effluent Limits

This draft permit may contain proposed water quality based effluent limitations for parameters that **are not** priority pollutants. (See the following link for a list of the priority pollutants: http://epa.ohio.gov/portals/35/pretreatment/Pretreatment_Program_Priority_Pollutant_Detection_Limits.pdf). In accordance with Ohio Revised Code Section 6111.03(J)(3), the Director established these water quality based effluent limits after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to conditions calculated to result from that action and their relation to benefits to the people of the state and to accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the timely submitted National Pollutant Discharge Elimination System (NDPES) permit renewal application, along with any and all pertinent information available to the Director.

This public notice allows the permittee to provide to the Director for consideration during this public comment period additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with the proposed final effluent limitations for these parameters. The permittee shall deliver or mail this information to:

Ohio Environmental Protection Agency
Attention: Division of Surface Water
Permits Processing Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

Should the applicant need additional time to review, obtain or develop site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness of achieving compliance with these limitations, written notification for any additional time shall be sent to the above address no later than 30 days after the Public Notice Date on Page 1.

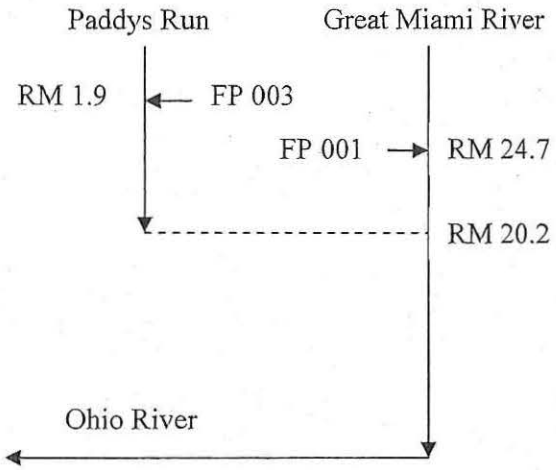
Should the applicant determine that compliance with the proposed water quality based effluent limitations for parameters other than the priority pollutants is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable water quality standard(s) used to develop the proposed effluent limitation in accordance with the terms and conditions set forth in Ohio Administrative Code (OAC) Rule 3745-33-07(D). The permittee shall submit this application to the above address no later than 30 days after the Public Notice Date.

Alternately, the applicant may propose the development of site-specific water quality standard(s) pursuant to OAC Rule 3745-1-35. The permittee shall submit written notification regarding their intent to develop site specific water quality standards for parameters that are not priority pollutants to the above address no later than 30 days after the Public Notice Date.

Location of Discharge/Receiving Water Use Classification

The FP outfall 001 discharges to Great Miami River at river mile (RM) 24.73. The remaining outfall discharges to Paddys Run which flows into the Great Miami River at RM 20.2. Figure 1 shows the approximate location of the outfalls at the facility.

Figure 1: Outfall Locations at Fernald



This segment of the Great Miami River is described by Ohio EPA River Code: 14-001, U.S. EPA River Reach #: 05080002-009, County: Butler and Hamilton, Ecoregion: Eastern Corn Belt Plains. The Great Miami River is designated for the following uses under Ohio's WQS (OAC 3745-1-18): Warmwater Habitat (WWH), Agricultural Water Supply (AWS), and Primary Contact Recreation (PCR) Class A.

Use designations define the goals and expectations of a waterbody. These goals are set for aquatic life protection, recreation use and water supply use, and are defined in the Ohio WQS (OAC 3745-1-07). The use designations for individual waterbodies are listed in rules -08 through -32 of the Ohio WQS. Once the goals are set, numeric WQS are developed to protect these uses. Different uses have different water quality criteria.

Use designations for aquatic life protection include habitats for coldwater fish and macroinvertebrates, warmwater aquatic life and waters with exceptional communities of warmwater organisms. These uses all meet the goals of the federal CWA. Ohio WQS also include aquatic life use designations for waterbodies which cannot meet the CWA goals because of human-caused conditions that cannot be remedied without causing fundamental changes to land use and widespread economic impact. The dredging and clearing of some small streams to support agricultural or urban drainage is the most common of these conditions. These streams are given Modified Warmwater or Limited Resource Water designations.

Recreation uses are defined by the depth of the waterbody and the potential for wading or swimming. Uses are defined for bathing waters, swimming/canoeing (Primary Contact) and wading only (Secondary Contact - generally waters too shallow for swimming or canoeing).

Water supply uses are defined by the actual or potential use of the waterbody. Public Water Supply designations apply near existing water intakes so that waters are safe to drink with standard treatment. Most other waters are designated for AWS and IWS.

Facility Description

FP is owned by the U.S. Department of Energy (DOE), and is operated under prime contract by The S.M. Stoller Corporation. The site of FP was formerly the Feed Materials Production Center (FMPC) which was a large scale, fully integrated facility for producing uranium metal. The uranium metal was then fabricated into fuel cores and target elements for use in nuclear reactors at other DOE sites, or into other forms required by the Department of Defense. The manufacturing facility ceased uranium production in July 1989 and was formally dedicated to environmental cleanup and restoration in August 1991. Site remediation is being conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (or CERCLA).

In order to remove uranium and radionuclides as well as heavy metals and organic compounds from contaminated ground water and process wastewater, FP installed several operations which are a part of a Converted Advanced Wastewater Treatment system (CAWWT). The CAWWT system includes ion exchange and filtration. Uranium removal occurs in the ion exchange system. Effluent from FP treatment systems are discharged through outfall 001 and ultimately flow into the Great Miami River.

On October 23rd of 2014, FP requested increased allowable flows through outfall 1IO00004001. The previous permit and renewal application had allowed for flows and loadings based on a design flow of 6.7 MGD; the associated flows and loadings have been increased to 8.2 MGD. Not all groundwater pumping mechanisms had been accounted for. FP has submitted an Antidegradation Addendum which includes requested increases in daily and monthly loadings for $CBOD_5$, total suspended solids (TSS), and oil and grease. Associated loadings are based on the current allowable concentrations.

Table 1. Description of Fernald Preserve Outfalls

Outfall Number	Treatment System/ Type of Wastewater	Description of Treatment System	Discharge Point	Average Discharge (in MGD)**
001	**Converted Advanced Waste Water Treatment System (CAWWT)* System** -contaminated groundwater -leachate -stormwater runoff -Water from well treatment and sampling	-Filtration -Ion exchange	Great Miami River	0.20
001	**Groundwater Bypassed Directly to Great Miami River**	none	Great Miami River	7.84
007	**Biowetland Overflow**	none	Paddys Run	
003	**Stormwater Outfall**	none	Paddys Run	

* CAWWT = Converted Advanced Wastewater Treatment; MGD = million gallons per day
** Average discharges based upon NPDES application: Total for Outfall 001 is 8.2 MGD

Note the total groundwater bypassed plus CAWWT effluent does not equal the gallons discharged at the Parshall Flume (outfall 001) due to differences in flow meter readings throughout the process. Discharge at the Parshall Flume equals 8.20 MGD.

Outfall 003 is a storm water outfall which discharges to Paddys Run. This discharge is currently uncontrolled, with flow and loadings to Paddys Run dependent upon the duration and intensity of rainfall events.

Description of Existing Discharge

Table 2: Effluent Flow Rates for Outfall 001 2009-2012			
Year	Annual Flow in MGD		
	50th Percentile	95th Percentile	Maximum
2009	7.78	8.36	8.85
2010	7.835	8.4495	8.63
2011	7.48	7.87	8.29
2012	7.67	8.47	10.56

Table 2 shows the annual effluent flow rates for outfall 001of FP based upon DMR data. The flow rates have been very stable across this period as expected.

Table 3 shows a summary of the aquatic life use attainment status of Great Miami River near where the FP discharges.

Table 5 presents chemical specific data compiled from data reported in bioassay reports and data submitted in the 2C form.

Table 6 presents a summary of unaltered DMR data for outfall 1IO00004001. Data are presented for the period from January, 2008 through September, 2013, and current permit limits are provided for comparison.

Table 7 summarizes the chemical specific data for outfall 1IO00004001 by presenting the average and maximum PEQ values.

Assessment of Impact on Receiving Waters

A Total Maximum Daily Load (TMDL) is currently being drafted for the lower segment of the Great Miami River. This TMDL report will address impairments identified through results of the 2009-10 field sampling. Implementation plans in the TMDL may include recommendations for load reductions through additional permit limits on industrial and municipal dischargers. The TMDL should be finalized in later 2014 or 2015 and made available at the website: http://www.epa.state.oh.us/dsw/tmdl/index.aspx

The Great Miami River in the study area covered by this report was evaluated by OEPA staff for aquatic life and recreational use potential during the 2009 and 2010 field seasons. This assessment included the collection of water chemistry and biological sampling at numerous sites in the mainstem Great Miami River and selected tributaries. A summary of the results from this assessment can be found below in Table 3.

More information on the 2009-2010 sampling can be found in the following two technical support documents (TSDs): "Biological and Water Quality Study of the Middle Great Miami River and Principal Tributaries, 2009", Jan. 2013; and, "Biological and Water Quality Study of the Lower Great Miami River and Selected Tributaries, 2010", May 2012. These documents can be viewed through the OEPA, Division of Surface Water website at www.epa.state.oh.us/dsw/index

The following Table is a summary of the designation status of Great Miami River. Cause and sources for reasoning for non-attainment are also listed.

Table 3. Great Miami River Use Designation Status and Causes and Sources.

Location	RM	AL Use Desig.	Attain. Status	Causes of Impairment	Sources of Impairment
Upst. Tri-Cities N. WWTP	87.7	EWH	FULL		
Dst. Tri-Cities N. WWTP	85.8	EWH	PARTIAL	Ammonia (modest toxicity)	Major WWTP (Tri-Cities N. WWTP)
Upst. Mad River to Dst. Bear Creek	82.1 to 66.9	WWH	FULL		
Dst. DP&L Hutchings discharge	64.1	WWH	PARTIAL	Temperature	Industrial Thermal Discharges (DP&L)
Further Dst. DP&L to Dst. Franklin WWTP	62.6 to 58.2	WWH	FULL		
Middletown area	52.6	WWH	PARTIAL	Nutrients	Livestock (grazing or feeding operations), Crop production (crop land or dry land), Municipal point sources
Dst. Wausau Papers to Just Upst. Hamilton WWTP	51.6 to 34.2	WWH	FULL		
Dst. Hamilton WWTP	33.6	WWH	PARTIAL	Temperature	Industrial thermal discharges (Hamilton Muni-Electric Plant)
Upst. Fairfield WWTP to Upst. Banklick Creek	32.7 to 28.7	WWH	PARTIAL	Nutrients, Biochemical Oxygen Demand	Livestock (grazing or feeding operations), Crop production (crop land or dry land), Municipal point sources
Dst. Indian Creek to Upst. Taylor Creek WWTP	26.1 to 15.5	WWH	FULL		
Dst. Taylor Creek WWTP	14.8	WWH	PARTIAL	Nutrients, Biochemical Oxygen Demand	Livestock (grazing or feeding operations), Crop production (crop land or dry land), Municipal point sources
Upst. Whitewater River	8.2	WWH	FULL		

* EWH = Exceptional Warm Water Habitat, WWH=Warm Water Habitat, NON=Non-Attainment , RM = river mile, Upst = Upstream, Dst = Downstream, WWTP = wastewater treatment plant, DP&L = Dayton Power and Lighting

Development of Water-Quality-Based Effluent Limits

Determining appropriate effluent concentrations is a multiple-step process in which parameters are identified as likely to be discharged by a facility, evaluated with respect to Ohio water quality criteria, and examined to determine the likelihood that the existing effluent could violate the calculated limits.

Parameter Selection

Effluent data for FP was used to determine what parameters should undergo WLA. The parameters discharged are identified by the data available to Ohio EPA - DMR data submitted by the permittee, compliance sampling data collected by Ohio EPA, and any other data submitted by the permittee, such as priority pollutant scans required by the NPDES application or by pretreatment, or other special conditions in the NPDES permit. The sources of effluent data used in this evaluation are as follows:

Self-monitoring data (DMR)	January 2008 through September 2013
NPDES Application data	2013
Ohio EPA Bioassay Studies	8/3/2011 and 8/4/2011

This data is evaluated statistically, and PEQ values are calculated for each pollutant. Average PEQ (PEQ_{avg}) values represent the 95th percentile of monthly average data, and maximum PEQ (PEQ_{max}) values represent the 95th percentile of all data points. The average and maximum PEQ values are presented in Table 7.

The effluent data were checked for outliers and the following values were removed: one value for Nitrate + Nitrite, of 430 mg/L.

The PEQ values are used according to Ohio rules to compare to applicable WQS and allowable WLA values for each pollutant evaluated. Initially, PEQ values are compared to the applicable average and maximum WQS. If both PEQ values are less than 25 percent of the applicable WQS, the pollutant does not have the reasonable potential to cause or contribute to exceedances of WQS, and no WLA is done for that parameter. If either PEQ_{avg} or PEQ_{max} is greater than 25 percent of the applicable WQS, a WLA is conducted to determine whether the parameter exhibits reasonable potential and needs to have a limit or if monitoring is required. See Table 11 for a summary of the screening results

Wasteload Allocation

For those parameters that require a WLA, the results are based on the uses assigned to the receiving waterbody in OAC 3745-1. Dischargers are allocated pollutant loadings/concentrations based on the Ohio WQS (OAC 3745-1). Most pollutants are allocated by a mass-balance method because they do not degrade in the receiving water. WLAs using this method are done using the following general equation: Discharger WLA = (downstream flow x WQS) - (upstream flow x background concentration). Discharger WLAs are divided by the discharge flow so that the allocations are expressed as concentrations.

The following major dischargers in the lower Great Miami River segment were considered interactive:

- Tri Cities North Regional WWTP
- Dayton WWTP
- Miami Conservancy District Western Regional WWTP
- West Carrollton WWTP
- Miamisburg WWTP
- Franklin WWTP
- Wausau Paper
- AK Steel
- Middletown WWTP
- LeSourdesville WWTP
- Miller Coors Brewery
- Hamilton Municipal Electric
- Fairfield WWTP
- Proposed Great Miami WWTP
- Hamilton County Taylor Creek WWTP

The available assimilative capacity was distributed among them using the Conservative Substance Wasteload Allocation Program (CONSWLA) water quality model for conservative parameters.

The applicable waterbody uses for this facility's discharge and the associated stream design flows are as follows:

Aquatic life (WWH)		
Toxics (metals, organics, etc.)	Average	Annual 7Q10
	Maximum	Annual 1Q10
Ammonia	Average	Summer 30Q10
		Winter 30Q10
Agricultural Water Supply		Harmonic mean flow
Human Health (nondrinking)		Harmonic mean flow

Allocations are developed using a percentage of stream design flow as specified in Table 9, and allocations cannot exceed the Inside Mixing Zone Maximum criteria.

Ohio's WQS implementation rules [OAC 3745-2-05(A)(2)(d)(iv)] required a phase out of mixing zones for bioaccumulative chemicals of concern (BCCs) as of November 15, 2010. This rule applied statewide. Mercury is a BCC. The mixing zone phase-out means that as of November 15, 2010 all dischargers requiring mercury limits in their NPDES permit must meet WQS at the end-of-pipe, which are 12 ng/L (average) and 1700 ng/L (maximum) in the Ohio River basin.

The data used in the WLA are listed in Table 8 and Table 9. The WLA results to maintain all applicable criteria are presented in Table 10. Current ammonia limits were not found to be protective of aquatic life.

Whole Effluent Toxicity WLA

WET is the total toxic effect of an effluent on aquatic life measured directly with a toxicity test. Acute WET measures short term effects of the effluent while chronic WET measures longer term and potentially more subtle effects of the effluent.

WQS for WET are expressed in Ohio's narrative "free from" WQS [OAC 3745-1-04(D)]. These "free froms" are translated into toxicity units (TUs) by the associated WQS Implementation (OAC 3745-2-09). WLAs can then be calculated using TUs as if they were water quality criteria.

The WLA calculations for WET are similar to those for aquatic life criteria - using the chronic toxicity unit (TU_c) and 7Q10 flow for the average and the acute toxicity unit (TU_a) and 1Q10 flow for the maximum. These values are the levels of effluent toxicity that should not cause instream toxicity during critical low-flow conditions. For FP, the WLA values are 1.0 TU_a and 47.2 TU_c.

The chronic toxicity unit (TU_c) is defined as 100 divided by the concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (IC_{25}):

$$TU_c = 100/IC_{25}$$

This equation applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations except when the following equation is more restrictive (*Ceriodaphnia dubia* only):

$$TU_c = 100/\text{geometric mean of NOEC and LOEC}$$

Where NOEC is No Observable Effect Concentration and LOEC is Lowest Observable Effect Concentration

The acute toxicity unit (TU_a) is defined as 100 divided by the concentration of effluent that is lethal to 50 percent of the exposed organisms (LC_{50}) for the most sensitive test species:

$$TU_a = 100/LC_{50}$$

This equation applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations.

Reasonable Potential/ Effluent Limits/Hazard Management Decisions

After appropriate effluent limits are calculated, the reasonable potential of the discharger to violate the WQS must be determined. Each parameter is examined and placed in a defined "group". Parameters that do not have a WQS or do not require a WLA based on the initial screening are assigned to either group 1 or 2. For the allocated parameters, the preliminary effluent limits (PEL) based on the most restrictive average and maximum WLAs are selected from Table 10. The average PEL (PEL_{avg}) is compared to the average PEQ (PEQ_{avg}) from Table 7, and the PEL_{max} is compared to the PEQ_{max}. Based on the calculated percentage of the allocated value [($PEQ_{avg} \div PEL_{avg}$) X 100, or ($PEQ_{max} \div PEL_{max}$) X 100)], the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 11.

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 12 presents the final effluent limits and monitoring requirements proposed for FP outfall 1IO00004001, 1IO00004003, and 1IO00004007; and the basis for their recommendation.

Outfall 1IO00004001

Chlorides, 1,2-Dichloroethane, Magnesium, Manganese, Potassium, Sulfate, and Trichloroethane

Ohio EPA risk assessment (Table 11) places Chlorides, 1,2-Dichloroethane, Magnesium, Manganese, Potassium, Sulfate, and Trichloroethane in group 1. This placement as well as the data in Tables 4, 5, and 6 support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. No monitoring is proposed for these parameters.

Ammonia-Summer, Ammonia-Winter, Antimony, Arsenic, Barium, Beryllium, Bis(2-ethylhexyl) phthalate, Boron, Cadmium, Chlorine, Chloroform, Chromium, Cobalt, Copper, Free Cyanide, Fluoride, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Strontium, and Zinc

Ohio EPA risk assessment (Table 11) places Ammonia-Summer, Ammonia-Winter, Antimony, Arsenic, Barium, Beryllium, Bis(2-ethylhexyl) phthalate, Boron, Cadmium, Chlorine, Chloroform, Chromium, Cobalt, Copper, Free Cyanide, Fluoride, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Strontium, and Zinc in group 2. This placement as well as the data in Tables 4, 5, and 6 support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality.

Monitoring for Free Cyanide, Fluoride, Manganese, and Bis(2-ethylhexyl) phthalate has been removed from the permit. Monitoring for Mercury is proposed to continue at a reduced frequency.

Iron and Total Filterable Residue (Total Dissolved Solids)

Ohio EPA risk assessment (Table 11) places Iron and Total Dissolved Solids in group 3. This placement as well as the data in Tables 4, 5, and 6 support that these parameters do not have the reasonable potential to contribute

to WQS exceedances, and limits are not necessary to protect water quality. Monitoring for total dissolved solids is proposed to continue. Total filterable residues monitoring is listed under a new reporting code of 70300 in the permit. No new monitoring is proposed for iron, this grouping was based on two data points from Ohio EPA bioassay data. Future bioassay data may be used to confirm that there is no reasonable potential to exceed water quality standards for this parameter.

pH, and Dissolved Oxygen

Limits proposed for pH and dissolved oxygen are based on WQS (OAC 3745-1), and are a continuation of existing permit limits.

TSS, Oil and Grease, and $CBOD_5$

On October 23, 2014, the facility requested an increase in total allowable flow from outfall 001. Flows were proposed to increase from 6.7MGD to 8.2MGD. The concentration limits for TSS, and $CBOD_5$ that were approved for the treatment plant under the existing permit are proposed to continue. The concentration limits for these parameters are based upon the treatment technology associated with the plant design of FP. Concentration limits proposed for oil and grease are based on WQS (OAC 3745-1), and are a continuation of existing permit limits as well. However, the loading limits are based upon the plant's average design flow. As the design flow is proposed to increase, the facility has requested an increase in the associated loadings for TSS, Oil and Grease, and $CBOD_5$. FP has submitted an antidegradation addendum with the following increases in loadings:

Table 4: Loadings for TSS, $CBOD_5$, and Oil and Grease

Parameter	Previous Loading (kg/day)	Requested Loading (kg/day)
TSS, daily	761	931
TSS, monthly	507	621
Oil and Grease, daily	254	310
Oil and Grease, monthly	254	310
$CBOD_5$, daily	761	931
$CBOD_5$, monthly	507	621

*TSS = Total Suspended Solids, $CBOD_5$ = 5-day carbonaceous biochemical oxygen demand

Nitrate+Nitrite and Phosphorus

The continuation of monitoring for nitrate+nitrite and phosphorus is proposed based on best engineering judgment. The purpose of the monitoring is to maintain a data set tracking nutrient levels in the lower Great Miami River basin.

Outfall 1IO00004003

pH

Limits proposed for pH are based on WQS (OAC 3745-1), and are a continuation of existing permit limits.

TSS and Mercury

Continued monitoring for TSS and mercury at a semiannual frequency is proposed at outfall 003. This monitoring is proposed to document that these pollutants continue to remain at low levels. High levels of either pollutant may lead to additional best management practices the permittee shall employ for stormwater.

Additional monitoring requirements proposed at the final effluent, stormwater, and upstream/downstream stations are included for all facilities in Ohio and vary according to the type and size of the discharge. In addition to permit compliance, this data is used to assist in the evaluation of effluent quality and treatment plant performance and for designing plant improvements and conducting future stream studies.

Other Requirements

Storm Water Compliance

Parts IV, V, and VI have been included with the draft permit to ensure that any storm water flows from the facility site are properly regulated and managed. As an alternative to complying with Parts IV, V, and VI, FP may seek permit coverage under the general permit for industrial storm water (permit # OHR000005) or submit a "No Exposure Certification." Parts IV, V, and VI will be removed from the final permit if: 1) the FP submits a Notice of Intent (NOI) for coverage under the general permit for industrial storm water or submits a No Exposure Certification, 2) Ohio EPA determines that the facility is eligible for coverage under the general permit or meets the requirements for a No Exposure Certification, and 3) the determination by Ohio EPA can be made prior to the issuance of the final permit.

Outfall Signage

Part II of the permit includes requirements for the permittee to place a sign at each outfall to the Great Miami River and Paddys Run providing information about the discharge. Signage at outfalls is required pursuant to OAC 3745-33-08(A).

Figure 2. Location of FP

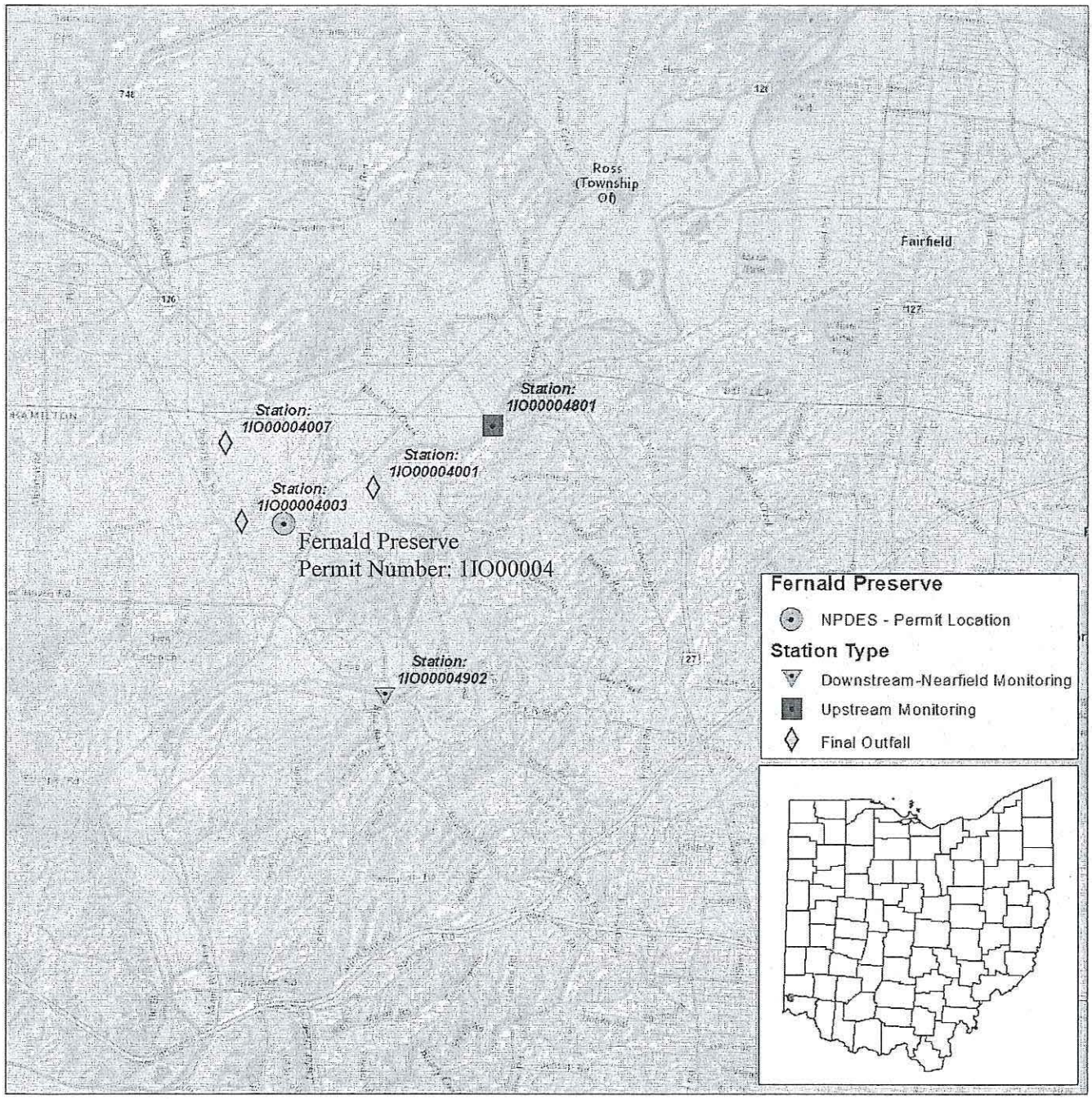


Figure 3. Great Miami River Study Area

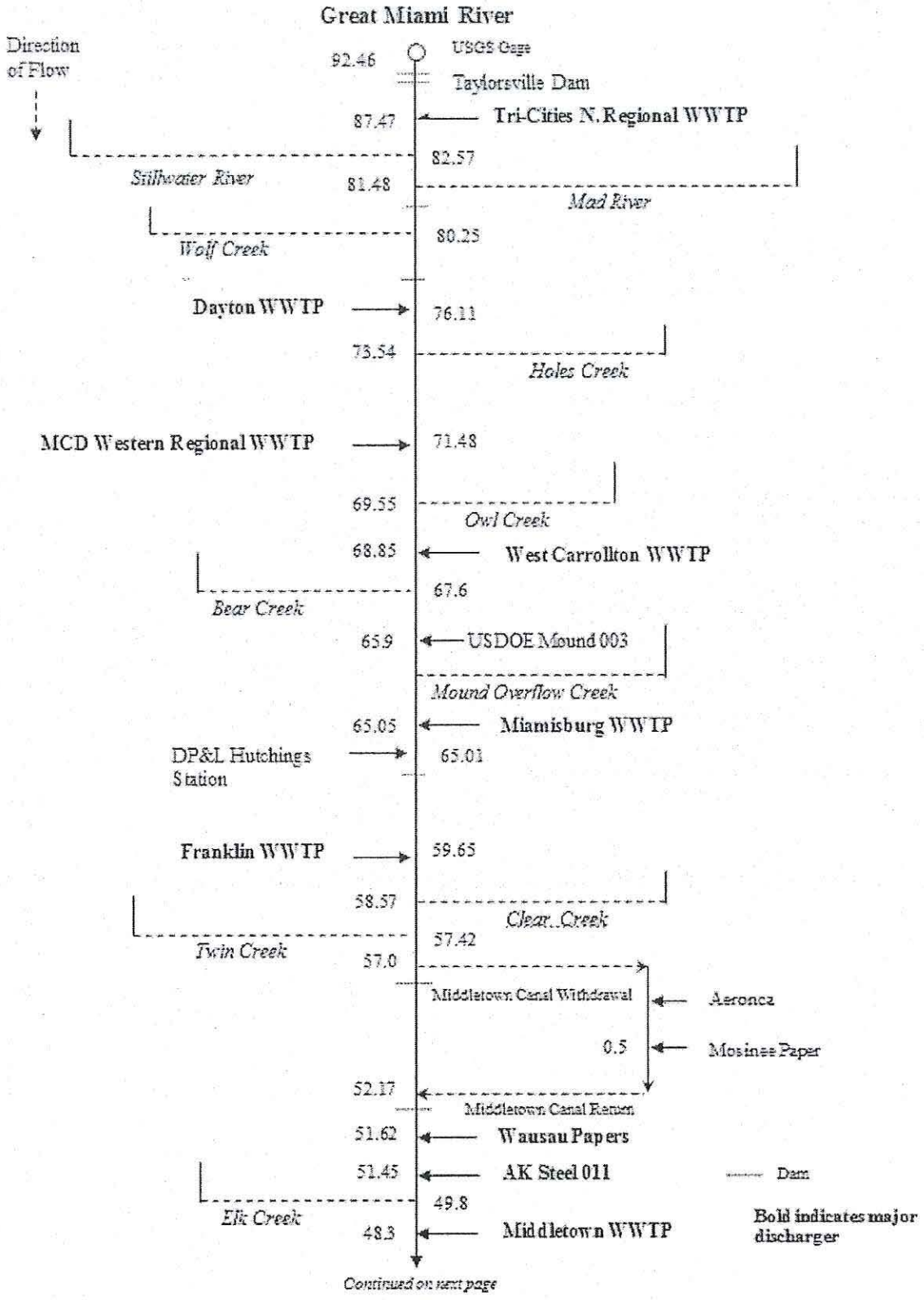


Figure 3. Great Miami River Study Area -(continued)

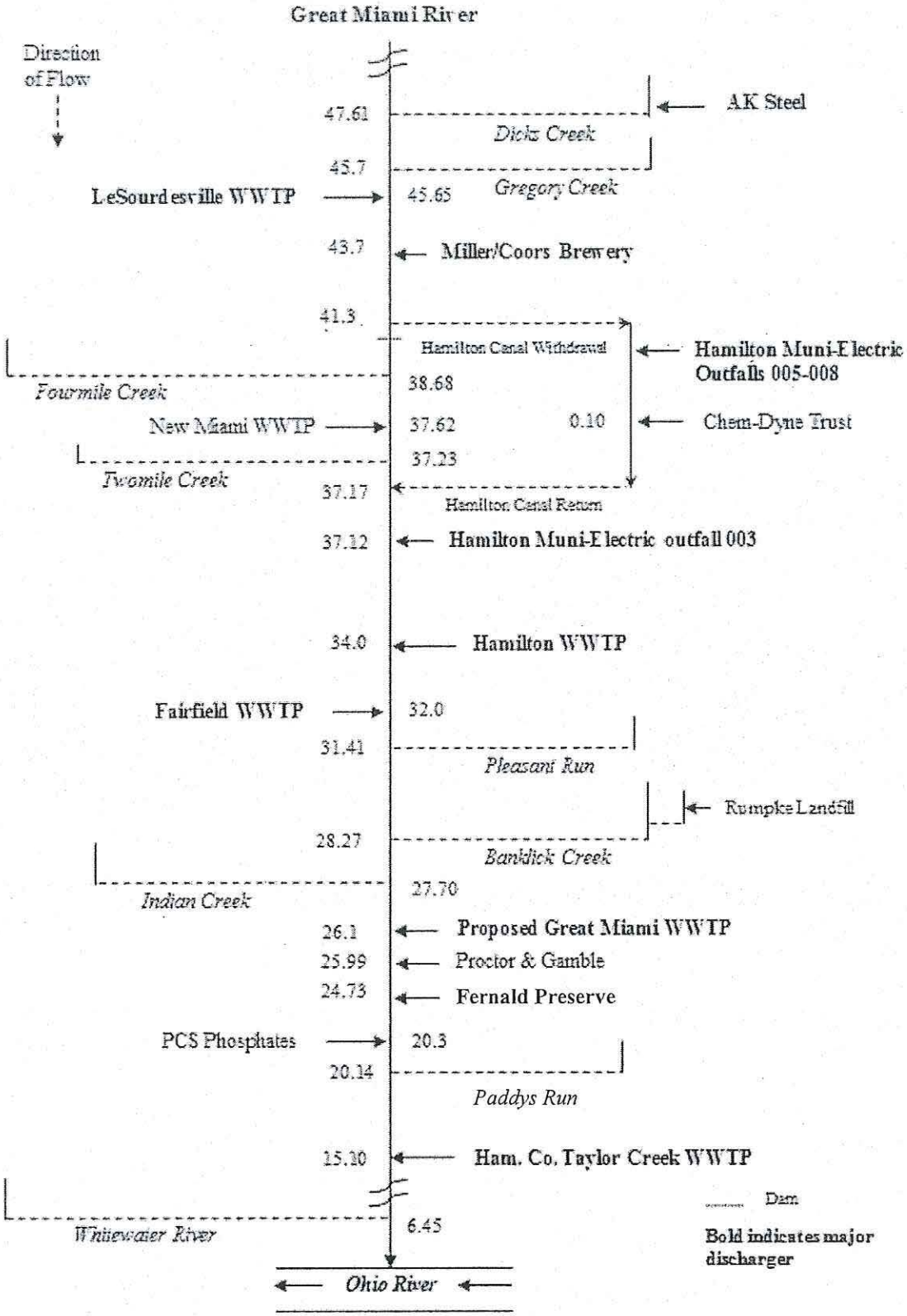


Table 5. Effluent Characterization Using Ohio EPA and Pretreatment Data

Summary of analytical results for FP outfall 1IO00004001. Units µg/L unless otherwise noted; PT = data from pretreatment program reports; AA = not detected (detection limit); NA = No tests were completed.

Bioassay and Form 2C Data						
PARAMETER	Units	OEPA	OEPA	Fernald Application Form 2C		
		8/3/2011	8/4/2011	number of samples	mean	maximum
TOC	mg/L	NA	NA	1	--	1.65
TSS	mg/L	<5	<5	366	<2.1	21.4
TDS	mg/L	458	474	NA	NA	NA
Chloride	mg/L	36.1	36.1	NA	NA	NA
Fluoride	mg/L	NA	NA	13	0.185	0.19
Sulfate	mg/L	86.6	89	NA	NA	NA
Hardness	mg/L	392	387	NA	NA	NA
Ammonia	mg/L	<0.05	<0.05	17	--	0.117
Organic Nitrogen	mg/L	<0.2	<0.2	NA	NA	NA
Nitrate + Nitrite	mg/L	0.72	0.63	13	33.63	430
Phosphorus	mg/L	0.022	0.011	49	<0.1	0.1
Barium	µg/L	58	56	1	--	57.3
Boron	µg/L	NA	NA	1	--	34.6
Copper	µg/L	<2.0	<2.0	1	--	0.58
Iron	µg/L	709	496	NA	NA	NA
Magnesium	mg/L	28	28	NA	NA	NA
Manganese	µg/L	214	186	97	158	250
Molybdenum	µg/L	NA	NA	1	--	1.17
Nickel	µg/L	3.4	3.1	140	2.3	4.8
Potassium	mg/L	3	3	NA	NA	NA
Strontium	µg/L	293	288	NA	NA	NA

Table 6. Effluent Characterization Using Self-Monitoring Data

Summary of current permit limits and unaltered discharge monitoring report data for FP outfall 1IO00004001 (January 2008 - December 2012). All values are based on annual records unless otherwise indicated. * = For minimum pH, 5th percentile shown in place of 50th percentile; ** = For dissolved oxygen, 5th percentile shown in place of 95th percentile; a = weekly average.

Parameter	Season	Units	Current Permit Limits		# Obs.	Percentiles		Data Range
			30 day	Daily		50th	95th	
Outfall 001								
Water Temperature	Annual	°C	- - - Monitoring - - -		1794	11.4	12.5	9.91-36.4
Dissolved Oxygen	Annual	mg/L	Not Less than 5.0		531	5.99	7.09	5.05-8.67
Total Suspended Solids	Annual	mg/L	20	30	1793	0	2.2	0-23.4
Oil and Grease	Annual	mg/L	10	10	473	0	3.73	0-7.36
Nitrite + Nitrate	Annual	mg/L	- - - Monitoring - - -		60	0.731	0.925	0-430
Phosphorus	Annual	mg/L	- - - Monitoring - - -		237	0	0.1	0-0.3
Free Cyanide	Annual	mg/L	- - - Monitoring - - -		60	0	0	0-0.00265
Fluoride	Annual	mg/L	- - - Monitoring - - -		60	0.19	0.2	0.14-0.2
Manganese	Annual	µg/L	- - - Monitoring - - -		473	151	197	95.2-825
Bis(2-ethylhexyl) Phthalate	Annual	µg/L	- - - Monitoring - - -		20	0	0	0-0
Flow Rate	Annual	MGD	- - - Monitoring - - -		1794	7.58	8.46	0.07-10.6
Mercury	Annual	ng/L	- - - Monitoring - - -		60	0	0.507	0-0.72
pH, Maximum	Annual	S.U.	Not Greater than 9.0		1787	7.25	7.5	6.8-8.73
pH, Minimum	Annual	S.U.	Not Less than 6.5		1787	7.13	7.4	6.5-7.8
Total Dissolved Solids	Annual	mg/L	- - - Monitoring - - -		60	490	527	0-579
$CBOD_5$	Annual	mg/L	20	30	473	0	0	0-3.25
Outfall 003								
Flow Rate	Annual	GPD	- - - Monitoring - - -		10	1440000	5640000	198000-6930000
pH	Annual	S.U.	Between 6.5 and 9.0		11	8.1	8.68	7.97-8.68
Total Suspended Solids	Annual	mg/L	- - - Monitoring - - -		10	7	36.7	0-43.2
Mercury	Annual	ng/L	- - - Monitoring - - -		10	1.07	2.58	0-2.62
Outfall 007								
Flow Rate	Annual	GPD	- - - Monitoring - - -		45	70400	226000	1250-758000

Table 7. Effluent Data for the FP- Projected Effluent Quality Values

Parameter	Units	# of Samples	# > MDL	Average PEQ	Maximum PEQ
Self-Monitoring (DMR) Data					
Ammonia-S	mg/L	48	0	--	--
Ammonia-W	mg/L	40	5	0.650	0.891
Nitrate+Nitrite	mg/L	68	66	1.177	1.633
Phosphorus	mg/L	214	21	0.091	0.137
Free Cyanide	µg/L	69	5	1.202	1.878
Fluoride	µg/L	69	68	201.8	216.9
Arsenic	µg/L	15	0	--	--
Cobalt	µg/L	119	119	0.297	0.405
Selenium	µg/L	179	12	0.680	1.347
Beryllium	µg/L	15	0	--	--
Barium [A]	µg/L	182	182	52.83	57.34
Boron [A]	µg/L	16	16	40.90	44.67
Manganese	µg/L	545	545	164.1	205.5
Molybdenum	µg/L	179	179	1.343	1.84
Nickel	µg/L	179	179	2.277	3.285
Silver	µg/L	179	0	--	--
Zinc	µg/L	179	133	4.530	9.036
Cadmium	µg/L	179	5	0.061	0.097
Lead	µg/L	179	0	--	--
Chromium	µg/L	179	3	2.862	3.92
Copper [A]	µg/L	182	180	2.421	5.072
Antimony	µg/L	15	0	--	--
Chloroform	µg/L	5	0	--	--
1,1-Dichloroethane	µg/L	5	0	--	--
Bis(2-ethylhexyl)Phthalate	µg/L	23	0	--	--
Chlorine	µg/L	48	0	--	--
Mercury	µg/L	67	21	0.526	0.72
Total Dissolved Solids [A]	mg/L	71	71	515.5	537.8
Trichloroethene	µg/L	5	0	--	--
Combined Other Data [B]					
Chloride	mg/L	2	2	100.1	137.2
Sulfate	mg/L	2	2	246.9	338.2
Iron	µg/L	2	2	1967.	2694.
Magnesium	mg/L	2	2	77.67	106.4
Potassium	mg/L	2	2	8.322	11.4
Strontium	µg/L	2	2	812.8	1113.

[A] DMR data combined with Ohio EPA data.
[B] Combined other data sources include Application Form 2.C. data and Ohio EPA data.

Table 8. Water Quality Criteria in the Little Miami River Study Area

Parameter	Units	Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum	
		Human Health	Agri-culture	Aquatic Life	Aquatic Life	
Antimony	µg/L	4300.	--	190.	900.	1800.
Arsenic	µg/L	--	100.	150.	340.	680.
Barium	µg/L	--	--	220.	2000.	4000.
Benzene [C]	µg/L	710.	--	160.	700.	1400.
3,4-Benzofluoranthene [D]	µg/L	0.49	--	--	--	--
Benzo(a)pyrene [C]	µg/L	0.49	--	--	--	--
Beryllium [A]	µg/L	280.	100.	65.	560.	1100.
Bis(2-ethylhexyl)phthalate [C]	µg/L	59.	--	8.4	1100.	2100.
Boron	µg/L	--	--	3900.	33000.	65000.
Cadmium [A]	µg/L	--	50.	5.9	16.	32.
Chlorine	µg/L	--	--	11.	19.	38.
Chlorobenzene	µg/L	21000.	--	47.	420.	850.
Chloroform [C]	µg/L	4700.	--	140.	1300.	2600.
Dissolved Hexavalent Chromium	µg/L	--	--	11.	16.	31.
Chromium [A]	µg/L	--	100.	210.	4500.	8900.
Copper [A]	µg/L	1300.	500.	24.	40.	80.
Free Cyanide	µg/L	220000.	--	12.	46.	92.
Dibenzo(a,h)anthracene [C]	µg/L	0.49	--	--	--	--
1,2-Dichloroethane [C]	µg/L	990.	--	2000.	9600.	19000.
1,1-Dichloroethylene [C]	µg/L	32.	--	210.	1900.	3800.
2,4-Dimethylphenol	µg/L	2300.	--	15.	140.	280.
Ethylbenzene	µg/L	29000.	--	61.	550.	1100.
Fluoride	µg/L	--	2000.	--	--	--
Heptachlor Epoxide [C]	µg/L	0.0011	--	--	--	--
Hexachlorobenzene [B C]	µg/L	0.0077	--	--	--	--
Ideno(1,2,3-c,d)pyrene [C]	µg/L	0.49	--	--	--	--
Iron	µg/L	--	5000.	--	--	--
Lead [A]	µg/L	--	100.	26.	500.	1000.
Mercury [B]	ng/L	12.	10000.	910.	1700.	3400.
Molybdenum	µg/L	--	--	20000.	190000.	370000.
Naphthalene	µg/L	--	--	21.	170.	340.
Nickel [A]	µg/L	4600.	200.	130.	1200.	2400.
Nitrate+Nitrite	mg/L	--	100.	--	--	--
Phenol	µg/L	4600000.	--	400.	4700.	9400.
Selenium	µg/L	11000.	50.	5.0	--	--
Silver [A]	µg/L	--	--	1.3	11.	22.
Strontium	µg/L	--	--	21000.	40000.	81000.

[A] Aquatic Life Criteria is hardness-based.
[B] Bioaccumulative Chemical of Concern
[C] Carcinogen
[D] Use Criteria for Benzo(b)fluoranthene

Table 8. Water Quality Criteria in the Little Miami River Study Area (continued)

Parameter	Units	Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum	
		Human Health	Agri-culture	Aquatic Life	Aquatic Life	
Tetrachloroethylene [B]	µg/L	89.	--	53.	430.	850.
Thallium	µg/L	6.3	--	17.	79.	160.
Toluene	µg/L	200000.	--	62.	560.	1100.
Total Dissolved Solids (TDS)	mg/L	--	--	1500.	--	--
1,2,4-Trimethylbenzene	µg/L	--	--	15.	140.	280.
Xylenes	µg/L	--	--	27.	240.	480.
Zinc [A]	µg/L	69000.	25000.	310.	310.	610.

[A] Aquatic Life Criteria is hardness-based.
[B] Carcinogen

Table 9. Instream Conditions and Discharger Flow

Note: USGS = United States Geographical Survey; cfs = cubic feet per second; GMR = Great Miami River; STORET = EPA STOrage and RETrieval data collection system; MDL = method detection level; DMR = discharge monitoring report

Parameter	Units	Season	Value	Basis
Upstream Flows				
GMR at Taylorsville				
7Q10	cfs	annual	58.4	USGS gage #03263000, 1970-2012 data
1Q10	cfs	annual	42.0	USGS gage #03263000, 1970-2012 data
30Q10	cfs	summer	73.0	USGS gage #03263000, 1970-2012 data
	cfs	winter	180.3	USGS gage #03263000, 1970-2012 data
Harmonic Mean Flow	cfs	annual	299.9	USGS gage #03263000, 1970-2012 data
Mixing Assumption	%	average	100	Stream-to-discharge ratio
(GMR & Tribs.)	%	maximum	100	Stream-to-discharge ratio
Stillwater River at Mouth				
7Q10	cfs	annual	24.2	USGS gage #03266000, 1970-2012 data
1Q10	cfs	annual	20.4	USGS gage #03266000, 1970-2012 data
30Q10	cfs	summer	29.8	USGS gage #03266000, 1970-2012 data
	cfs	winter	79.4	USGS gage #03266000, 1970-2012 data
Harmonic Mean Flow	cfs	annual	143.3	USGS gage #03266000, 1970-2012 data
Mad River at Mouth				
7Q10	cfs	annual	177.8	USGS gage #03270000, 1970-2012 data
1Q10	cfs	annual	166.9	USGS gage #03270000, 1970-2012 data
30Q10	cfs	summer	210.0	USGS gage #03270000, 1970-2012 data
	cfs	winter	264.7	USGS gage #03270000, 1970-2012 data
Harmonic Mean Flow	cfs	annual	482.7	USGS gage #03270000, 1970-2012 data

Table 9. Instream Conditions and Discharger Flow (continued)

Parameter	Units		Value	Basis
Wolf Creek at Mouth				
7Q10	cfs	annual	5.13	USGS gage #03271000, 1986-2012 data
1Q10	cfs	annual	4.18	USGS gage #03271000, 1986-2012 data
30Q10	cfs	summer	5.77	USGS gage #03271000, 1986-2012 data
	cfs	winter	14.1	USGS gage #03271000, 1986-2012 data
Harmonic Mean Flow	cfs	annual	23.3	USGS gage #03271000, 1986-2012 data
Twin Creek at Mouth				
7Q10	cfs	annual	5.04	USGS gage #03272000, 1970-2012 data
1Q10	cfs	annual	4.50	USGS gage #03272000, 1970-2012 data
30Q10	cfs	summer	7.26	USGS gage #03272000, 1970-2012 data
	cfs	winter	32.4	USGS gage #03272000, 1970-2012 data
Harmonic Mean Flow	cfs	annual	44.9	USGS gage #03272000, 1970-2012 data
Four Mile Creek at Mouth				
7Q10	cfs	annual	6.67	USGS gage #03272700, 1970-2012 data
1Q10	cfs	annual	5.84	USGS gage #03272700, 1970-2012 data
30Q10	cfs	summer	8.90	USGS gage #03272700, 1970-2012 data
	cfs	winter	24.6	USGS gage #03272700, 1970-2012 data
Harmonic Mean Flow	cfs	annual	50.2	USGS gage #03272700, 1970-2012 data
Holes Creek at Mouth				
7Q10	cfs	annual	1.16	USGS gage #03271300, 2002-2012 data
1Q10	cfs	annual	1.13	USGS gage #03271300, 2002-2012 data
30Q10	cfs	summer	3.54	USGS gage #03271300, 2002-2012 data
	cfs	winter	11.9	USGS gage #03271300, 2002-2012 data
Harmonic Mean Flow	cfs	annual	9.07	USGS gage #03272000, 2002-2012 data
Indian Creek at Mouth				
7Q10	cfs	annual	0.2	USGS gage #03274200, 1961-69 data
1Q10	cfs	annual	0.2	USGS gage #03274200, 1961-69 data
30Q10	cfs	summer	0.3	USGS gage #03274200, 1961-69 data
	cfs	winter	0.8	USGS gage #03274200, 1961-69 data
Harmonic Mean Flow	cfs	annual	1.17	USGS gage #03272800, 1960-72 data
Clear Creek at Mouth				
7Q10	cfs	annual	0.4	USGS gage #03271700, 1959-69 data
1Q10	cfs	annual	0.4	USGS gage #03271700, 1959-69 data
30Q10	cfs	summer	0.6	USGS gage #03271700, 1959-69 data
	cfs	winter	2.5	USGS gage #03271700, 1959-69 data
Harmonic Mean Flow	cfs	annual	3.0	USGS gage #03272000, 1970-2012 data
Elk Creek at Mouth				
7Q10	cfs	annual	0.4	USGS gage #03272200, 1960-67 data
1Q10	cfs	annual	0.4	USGS gage #03272200, 1960-67 data
30Q10	cfs	summer	0.6	USGS gage #03272200, 1960-67 data
	cfs	winter	2.1	USGS gage #03272200, 1960-67 data
Harmonic Mean Flow	cfs	annual	3.0	USGS gage #03272000, 1970-2012 data

Table 9. Instream Conditions and Discharger Flow (continued)

Parameter	Units		Value	Basis
Bear Creek at Mouth				
7Q10	cfs	annual	0.85	USGS gage #03272000, 1970-2012 data
1Q10	cfs	annual	0.76	USGS gage #03272000, 1970-2012 data
30Q10	cfs	summer	1.23	USGS gage #03272000, 1970-2012 data
	cfs	winter	5.48	USGS gage #03272000, 1970-2012 data
Harmonic Mean Flow	cfs	annual	7.59	USGS gage #03272000, 1970-2012 data
Gregory Creek at Mouth				
7Q10	cfs	annual	0.26	USGS gage #03272200, 1960-67 data
1Q10	cfs	annual	0.26	USGS gage #03272200, 1960-67 data
30Q10	cfs	summer	0.39	USGS gage #03272200, 1960-67 data
	cfs	winter	1.35	USGS gage #03272200, 1960-67 data
Harmonic Mean Flow	cfs	annual	1.93	USGS gage #03272000, 1970-2012 data
Pleasant Run at Mouth				
7Q10	cfs	annual	0.04	USGS gage #03274200, 1961-69 data
1Q10	cfs	annual	0.04	USGS gage #03274200, 1961-69 data
30Q10	cfs	summer	0.06	USGS gage #03274200, 1961-69 data
	cfs	winter	0.16	USGS gage #03274200, 1961-69 data
Harmonic Mean Flow	cfs	annual	0.23	USGS gage #03272800, 1960-72 data
Banklick Creek at Mouth				
7Q10	cfs	annual	0.01	USGS gage #03274200, 1961-69 data
1Q10	cfs	annual	0.01	USGS gage #03274200, 1961-69 data
30Q10	cfs	summer	0.02	USGS gage #03274200, 1961-69 data
	cfs	winter	0.05	USGS gage #03274200, 1961-69 data
Harmonic Mean Flow	cfs	annual	0.07	USGS gage #03272800, 1960-72 data
Twomile Creek at Mouth				
7Q10	cfs	annual	0.02	USGS gage #03274200, 1961-69 data
1Q10	cfs	annual	0.02	USGS gage #03274200, 1961-69 data
30Q10	cfs	summer	0.02	USGS gage #03274200, 1961-69 data
	cfs	winter	0.06	USGS gage #03274200, 1961-69 data
Harmonic Mean Flow	cfs	annual	0.10	USGS gage #03272800, 1960-72 data
Paddys Run at Mouth				
7Q10	cfs	annual	0.03	USGS gage #03274200, 1961-69 data
1Q10	cfs	annual	0.03	USGS gage #03274200, 1961-69 data
30Q10	cfs	summer	0.05	USGS gage #03274200, 1961-69 data
	cfs	winter	0.13	USGS gage #03274200, 1961-69 data
Harmonic Mean Flow	cfs	annual	0.19	USGS gage #03272800, 1960-72 data
Fernald outfall 001 effluent flow	cfs (mgd)	avg.	12.50 (8.08)	DSW
Instream Hardness	mg/L	annual	303.	STORET/DMRs; 753 values, 2008-2013

Table 9. Instream Conditions and Discharger Flow (continued)

Parameter	Units	Season	Value	Basis
Background Water Quality for the Great Miami River				
Antimony	µg/L	annual	0.	No representative data available.
Arsenic	µg/L	annual	1.0	STORET; 18 values,10 <MDL, 2009-10
Barium	µg/L	annual	92.	STORET; 18 values, 0 <MDL, 2009-10
Benzene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Benzo(a)pyrene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
3,4-Benzofluoranth.	µg/L	annual	0.	No representative data available.
Beryllium	µg/L	annual	0.	No representative data available.
Bis (2-ethylhexyl) phthalate	µg/L	annual	0.66	STORET; 5 values, 3 <MDL, 2009
Boron	µg/L	annual	0.	No representative data available.
Cadmium	µg/L	annual	0.	STORET; 18 values,18 <MDL, 2009-10
Chlorine	µg/L	annual	0.	No representative data available.
Chlorobenzene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Chloroform	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Dissolved Hexavalent Chromium	µg/L	annual	0.	No representative data available.
Chromium	µg/L	annual	1.0	STORET; 18 values,17<MDL, 2009-10
Copper	µg/L	annual	2.1	STORET; 18 values, 5<MDL, 2009-10
Free Cyanide	µg/L	annual	0.	No representative data available.
Dibenzo(a,h)anthrac.	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
1,2-Dichloroethane	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
1,1-Dichloroethylene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
2,4-Dimethylphenol	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Ethylbenzene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Fluoride	µg/L	annual	0.	No representative data available.
Heptachlor epoxide	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Hexachlorobenzene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Indeno(1,2,3,-cd)pyr.	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Iron	µg/L	annual	468.	STORET; 18 values, 0<MDL, 2009-10
Lead	µg/L	annual	1.0	STORET; 18 values, 17<MDL, 2009-10
Mercury	ng/L	annual	0.	No representative data available.
Molybdenum	µg/L	annual	0.	No representative data available.
Napthalene	µg/L	annual	0.	STORET; 6 values, 6 <MDL, 2009
Nickel	µg/L	annual	2.95	STORET; 18 values, 0<MDL, 2009-10
Nitrate+Nitrite	mg/L	annual	1.26	STORET; 26 values, 2<MDL, 2009-10
Phenols	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Selenium	µg/L	annual	0.	STORET; 18 values,18 <MDL, 2009-10
Silver	µg/L	annual	0.	No representative data available.
Total Dissolved Solids	mg/L	annual	412.	STORET; 26 values, 0<MDL, 2009-10
Tetrachloroethylene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Thallium	µg/L	annual	0.	No representative data available.
Toluene	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
1,2,4-Trimethylbenz.	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Xylenes	µg/L	annual	0.	STORET; 3 values, 3 <MDL, 2009
Zinc	µg/L	annual	5.0	STORET; 18 values, 13<MDL, 2009-10

Table 10. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria

Parameter	Units	Average			Maximum	Inside
		Human Health	Agri Supply	Aquatic Life	Aquatic Life	Mixing Zone Maximum
Iron	µg/L	--	77450.	--	--	--
Total Dissolved Solids	mg/L	--	--	2360.	--	--

Table 11. Parameter Assessment

Group 1: Due to a lack of numeric criteria, the following parameters were not evaluated at this time.

Chloride	1,2-Dichloroethane	Magnesium
Manganese	Phosphorus	Potassium
Sulfate	Trichloroethane	

Group 2: PEQ < 25% of WQS or all data below minimum detection limit; WLA not required. No limit recommended, monitoring optional.

Ammonia-S&W	Antimony	Arsenic
Barium	Beryllium	Bis(2-ethylhexyl) phthalate
Boron	Cadmium	Chlorine
Chloroform	Chromium	Cobalt
Copper	Free Cyanide	Fluoride
Lead	Mercury	Molybdenum
Nickel	Nitrate+Nitrite	Selenium
Silver	Strontium	Zinc

Group 3: PEQ_{max} < 50% of maximum PEL and PEQ_{avg} < 50% of average PEL. No limit recommended, monitoring optional.

Iron	Total Dissolved Solids

Group 4: $PEQ_{max} \geq$ 50% but <100% of the maximum PEL or $PEQ_{avg} \geq$ 50% but < 100% of the average PEL. Monitoring is appropriate.

No parameters meet the criteria of this group.

Group 5: Maximum PEQ ≥ 100% of the maximum PEL or average PEQ ≥ 100% of the average PEL, or either the average or maximum PEQ is between 75 and 100% of the PEL and certain conditions that increase the risk to the environment are present. Limit recommended.

No parameters meet the criteria of this group.

Table 12. Final Effluent Limits and Monitoring Requirements

Outfall 1IO00004001:

		Effluent Limitations				
		Concentration		Loading (kg/day)[a]		
Parameter	Units	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Basis[b]
Temperature	°C	---------- Monitor ----------				M, EP
Dissolved Oxygen	mg/L	---------- Not less than 5.0 ----------				WQS, EP
Total Suspended Solids	mg/L	20	30	621	931	PD, AD
Oil and Grease	mg/L	10	10	310	310	WQS, AD
Nitrite + Nitrate	mg/L	---------- Monitor ----------				M, EP
Phosphorus	mg/L	---------- Monitor ----------				M, EP
Flow	MGD	---------- Monitor ----------				M, EP
Mercury	ng/L	---------- Monitor ----------				M, EP
pH	S.U.	---------- 6.5 to 9.0 ----------				WQS, EP
$CBOD_5$[c]	mg/L	20	30	621	931	PD, AD
Total Dissolved Solids	mg/L	---------- Monitor ----------				M, EP

Outfall 1IO00004003:

		Effluent Limitations				
		Concentration		Loading (kg/day)[a]		
Parameter	Units	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Basis[b]
Total Suspended Solids	mg/L	---------- Monitor ----------				M, EP
Flow	MGD	---------- Monitor ----------				M, EP
Mercury	ng/L	---------- Monitor ----------				M, EP
pH	S.U.	---------- 6.5 to 9.0 ----------				WQS, EP

[a] Effluent loadings based on average design discharge flow of 6.7 MGD.

[b] Definitions: AD = Loadings based on increased flow, through Antidegradation.
BEJ = Best Engineering Judgment;
EP = Existing Permit;
M = BEJ of Permit Guidance 1: Monitoring Frequency Requirements for Sanitary Discharges;
PD = Plant Design Criteria;
RP = Reasonable Potential for requiring water quality-based effluent limits and monitoring requirements in NPDES permits [OAC 3745-33-07(A)];
WLA = Wasteload Allocation procedures (OAC 3745-2);
WQS = Ohio Water Quality Standards (OAC 3745-1-07).

[c] $CBOD_5$ = 5-day carbonaceous biochemical oxygen demand

09/SW

Application No.: OH0009580
Ohio EPA Permit No.: 1IO00004*ID

National Pollutant Discharge Elimination System (NPDES) Permit Program

PUBLIC NOTICE

NPDES Permit to Discharge to State Waters

Ohio Environmental Protection Agency
Permits Section
50 West Town St., Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049
(614) 644-2001

Public Notice No.:	OEPA 15-01-003 DFT
Date of Issue of Public Notice:	Jan-05-2015
Name and Address of Applicant:	USDOE Fernald Closure Project, 10995 Hamilton-Cleves Highway, Harrison, OH 45030
Name and Address of Facility Where Discharge Occurs:	USDOE Fernald Closure Project, 7400 Wiley Road, Harrison, OH, 45013, Butler County
Outfall Flow and Location List:	001 8,200,000 GPD 39N 17' 39" 84W 39' 58"
Receiving Stream:	Great Miami River
Nature of Business:	NATURE PRESERVE
Key parameters to be limited in the permit are as follows:	Oil and Grease, Hexane Extr Method, pH, Minimum, pH, Maximum, CBOD 5 day, Dissolved Oxygen, Total Suspended Solids, pH Range Excursions, Monthly Total Duration, pH

On the basis of preliminary staff review and application of standards and regulations, the director of the Ohio Environmental Protection Agency will issue a permit for the discharge subject to certain effluent conditions and special conditions. The draft permit will be issued as a final action unless the director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the administrator of the U.S. Environmental Protection Agency. Any person may submit written comments on the draft permit and administrative record and may request a public hearing. A request for public hearing shall be in writing and shall state the nature of the issues to be raised. In appropriate cases, including cases where there is significant public interest, the director may hold a public hearing on a draft permit or permits prior to final issuance of the permit or permits. Following final action by the director, any aggrieved party has the right to appeal to the Environmental Review Appeals Commission.

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this public notice. Comments should be delivered or mailed to both of the following locations: 1) Ohio Environmental Protection Agency, Lazarus Government Center, Division of Surface Water, Permits Processing Unit, 50 West Town St., Suite 700, P.O. Box 1049, Columbus, Ohio 43216-1049 and 2) Ohio Environmental Protection Agency, Southwest District Office 401 E. Fifth Street, Dayton, Ohio 45402-2911.

The Ohio EPA permit number and public notice numbers should appear next to the above address on the envelope and on each page of any submitted comments. All comments received no later than 30 days after the date of this public notice will be considered.

Proposed Water Quality Based Effluent Limitations: This draft permit contains water quality based effluent limitation(s) (WQBELs). In accordance with Ohio Revised Code Section 6111.03(J)(3), the Director establishes WQBELs after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to conditions calculated to result from that action and their relation to benefits to the people of the state and to accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the of the timely submitted National Pollutant Discharge Elimination System (NDPES) permit renewal application, along with any and all pertinent information available to the Director.

This public notice hereby allows the permittee to provide to the Director for consideration during this public comment period, additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with WQBEL(s). This information shall be submitted to the addresses listed above.

Should the applicant need additional time to review, obtain or develop site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness of achieving compliance with WQBEL(s), written notification for any additional time shall be sent no later than 30 days after the date of this public notice to the Director at the addresses listed above.

Should the applicant determine that compliance with a WQBEL is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable WQBEL in accordance with the terms and conditions set forth in Ohio Administrative Code (OAC) Rule 3745-33-07(D) no later than 30 days after the date of this public notice to the addresses listed above.

Alternately, the applicant may propose the development of site-specific water quality standard(s) pursuant to OAC Rule 3745-1-35. The permittee shall submit written notification to the Director regarding their intent to develop site-specific water quality standards for the pollutant at issue to the addresses listed above no later than 30 days after the date of this public notice.

The application, fact sheets, permit including effluent limitations, special conditions, comments received, and other documents are available for inspection and may be copied at a cost of 5 cents per page at the Ohio Environmental Protection Agency at the address shown on page one of this public notice any time between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Copies of the public notice are available at no charge at the same address.

Mailing lists are maintained for persons or groups who desire to receive public notice for all applications in the state or for certain geographical areas. Persons or groups may also request copies of fact sheets, applications, or other documents pertaining to specific applications. Persons or groups may have their names put on such a list by making a written request to the agency at the address shown above.