

DTE Energy Company  
6400 N. Dixie Highway  
Newport, MI 48166



August 20, 2020  
NRC-20-0056

EPP

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

Fermi 2 Power Plant  
NRC Docket No. 50-341  
NRC License No. NPF-43

Subject: Submittal of the National Pollutant Discharge Elimination System (NPDES)  
Permit Application for Amendment

In accordance with the requirement of Section 3.2 of the Fermi 2 Facility Operating License NPF-43, Appendix B, "Environmental Protection Plan," enclosed is a copy of the Fermi 2 National Pollutant Discharge Elimination System (NPDES) permit number MI0037028 Application for Amendment that has been submitted to the Michigan Department of Environment, Great Lakes, and Energy on August 20, 2020.

No new commitments are being made in this submittal.

Should you have any questions or require additional information, please contact me at (734) 586-5076.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Offerle".

Margaret M. Offerle  
Manager - Nuclear Licensing

- Enclosures:
- 1.) Letter dated August 19, 2020 from DTE to Michigan Department of Environmental, Great Lakes and Energy (EGLE), Request to Reduce Monitoring Frequency for Total Copper and Total Phosphorus DTE Electric Company – Enrico Fermi 2 Power Plant (ENFPP) NPDES Permit No. MI0037028.
  - 2.) Michigan Department of Environmental, Great Lakes and Energy (EGLE), MIWATERS 8/20/2020 Submission HNY-PAKD-377S6, version 2

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cc: NRC Project Manager  
NRC Resident Office  
Regional Administrator, Region III  
Michigan Department of Environment, Great Lakes, and Energy

**Enclosure 1 to  
NRC-20-0056**

**Fermi 2 NRC Docket No. 50-341  
Operating License No. NPF-43**

**Letter dated August 19, 2020 from DTE to Michigan Department of Environmental, Great  
Lakes and Energy (EGLE), Request to Reduce Monitoring Frequency for Total  
Copper and Total Phosphorus DTE Electric Company – Enrico Fermi 2 Power Plant  
(ENFPP) NPDES Permit No. MI0037028**



August 19, 2020

Mr. Ken Mroczkowski  
Water Resources Division  
Michigan Department of Environmental Quality  
Jackson District Office  
301 E. Louis B. Glick Hwy  
Jackson, MI 49201

Re: Request to Reduce Monitoring Frequency for Total Copper and Total Phosphorus  
DTE Electric Company – Enrico Fermi 2 Power Plant (ENFPP)  
NPDES Permit No. MI0037028

Dear Mr. Mroczkowski:

In accordance with Part I.A.1.e and Part I.A.1.f of the DTE Electric Company – Enrico Fermi 2 Power Plant (ENFPP) National Pollution Discharge Elimination System (NPDES) Permit No. MI0037028 (Permit), ENFPP requests to reduce monitoring frequency for Total Copper and Total Phosphorus from monthly to quarterly.

#### Total Copper

As of November 2019, ENFPP has submitted 12 months of data, as required per the Permit. Attachment 1 summarizes 13 months of Total Copper measurements (November 2018-November 2019). Throughout this period, Total Copper loading and concentration has remained well below Permit limits. Attachment 2 provides summary statistics on 12 months of data (November 2018-October 2019). The maximum value for Total Copper loading during this time is 3.9 lbs/day, about 26% of the Permit limit of 15 lbs/day. Additionally, the maximum value for Total Copper concentration is 14.1 ug/L, about 35% of the Permit limit of 40 ug/L. A monitoring reduction from monthly to quarterly is appropriate because it is unlikely that Total Copper limits will be surpassed, and quarterly measurements will accurately represent Total Copper loading and concentration.

#### Total Phosphorus

Attachment 1 summarizes 13 months of Total Phosphorus measurements (November 2018-November 2019). Throughout this period, Total Phosphorus loading and concentration has remained well below Permit limits. Attachment 2 provides summary statistics on 12 months of data (November 2018-October 2019). The maximum value for Total Phosphorus loading during this time is 34 lbs/day, about 9% of the Permit limit of 380 lbs/day. Additionally, the maximum value for Total Phosphorus concentration is 0.11 mg/L, about 11% of the Permit limit of 1.0 mg/L. ENFPP is currently using two phosphorus-containing water treatment additives discharged to Outfall 001B that reach Outfall 001A, Depositrol BL5400 and Flogard MS6222. These two additives are highly diluted at levels around 0.12 ppm in the final discharge to Outfall 001A. Based on the above information, it is unlikely that Total Phosphorus limits will be surpassed, and quarterly measurements should sufficiently represent Total Phosphorus loading and concentration.

Additionally, phosphorus-containing water treatment additives currently in use are used infrequently and at low concentrations. Thus, a monitoring reduction from monthly to quarterly is appropriate.

If you have any questions related to this report or desire additional information, please contact me at (248) 207-7768 or via e-mail at [marcela.orlandea@dteenergy.com](mailto:marcela.orlandea@dteenergy.com) .

Sincerely,  
DTE Energy Corporate Services, LLC



Marcela P. Orlandea, PE, LEED AP  
Senior Environmental Engineer  
Environmental Management & Resources

Cc: Mr. K. Mroczkowski – EGLE, Jackson District

Enclosures

ATTACHMENT 1  
Summary of Total Copper and Total Phosphorus Data  
November 2018 – November 2019

**OpenCDM**  
**Measurements - Samplepoint, Analysis, Sampledate**  
**Detroit Edison**  
**From: 01-Nov-2018 00:00 To: 25-Nov-2019 23:59**

**Unit: 2 - Enrico Fermi 2**  
**Sample Point: DECANT - CW DECANT LINE CT-N71-L420**

**TITLE - DESCRIPTOR**

Chem Spec - CHS-AUX-02  
 ChemSpecGroup - Auxiliary  
 NPDES - NPDES and CWPB

SystemNumber - W2500(Circ Water Decant)

<u>Analysis</u>	<u>Value/Meas. Unit</u>	<u>Date/Time</u>	<u>Power</u>	<u>OpMode</u>	<u>Analyst</u>
Cu total (Total Copper ppb)	4.4 ppb	29-Nov-2018 09:15:00	100.00	1	SBK
<b>Results Comment:</b> 24 hr composite					
Cu total (Total Copper ppb)	1.8 ppb	14-Dec-2018 09:30:00	0.00	4	KPB
Cu total (Total Copper ppb)	3.5 ppb	11-Jan-2019 09:00:00	100.00	1	SBK
<b>Results Comment:</b> pace result 24 hr. comp					
Cu total (Total Copper ppb)	2.9 ppb	08-Feb-2019 09:30:00	100.00	1	TRI
Cu total (Total Copper ppb)	11.3 ppb	02-Mar-2019 14:15:00	100.00	1	SBK
Cu total (Total Copper ppb)	9.4 ppb	02-Apr-2019 09:20:00	100.00	1	TRI
Cu total (Total Copper ppb)	14.1 ppb	06-May-2019 09:10:00	100.00	1	SBK
Cu total (Total Copper ppb)	10.3 ppb	03-Jun-2019 10:00:00	100.00	1	TRI
Cu total (Total Copper ppb)	6.4 ppb	09-Jul-2019 10:00:00	100.00	1	TRI
Cu total (Total Copper ppb)	4.6 ppb	07-Aug-2019 10:45:00	100.00	1	SBK
Cu total (Total Copper ppb)	10.6 ppb	02-Sep-2019 08:00:00	100.00	1	SBK
Cu total (Total Copper ppb)	5.4 ppb	02-Oct-2019 09:20:00	100.00	1	SBK
Cu total (Total Copper ppb)	4.1 ppb	03-Nov-2019 09:30:00	100.00	1	SBK
Phosphorus (Total Phosphorus)	0.053 PPM	29-Nov-2018 09:15:00	100.00	1	SBK
<b>Results Comment:</b> 24 hr composite					
Phosphorus (Total Phosphorus)	< 0.050 PPM	14-Dec-2018 09:30:00	0.00	4	KPB
Phosphorus (Total Phosphorus)	< 0.050 PPM	11-Jan-2019 09:00:00	100.00	1	SBK
<b>Results Comment:</b> pace result 24 hr. comp					
Phosphorus (Total Phosphorus)	< 0.050 PPM	08-Feb-2019 09:30:00	100.00	1	TRI
Phosphorus (Total Phosphorus)	< 0.050 PPM	02-Mar-2019 14:15:00	100.00	1	SBK
Phosphorus (Total Phosphorus)	0.061 PPM	02-Apr-2019 09:20:00	100.00	1	TRI
Phosphorus (Total Phosphorus)	0.11 PPM	06-May-2019 09:10:00	100.00	1	SBK
Phosphorus (Total Phosphorus)	< 0.050 PPM	03-Jun-2019 10:00:00	100.00	1	TRI
Phosphorus (Total Phosphorus)	0.052 PPM	09-Jul-2019 10:00:00	100.00	1	TRI
Phosphorus (Total Phosphorus)	< 0.50 PPM	07-Aug-2019 10:45:00	100.00	1	SBK
Phosphorus (Total Phosphorus)	0.08 PPM	02-Sep-2019 08:00:00	100.00	1	SBK
Phosphorus (Total Phosphorus)	0.093 PPM	02-Oct-2019 09:20:00	100.00	1	SBK
Phosphorus (Total Phosphorus)	< 0.05 PPM	03-Nov-2019 09:30:00	100.00	1	SBK

**TOTAL NUMBER OF MEASUREMENTS: 26**

**END OF MEASUREMENTS REPORT**

ATTACHMENT 2  
Summary Statistics on 12 months of Total Copper and Total Phosphorus Data  
November 2018 – October 2019



### Summary Statistics

	<b>Phosphorus Loading (lbs/day)</b> <i>Permit Limit 380 lbs/day</i>	<b>Phosphorus Concentration (mg/L)</b> <i>Permit Limit 1.0 mg/L</i>	<b>Copper Loading (lbs/day)</b> <i>Permit Limit 15 lbs/day</i>	<b>Copper Concentration (ug/L)</b> <i>Permit Limit 40 ug/L</i>
<b>Mean</b>	13.15	0.06	1.51	7
<b>Median</b>	9.82	0.05	1.49	5.7
<b>Standard Deviation</b>	10.23	0.02	1.08	3.92
<b>Range</b>	34	0.06	3.68	12.3
<b>Minimum</b>	0	0.05	0.22	1.8
<b>Maximum</b>	34	0.11	3.9	14.1
<b>Count</b>	12	12	12	12

**Enclosure 2 to  
NRC-20-0056**

**Fermi 2 NRC Docket No. 50-341  
Operating License No. NPF-43**

**Michigan Department of Environmental, Great Lakes and Energy (EGLE), MIWATERS  
8/20/2020 Submission HNY-PAKD-377S6, version 2**

# NPDES Monitoring Frequency Reduction Requests

version 1.4

(Submission #: HNY-PAKD-377S6, version 2)

## Details

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**Submission ID** HNY-PAKD-377S6

**Submission Reason** Modification

**Status** Submitted

## Form Input

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### Permit ID

**Permit Number (Pre-populated)**

MI0037028

### Applicant Information

The Applicant should be the business seeking certification or certification renewal.

▶▶▶ Do NOT type the name of the individual filling out this form. Please type the company/entity name and address only.

**Permittee Information****Permittee/Company Name****Prefix**

NONE PROVIDED

**First Name**

NONE PROVIDED

**Last Name**

NONE PROVIDED

**Title**

NONE PROVIDED

**Organization Name**

DTE Electric Company

**Phone Type**

Business

**Number**

2482077769

**Extension****Email**

marcela.orlandea@dteenergy.com

**Fax**

NONE PROVIDED

**Permittee/Company Mailing Address**

One Energy Plaza

415 GO, F-40

Detroit, MI 48226

US

**Contacts (1 of 4)****CONTACTS**

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Provide contact information for each person as required for each area; a person may be identified for more than one category.

◆To add additional contacts, please use the “Add New Section” button at the bottom of this page, or select “Duplicate Section” to copy the contact information and edit a portion of the contact fields.

◆If a single contact has multiple roles, please enter the information once, and assign multiple roles.

**Contact**

Annual Permit Billing Contact

Application Contact

**Required Contact Types:**

► At minimum, any changes to the following contact types must be provided: Annual Permit Billing Contact; Application Contact; Facility Contact; DMR Contact; and Certified Operator

**Section I shall be completed by all permit applicants. Instructions for completing Section I are on Page 2 of the Appendix.**

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### [Appendix to the Permit Application](#)

#### Contact

**Prefix**

*Mrs.*

**First Name**

Marcela

**Last Name**

*Orlandea*

**Title**

*Senior Environmental Engineer*

**Organization Name**

*DTE Energy*

**Phone Type**

Business

**Number**

2482077768

**Extension**

**Email**

marcela.orlandea@dteenergy.com

**Fax**

NONE PROVIDED

1 ENERGY PLZ

GO 415, F-40

Detroit, MI 48226

US

## Contacts (2 of 4)

### **CONTACTS**

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Provide contact information for each person as required for each area; a person may be identified for more than one category.

◆ To add additional contacts, please use the “Add New Section” button at the bottom of this page, or select “Duplicate Section” to copy the contact information and edit a portion of the contact fields.

◆ If a single contact has multiple roles, please enter the information once, and assign multiple roles.

**Contact**

Facility Contact

**Required Contact Types:**

► At minimum, any changes to the following contact types must be provided: Annual Permit Billing Contact; Application Contact; Facility Contact; DMR Contact; and Certified Operator

**Section I shall be completed by all permit applicants. Instructions for completing Section I are on Page 2 of the Appendix.**

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[Appendix to the Permit Application](#)**Contact****Prefix***Mr.***First Name**

Mathew

**Last Name***Caragher***Title***Executive Director - Nuclear Production***Organization Name***DTE Energy - Fermi 2 Power Plant***Phone Type**

Business

**Number**

7345865325

**Extension****Email**

mathew.caragher@dteenergy.com

**Fax**

NONE PROVIDED

6400 North Dixie Highway

Newport, MI 48166

US

**Contacts (3 of 4)****CONTACTS**

Provide contact information for each person as required for each area; a person may be identified for more than one category.

◆ To add additional contacts, please use the “Add New Section” button at the bottom of this page, or select “Duplicate Section” to copy the contact information and edit a portion of the contact fields.

◆If a single contact has multiple roles, please enter the information once, and assign multiple roles.

## Contact

DMR Contact

### Required Contact Types:

► At minimum, any changes to the following contact types must be provided: Annual Permit Billing Contact; Application Contact; Facility Contact; DMR Contact; and Certified Operator

**Section I shall be completed by all permit applicants. Instructions for completing Section I are on Page 2 of the Appendix.**

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## [Appendix to the Permit Application](#)

### Contact

**Prefix**

*Mr.*

**First Name**

John

**Last Name**

*Sawnick*

**Title**

*Staff Environmental Engineer*

**Organization Name**

*DTE Energy - Fermi 2 Power Plant*

**Phone Type**

Business

**Number**

313.657.8339

**Extension**

**Email**

john.sawnick@dteenergy.com

**Fax**

NONE PROVIDED

6400 North Dixie Highway

Newport, MI 48166

US

## Contacts (4 of 4)

### CONTACTS

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Provide contact information for each person as required for each area; a person may be identified for more than one category.

◆To add additional contacts, please use the “Add New Section” button at the bottom of this page, or select “Duplicate Section” to copy the contact information and edit a portion of the contact fields.

◆If a single contact has multiple roles, please enter the information once, and assign multiple roles.

## Contact

Certified Operator

### Required Contact Types:

►At minimum, any changes to the following contact types must be provided: Annual Permit Billing Contact; Application Contact; Facility Contact; DMR Contact; and Certified Operator

**Section I shall be completed by all permit applicants. Instructions for completing Section I are on Page 2 of the Appendix.**

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## [Appendix to the Permit Application](#)

### Contact

#### Prefix

*Mr.*

#### First Name

John

#### Last Name

*Tansek*

#### Title

*Chemistry Engineering Technician*

#### Organization Name

*DTE Energy - Fermi 2 Power Plant*

#### Phone Type

Business

#### Number

734.586.5388

#### Extension

#### Email

john.tansek@dteenergy.com

#### Fax

NONE PROVIDED

6400 North Dixie Highway

Newport, MI 48166

US

### Certification Number(s)

W-6149

### Certification Classification(s)

A-1d, A-1h, B-2a, B-2c,



## Changes Requested

The monitoring frequency reduction request is limited to what the effective permit allows. Please specify the permit condition that details which parameter(s) can have reduced monitoring (i.e. Part I.A.1.x.), the parameter(s) that is/are being requested for reduced monitoring (i.e. Total Suspended Solids), and the frequency that is being requested for the reduction (i.e. from daily to monthly), and an explanation of why reduced monitoring is warranted here or as an attachment.

NONE PROVIDED

### Documents (As needed)

[Request for Reduction in Sampling 08.19.20.pdf - 08/19/2020 04:30 PM](#)

#### Comment

NONE PROVIDED

## Attachments

Date	Attachment Name	Context	User
8/19/2020 4:30 PM	Request for Reduction in Sampling 08.19.20.pdf	Attachment	Marcela Orlandea

## Status History

	User	Processing Status
8/19/2020 11:44:03 AM	Marcela Orlandea	Draft
8/20/2020 5:12:13 AM	Mathew Caragher	Submitted

## Revisions

Revision	Revision Date	Revision By
Revision 1	4/1/2020 11:53 AM	Marcela Orlandea
Revision 2	8/19/2020 11:44 AM	Marcela Orlandea