# PHASE II ACID RAIN PERMIT Permit No. MI-AR-6034-2024

Permittee DTE Electric - Belle River Power Plant Address 4505 King Road, East China Township, MI

SRN B2796 Plant Code 6034

Issue Date June 1, 2024

Effective Issuance date of this facility's Renewable Operating Permit at

the facility in accordance with 40 CFR 72.73.

Expiration This permit shall expire when the facility's Renewable

Operating Permit expires, in accordance with 40 CFR 72.73.

ROP No. MI-ROP-B2796-2024

#### The Acid Rain Permit Contents

1. A statement of basis prepared by the Air Quality Division (AQD) containing:

References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;

2. Terms and conditions including:

A table of sulfur dioxide allowances to be allocated during the term of the permit, if applicable, authorized by this permit during Phase II. Unless they are subject to Sections 405(g)(2) or (3) of the federal Clean Air Act, new units are not allocated allowances in 40 CFR Part 73 and must obtain allowances by other means (Section 403(e) of the federal Clean Air Act);

Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements; and,

Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to Sections 404, 405, or 409 of the federal Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements (40 CFR 76.1(a)).

3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

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#### **Statement of Basis**

#### Statutory and Regulatory Authorities.

In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the federal Clean Air Act, the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1902(1)(p).

For further information contact:

Mr. Brian Carley
Environmental Quality Specialist
Michigan Department of Environment, Great Lakes, and Energy
Air Quality Division, Jackson District Office
State Office Building, 4<sup>th</sup> Floor
301 East Louis B. Glick Highway
Jackson, Michigan 49201-1556

Telephone: 517-416-4631 Facsimile: 517-780-7855

There are no comments, notes and/or justification that apply to the source in general for this section.

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#### **Terms and Conditions:**

# Phase II Sulfur Dioxide Allowance Allocation and Nitrogen Oxides Requirements for each affected unit.

		2024 2025		2026	2027	2028
	SO <sub>2</sub> allowances	18,536	18,536	18,536	18,536	18,536
Unit 1	NOx Emission Limits	Department Quality Division of the plan is effect plan, this ur year, determent exceed 76.7(a)(2), of the fired boilers. In addition to shall comply Part 76, inc.	of Environmesion approve ompliance plactive beginning it's annual anined in accordance of 0.46 lb/MN of the describity with all other luding the du	ent, Great Las a NOx star in for Unit 1. ing 2023. Und verage NOx ordance with e emission ling IBTU for Phase and NOx come er applicable ty to reapply	e of Michigar akes, and Endard emissions rademissions rademissions rademitation, undese II dry bottomical pliance plan, requirements for a NOx coss emissions	ergy, Air ons mpliance compliance te for each 75, shall er 40 CFR tom wall- this unit s of 40 CFR

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Terms and Conditions: (continued)

		2024	2025	2026	2027	2028
	SO <sub>2</sub> allowances	18,801	18,801	18,801	18,801	18,801
Unit 2	NOx Emission Limits	Department Quality Dividing Imitation could plan is effect plan, this uryear, determent exceed 76.7(a)(2), of fired boilers. In addition to shall comply Part 76, inc.	of Environmesion approve ompliance plactive beginnir nit's annual anined in accordance of 0.46 lb/MN.  The describing with all other luding the during the	t 76, the State ent, Great Lass a NOx stands of Unit 2. Ing 2023. Under the emission limits of the emission limits	akes, and Endard emission The NOx conder the NOx conder the NOx condered t	ergy, Air ons mpliance compliance te for each 75, shall er 40 CFR tom wall- this unit s of 40 CFR

		2024	2025	2026	2027	2028
Unit CTG 12-1	SO <sub>2</sub> allowances	transfer dead deductions used annual emis year from the applicable A	dline, in the s ınder 40 CFR sions of sulfu e affected uni	old allowances ource's comp (173.34(c)) no rediction to the sour serious limitation (12.9 (c).	liance accour t less than the he previous c ce; and comp	nt (after e total alendar oly with the

2024 2025 2026 2027				2028		
Unit CTG 12-2	SO <sub>2</sub> allowances	transfer dead deductions use annual emis year from the applicable A	d unit shall ho dline, in the s under 40 CFR sions of sulfu e affected uni cid Rain emis with 40 CFR	ource's comp (73.34(c)) not r dioxide for the ts at the sour ssions limitation	liance accour t less than the he previous c ce; and comp	nt (after e total alendar oly with the

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**Terms and Conditions:** (continued)

		2024	2025	2026	2027	2028
Unit CTG 13-1	SO <sub>2</sub> allowances	transfer dead deductions used annual emis year from the applicable A	d unit shall ho dline, in the s under 40 CFR sions of sulfu e affected uni cid Rain emis with 40 CFR	ource's comp (73.34(c)) no r dioxide for the ts at the sour ssions limitation	liance accour t less than the he previous c ce; and comp	nt (after e total alendar oly with the

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process: During the permit development process DTE Electric determined with the closure of other plants in their fleet that there was no need for a NOx Averaging Plan. On September 26, 2022, DTE Electric revised their Acid Rain Permit application and their NOx Compliance that the coal-fired units would now comply with the standard annual NOx average emission limit for dry bottom wall-fired boilers.

#### Permit Application: (attached)

Acid Rain Permit Application submitted December 3, 2019, revised September 26, 2022 Phase II NOx Compliance Plan submitted December 3, 2019, revised September 26, 2022 Phase II NOx Averaging Plan submitted June 7, 2019, removed September 26, 2022

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United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258 Approval expires 12/31/2021

## **Acid Rain Permit Application**

For more information, see instructions and 40 CFR 72.30 and 72.31	*
This submission is: new revised for ARP permit renew.	2

#### STEP 1

Identify the facility name, State, and plant (ORIS) code.

DTE Electric-Belle River Power Plant	MI	6034
Facility (Source) Name	State	Plant Code

#### STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
1	Yes
2	Yes
CTG 12-1	Yes
CTG 12-2	Yes
CTG 13-1	Yes
	Yes

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DTE Electric-Belle River Power Plant Facility (Source) Name (from STEP 1)

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#### STEP 3

#### **Permit Requirements**

### Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (i) Have an Acid Rain Permit

#### Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

#### Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall
  - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

#### Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

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#### STEP 3, Cont'd.

#### **Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (v) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

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DTE Electric-Belle River Power Plant Facility (Source) Name (from STEP 1)

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#### STEP 3, Cont'd.

#### Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act, or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

#### STEP 4

#### Certification

Read the certification statement, sign, and date. I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Benjamin Felton, Senior Vice P	President, Energy Supply
Signature	Date 9/22/2022

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**United States** 

Environmental Protection Agency Acid Rain Program OMB No. 2060-0258 Approval expires 12/31/2021

## Acid Rain NO<sub>x</sub> Compliance Plan

This submission is: New ✓ Revised	Page	Page 1 of 2
DTE Electric - Belle River Power Plant	MI	6034
Plant Name	State	Plant Code

STEP 1 Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	<sub>ID#</sub> 1	<sub>ID#</sub> 2	ID#	ID#	ID#	ID#
	DBW Type	DBW	Tuna	_		
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired bollers)	Туре	Туре	Туре	Туре	Туре	Туре
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for <u>Phase</u> <u>I</u> tangentially fired boilers)						
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for <u>Phase</u> <u>Il</u> dry bottom wall-fired boilers)	X	X				
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for <u>Phase</u> <u>Il</u> tangentially fired boilers)						
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)						
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)				d.		
(i) NOx Averaging Plan (include NOx Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>X</sub> Averaging (check the NO <sub>X</sub> Averaging Plan box and include NO <sub>X</sub> Averaging form)						
(I) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						

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	DTE Electric - Belle River Power Plant Plant Name (from Step 1)	NO <sub>X</sub> Compliance - Page 2 Page 1 of 2
STEP 3 Identify the first calendar year in which this plan will apply.	January 1, 2023	
STEP 4 Read the special provisions and certification, enter the name of the designated representative, sign and date.	General.  This source is subject to the standard requirements in 40 CFR 72.9 this source's Acid Rain Permit.  Certification  I am authorized to make this submission on behalf of the owners a or affected units for which the submission is made. I certify under examined, and am familiar with, the statements and information su attachments. Based on my inquiry of those individuals with priminformation, I certify that the statements and information are to the baccurate, and complete. I am aware that there are significant pena and information or omitting required statements and information, imprisonment.  Name Benjamin Fetton, Senior Vice President, Energy Signature	and operators of the affected source penalty of law that I have personally abmitted in this document and all its nary responsibility for obtaining the lest of my knowledge and belief true, littles for submitting false statements including the possibility of fine or