Permit Modification Fact Sheet

Changes from the previous permit are highlighted in grey.

General Information

Permit Number	WI-0001961-10-2
Permittee Name	Madison Gas & Electric Company
Address	201 S Blount Street, Madison, WI 53701-1231
Discharge Location	Unchanged by modification.
Receiving Water	Lake Monona
Stream Classification	Unchanged by modification.

Facility Description

Madison Gas & Electric (MG&E) Blount Generating Station (BGS) has two boilers and two active steam turbines capable of generating approximately 100 MW of electricity. The facility also has one boiler used for heating. All three boilers burn only natural gas. For a more detailed description of the facility and its outfalls, please see the fact sheet for the permit no. WI-0001961-10-0.

Substantial Compliance Determination

Unchanged by modification.

Sample Point Descriptions

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
702	N/A – unchanged by modification.	INTAKE: Blount St. Intake Water Temperature for Condenser Cooling Water without additives discharged Thru Outfall 002.
703	N/A – unchanged by modification.	INTAKE: Livingston St. Intake Water Temperature for Condenser Cooling Water without additives discharged Thru Outfall 003. Samples are taken under hatch next to the traveling screens.
003	N/A – unchanged by modification.	EFFLUENT: Condenser cooling water and turbine sump discharge (Turbines 6 & 7), roof drains, city water when the fire suppression system is tested, and auxiliary equipment cooling water discharged to Lake Monona (Livingston Street). Samples taken in screen house prior to comingling with roof drain water and water from when the fire suppression system is tested.
009	N/A – unchanged by modification.	EFFLUENT: Emergency generator noncontact cooling water discharged infrequently to the City storm sewer on Main Street. Samples taken from spigot near the bottom of the emergency generator.
110	N/A – unchanged by modification.	BLANK: Field blank sample to confirm good quality mercury sample collection procedures.

Permit Requirements

1 Influent - Cooling Water Intake Structure (CWIS) – Monitoring

1.1 Sample Point Number: 702- Blount St. Emergency Intake

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Temperature Maximum		deg F	Daily	Continuous	

1.1.1 Changes from Previous Permit

Unchanged by modification.

1.1.2 Explanation of Limits and Monitoring Requirements

N/A

1.2 Sample Point Number: 703- Livingston Intake

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Temperature Maximum		deg F	Daily	Continuous	
Flow Rate		MGD	Daily	Calculated	
Copper, Total Recoverable		ug/L	Annual	Grab	
Hardness, Total as CaCO3		mg/L	Annual	Grab	
Mercury, Total Recoverable		ng/L	Annual	Grab	See Mercury Monitoring section for more details.

1.2.1 Changes from Previous Permit

Unchanged by modification.

1.2.2 Explanation of Limits and Monitoring Requirements

N/A

2 In-Plant - Monitoring and Limitations

2.1 Sample Point Number: 110- Mercury Field Blank

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Mercury, Total Recoverable		ng/L	Annual	Blank	See Mercury Monitoring section below for details.

2.1.1 Changes from Previous Permit

Unchanged by modification.

2.1.2 Explanation of Limits and Monitoring Requirements

N/A

3 Surface Water - Monitoring and Limitations

3.1 Sample Point Number: 003- Cooling Water (Turb. 6 & 7)

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
Temperature Maximum	Daily Max	120 deg F	Daily	Continuous	
Copper, Total Recoverable		ug/L	Annual	Grab	
Mercury, Total Recoverable		ng/L	Annual	Grab	See Mercury Monitoring section below for details
Hardness, Total as CaCO3		mg/L	Annual	Grab	
PFOS		ng/L	Monthly	Grab	Monitoring only. See the PFOS and PFOA Minimization Plan Requirements section and the PFOS and PFOA Minimization Plan Schedule.
PFOA		ng/L	Monthly	Grab	Monitoring only. See the PFOS and PFOA Minimization Plan Requirements section and the PFOS and PFOA Minimization Plan Schedule.

3.1.1 Changes from Previous Permit

PFOS and PFOA –Language requiring the implementation of a PFOS and PFOA Minimization Plan has been added to the permit.

3.1.2 Explanation of Limits and Monitoring Requirements

Language was added to the permit to ensure that the actions outlined in the approved minimization plan are accomplished over the next several years. The determination to require the implementation of a minimization plan will be reevaluated at the next permit reissuance.

Pursuant to s. NR 106.985(1), Wis. Adm. Code, the department notified the permittee on 10/22/2025 of the requirement to develop a PFOS and PFOA Minimization Plan that satisfies the requirements in s. NR 106.99, Wis. Adm. Code. The permittee submitted a minimization plan on 01/19/2026 (dated January 16, 2026); this plan was approved by the department on 03/02/2026.

3.2 Sample Point Number: 009- Emergency Generator NCCW

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gpd	Daily	Total Daily	
Oil & Grease (Hexane)		mg/L	Quarterly	Grab	Sampling only required when discharges occur.

3.2.1 Changes from Previous Permit

Unchanged by modification.

3.2.2 Explanation of Limits and Monitoring Requirements

N/A

4 Schedules

4.1 Annual Certification Statements and Reports for Intake Structure

Submit Annual Reports by January 31st of each year in accordance with the Annual Reports subsection in Standard Requirements.

Required Action	Due Date
Submit Annual Certification Statement and Report #1:	01/31/2024
Submit Annual Certification Statement and Report #2:	01/31/2025
Submit Annual Certification Statement and Report #3:	01/31/2026
Submit Annual Certification Statement and Report #4:	01/31/2027
Submit Annual Certification Statement and Report #5:	01/31/2028

Ongoing Annual Certification Statements and Reports: Continue to submit Annual Certification Statements and Reports until permit reissuance has been completed.	

4.1.1 Explanation of Schedule

N/A – unchanged by modification.

4.2 Impingement Mortality BTA Schedule

Required Action	Due Date
Compliance Option: If the permitee has chosen to move forward with a different option of compliance with the impingement mortality BTA standards than the system of technologies option the permittee must inform the department by this date.	01/01/2026
Plans and Specifications: If the chosen compliance option involves a modification to the existing CWIS the permittee must submit plans and specification for the chosen option of compliance with the impingement mortality BTA standards by this date.	01/01/2027
Construction: If construction was deemed necessary in order to comply with the BTA determination, complete construction. This is also the date when compliance with the BTA standards must start being met.	01/01/2028

4.2.1 Explanation of Schedule

N/A – unchanged by modification.

4.3 Optimization Study

The permittee shall complete an optimization study if either a system of technologies or a modifed travelling screen is selected as the option for complying with the impingement mortality BTA standards.

Required Action	Due Date
Progress Report: The permittee shall submit a progress report that includes the data collected so far as part of the study, the metodology of the study, and an outline of the future stages of the study.	01/01/2027
Optimization Study: The permittee shall submit a report which meets the requirements under s. NR 111.41(5)b, Wis. Adm. Code, if the permittee has chosen to move forward with a system of technologies as the selected option for complying with impingement mortality BTA standards. If the permittee has chosen to change the selected option for complying with impingement mortality BTA standards and has instead chosen a modified traveling screen as their compliance option the permittee shall submit a report that meets the requirements under s. NR 111.41(5)a, Wis. Adm. Code.	01/01/2028

4.3.1 Explanation of Schedule

N/A – unchanged by modification.

4.4 PFOS/PFOA Minimization Plan Determination of Need

Required Action	Due Date
Report on Effluent Discharge: Submit a report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations. This analysis should also include a comparison to the applicable narrative standard in s. NR 102.04(8)(d),	10/01/2024

Wis. Adm. Code. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results.	
Report on Effluent Discharge and Evaluation of Need: Submit a final report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations of data collected over the last 24 months. The report shall also provide a comparison on the likelihood of the facility needing to develop a PFOS/PFOA minimization plan. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results. The permittee shall also submit a request to the department to evaluate the need for a PFOS/PFOA minimization plan. If the Department determines a PFOS/PFOA minimization plan is needed based on a reasonable potential evaluation, the permittee will be required to develop a minimization plan for Department approval no later than 90 days after written notification was sent from the Department. The Department will modify or revoke and reissue the permit to include PFOS/PFOA minimization plan reporting requirements along with a schedule of compliance to meet WQBELs. Effluent monitoring of PFOS and PFOA shall continue as specified in the permit until the modified permit is issued. If, however, the Department determines there is no reasonable potential for the facility to discharge PFOS or PFOA above the narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code, no further action is required and effluent monitoring of PFOS and PFOA shall continue as specified in the permit.	10/01/2025

4.4.1 Explanation of Schedule

N/A – unchanged by modification.

4.5 PFOS and PFOA Minimization Plan

This compliance schedule requires the permittee to achieve compliance by the Due Date.

Required Action	Due Date
Submit Progress Report #1: Submit an annual progress report. The annual progress report shall: Indicate which source reduction measures or activities in the approved PFOS and PFOA minimization plan have been implemented; Identify which suspected sources have been monitored; Include an analysis of trends in weekly, monthly and annual average PFOS and/or PFOA concentrations; and Include an analysis of how influent and effluent concentrations vary with time and with significant loadings of PFAS such as loads from industries or other sources into the collection system.	06/30/2027
Submit Progress Report #2: Submit the PFOS and PFOA minimization progress report as defined above.	11/30/2027
Submit Progress Report #3 and Re-evaluation: Submit a progress report on the success in the implementation of the PFAS minimization plan. The report shall include a summary of all actions taken and analysis of trends in weekly, monthly, and annual average PFOA and/or PFOS effluent concentrations.	03/31/2028

If initial PMP actions were not successful enough to result in PFOA and/or PFOS reductions below the values in s. NR 102.04(8)(d)1., Wis. Adm. Code, the permittee shall submit an updated PMP with the permit application for reissuance. Based on facility and PMP specifics the permittee may be allowed up to 53 additional months after the permit expiration date to implement additional PMP actions before being required to install PFAS treatment technologies. This schedule may be modified to adjust compliance schedule dates to incorporate any changes in minimization plan goals and actions or as new information is made available to the department.	
Submit Progress Report #4: Submit the PFOS and PFOA minimization progress report as defined above.	09/30/2029
Submit Progress Report #5: Submit the PFOS and PFOA minimization progress report as defined above.	09/30/2030
Submit Progress Report #6: Submit the PFOS and PFOA minimization progress report as defined above.	09/30/2031
Submit Progress Report #7: Submit the PFOS and PFOA minimization progress report as defined above.	09/30/2032
Submit Final Progress Report and Re-evaluation: Submit a progress report on the success in the implementation of the PFOS and PFOA minimization plan. The report shall include a summary of all actions taken and analysis of trends in weekly, monthly, and annual average PFOS and/or PFOA effluent concentrations. If initial PMP actions were not successful enough to result in PFOS and/or PFOA reductions below the values in s. NR 102.04(8)(d)1., Wis. Adm. Code, the permittee shall be required to install PFAS treatment technologies to meet the calculated WQBELs.	03/31/2033
Submit Preliminary Engineering Report: The permittee shall submit a report outlining the various options for compliance with the applicable PFOS and/or PFOA WQBELs to the Department for review.	03/31/2034
Plan and Specification Submittal: The permittee shall submit final construction plans and specifications to the Department for approval pursuant to ch. NR 108, Wis. Adm. Code, specifying treatment plant upgrades that must be constructed to achieve compliance with the applicable PFOS and/or PFOA WQBELs, and a schedule for completing construction of the upgrades by the complete construction date specified below.	03/31/2035
Treatment Plant Upgrade to Meet Limitations: The permittee shall initiate bidding, procurement, and/or construction of the project. The permittee shall obtain approval of final constructions plans and schedule from the Department pursuant to s. 281.41, Stats., prior to initiating activities defined as construction under ch. NR 108, Wis. Adm. Code. Upon approval of the final construction plans/specifications and schedule by the Department, the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.	03/31/2036
Complete Construction: The permittee shall complete construction of the wastewater treatment plant upgrades.	03/31/2037
Achieve Compliance: The permittee shall achieve compliance with the PFOS water quality-based effluent limit of 8 ng/L as a monthly average.	04/30/2037

4.5.1 Explanation of Schedule

The department has made the determination that this facility has reasonable potential to cause or contribute to an exceedance of the PFOS standard in s. NR 102.04(8)(d)1., Wis. Adm. Code, based on the reasonable potential procedures

and data collected under s. NR 106.98, Wis. Adm. Code. Pursuant to s. NR 106.985(1), Wis. Adm. Code, the department notified the permittee on 10/22/2025 of the requirement to develop a PFOS and PFOA Minimization Plan that satisfies the requirements in s. NR 106.99, Wis. Adm. Code. The permittee submitted a minimization plan on 01/19/2026 (dated January 16, 2026); this plan was approved by the department on 03/02/2026.

The permittee is allowed up to 85 months to implement the minimization plan as outlined above. This schedule may be modified as more data is collected and the success of the proposed minimization plan is further evaluated. The permittee is required to submit annual progress reports every year, with a third progress report required to be submitted with the permit application. If necessary, a final progress report is required at the end of the next permit term.

If the minimization plan actions have not been successful enough to no longer have reasonable potential to cause or contribute to an exceedance of the applicable PFOS standards, then the permittee will be required to install a treatment system or otherwise take steps necessary to come into compliance with the applicable standard(s) by the final Due Date.

Attachments

PFOS and PFOA Water Quality-Based Effluent Limitations for the Madison Gas and Electric Blount Station WPDES Permit No. WI-0001961 in Dane County, by Amy Garbe, PE, Wastewater Engineer, dated October 15, 2025

PFAS Minimization Plan (PMP), dated January 16, 2026 (received 01/19/2026)

Approval of PFOS Minimization Plan letter, by Nate Willis, PE, Wastewater Section Manager, dated 03/02/2026

Prepared By: Sarah Donoughe, Wastewater Specialist-Adv

Date: April 14, 2026

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: October 15, 2025

TO: Sarah Donoughe – NER

FROM: Kari Fleming – WY/3

SUBJECT: PFOS and PFOA Water Quality-Based Effluent Limitations for the Madison Gas and Electric Blount Station WPDES Permit No. WI-0001961 in Dane County

This is in response to your request for an evaluation of the need for PFOS and PFOA limitations for the Madison Gas & Electric's (MG&E) Blount facility. This industrial facility discharges to Lake Monona, located in the Yahara River and Lake Monona Watershed in the Lower Rock River Basin.

The current permit, effective since October 2023, has monitoring only for PFOS and PFOA for Outfall 003. The following review is based on new regulations which are now in effect throughout the state of Wisconsin and recommendations are made in accordance with chapters NR 102, 104, 105, 106, 207, and 217 of the Wisconsin Administrative Code, where applicable.

Receiving Water Information

- Name: Lake Monona
- Classification: Warm water sport fish community, non-public water supply.
- Flow: A ten-to-one dilution ratio will be used for calculating effluent limitation based on chronic or long-term impacts, in accordance with s. NR 106.06(4)(b)2, because the receiving water does not exhibit a unidirectional flow at the point of discharge.
- Background Receiving Water/Source Water Data: There are several locations within Lake Monona in which targeted monitoring for PFOS and PFOA has occurred between 2019 and 2024. Available surface water data can be found at the Wisconsin PFAS Interactive Data Viewer. The average results are shown below

	PFOS ng/L	PFOA ng/L
Oct-19	12	2.9
Oct-19	12	2.5
Oct-19	10	2.4
Jul-20	5.57	2.6
May-24	9.42	2.31
Jul-24	9.43	2.3
Sep-24	7.52	2.08
Mean	9.42	2.44
Sample Size	7	7
Range	5.57-12	2.08-2.9

Effluent Information

- Flow rate(s): Outfall 003
  Annual average = 35.39 MGD (Million Gallons per Day)
  Peak daily = 63.40 MGD
  Peak weekly = 63.40 MGD
  Peak monthly = 47.60 MGD

For reference, the actual average flow from January 2023 through September 2025 was 31.4 MGD.

- Water source: Intake from Lake Monona (99.8% of total volume) with small amount from a high capacity well (12,909 gpd) and the City of Madison (380 gpd). Though the high capacity well and city water is not used as NCCW or discharged through Outfall 003.
- Effluent characterization: This facility is categorized as an industrial discharger of mostly noncontact cooling water

The following table lists the statistics for effluent PFOS and PFOA levels for Outfall 001 from October 2023 through August 2025.

	PFOS ng/L	PFOA ng/L
1-day P_{99}	18.96	4.48
4-day P_{99}	14.87	3.73
30-day P_{99}	12.63	3.31
Mean	11.46	3.08
Std	2.64	0.52
Sample Size	22	22
Range	6.8-16	2.4-3.8

Water Quality Based Limit – PFOS and PFOA

Administrative rules for PFOS and PFOA took effect on August 1, 2022. These rule revisions include additions to ch. NR 102 (s. NR 102.05), Wis. Adm. Code, which establish PFOS and PFOA standards for surface waters. Revisions to ch. NR 106 (s. NR 106, Subchapter VIII), Wis. Adm. Code establish procedures for determining water quality based effluent limits for PFOS and PFOA, based on the applicable standards in ch. NR 102, Wis. Adm. Code.

PFOS

Due to PFOS being a bioaccumulating compound of concern (BCC), no mixing zone is allowed pursuant s. NR 106.98(4), Wis. Adm. Code. Therefore, the effluent limit for PFOS is set equal to criteria (8 ng/L).

PFOA

The conservation of mass equation is described in s. NR 106.06(4)(b)2. Wis. Adm. Code, and includes variables of water quality criterion (WQC) and upstream PFOA concentrations (Cs) provided below.

$$\text{Limitation} = 11(\text{WQC}) - 10(\text{Cs})$$

Where:

WQC = 95 ng/L for Lake Monona

Cs = background concentration of PFOA in the receiving water pursuant to s. NR 106.06(4)(e), Wis. Adm. Code (2.44 ng/L)

After substituting the appropriate variables, the calculated PFOA limit is 1,020 ng/L.

Reasonable Potential Determination

Since the background concentration for PFOS in the receiving water is determined to be greater than any applicable water quality criterion, the determination of need for the limitation may be evaluated pursuant s. NR 106.06(6), Wis. Adm. Code. In this instance, MG&E Blount shall demonstrate all of the following conditions are met:

- The permittee withdraws 100 percent of the intake water containing the substance from the same waterbody into which the discharge is made. (s. NR 106.06(6)(b)1., Wis. Adm. Code)
- The permittee does not contribute any additional mass of the identified intake substance to its wastewater. (s. NR 106.06(6)(b)2., Wis. Adm. Code)
- The permittee does not alter the identified intake substance chemically or physically in a manner that would cause adverse water quality impacts to occur that would not occur if the substance were left in-stream. (s. NR 106.06(6)(b)3., Wis. Adm. Code)
- The permittee does not contribute to a statistically significant increase in the identified intake substance concentration, as determined by the department, at the edge of the mixing zone or at the point of discharge if a mixing zone is not allowed, as compared to the concentration of the substance in the intake water, unless the increased concentration does not cause or contribute to an excursion of water quality standard for that substance. (s. NR 106.06(6)(b)4., Wis. Adm. Code)

Though MG&E Blount withdraws 100% of the intake water from Lake Monona and it is used as once-through noncontact cooling water with no additives or chemical treatment, the facility is not able to demonstrate that the conditions in item #2 (does not contribute any additional mass) are being met. No specific intake data is available to directly compare intake results to effluent results; therefore, the department compared the available results from targeted monitoring performed in 2024 to effluent results during the same months in 2024. All of the effluent results are greater than the surface water results.

In accordance with s. NR 106.98(4)(a), Wis. Adm. Code, **the discharge has reasonable potential to cause or contribute to an exceedance of the water quality criterion for PFOS** because the 30-day P_{99} of reported effluent PFOS data is greater than the calculated WQBEL (8 ng/L). Therefore, **a WQBEL is required for Outfall 003.**

The discharge does not have reasonable potential to cause or contribute to an exceedance of the water quality criterion for PFOA because the 30-day P_{99} of reported effluent PFOA data is less than the calculated WQBEL (1,020 ng/L). Therefore, **a WQBEL is not required.**

Conclusions
The following is a summary of limits recommended by this evaluation:

- Monthly average PFOS limit of 8 ng/L

If there are any questions or comments on these recommendations, please contact Amy Garbe by telephone at (608) 716-9968 or by email at Amy.Garbe@wisconsin.gov.

Attachments (2) – P99 Calculations

PREPARED BY: _____ date: 10/15/25
Amy Garbe, P.E., Wastewater Engineer

cc: Kenzie Ostien, Basin Engineer – SCR/Fitchburg
Nate Willis, P.E., PFAS Implementation Coordinator – CO

Attachment 1 – PFOS P99 Calculation

EFFLUENT VARIABILITY ANALYSIS -

SUBSTANCE:

NUMBER OF VALUES:			
TOTAL	22		
DETECTED	22		
NON-DETECTED			
d	0		
m	11.46364		
mean of all data	11.46364		
s	2.639543		
n	1	4	30
d^n	0	0	0
p	0.99	0.99	0.99
Z_p	2.326785	2.326785	2.326785
1+(s/m)^2	1.053017	1.053017	1.053017
(sigma_d)^2	0.051659	0.051659	0.051659
mu_d	2.41335	2.41335	2.41335
(sigma_dn)^2	0.051659	0.013167	0.001766
mu_dn	2.41335	2.432596	2.438297
P_99 exponent	2.942197	2.69959	2.536068
P_99	18.96	14.87	12.63

Data Summary

Oct-23	11
Nov-23	19
Dec-23	9
Jan-24	8.7
Feb-24	9.9
Mar-24	9.1
Apr-24	12
May-24	11
Jun-24	13
Jul-24	11
Aug-24	12
Sep-24	13
Oct-24	11
Dec-24	12
Jan-25	16
Feb-25	8.7
Mar-25	6.8
Apr-25	11
May-25	11
Jun-25	10
Jul-25	14
Aug-25	13

Attachment 2 – PFOA P99 Calculation

EFFLUENT VARIABILITY ANALYSIS -				
=	= =	=	=	
SUBSTANCE:				
NUMBER OF VALUES:	------			
TOTAL	22			
DETECTED	22			
NON-DETECTED	0			
d	0			
m	3.081818			
mean of all data	3.081818			
s	0.516984			
	------	------	------	
n	1	4	30	
d^n	0	0	0	
p	0.99	0.99	0.99	
Z_p	2.326785	2.326785	2.326785	
1+(s/m)^2	1.028141	1.028141	1.028141	
(sigma_d)^2	0.027752	0.027752	0.027752	
mu_d	1.111644	1.111644	1.111644	
(sigma_dn)^2	0.027752	0.007011	0.000938	
mu_dn	1.111644	1.122014	1.125051	
P_99 exponent	1.499264	1.316835	1.196298	
	-------	-------	-------	
P_99	4.48	3.73	3.31	
	-------	-------	-------	

Data Summary	
Oct-23	3.1
Nov-23	3.3
Dec-23	2.7
Jan-24	2.3
Feb-24	3.5
Mar-24	3.2
Apr-24	3.2
May-24	3.2
Jun-24	3.3
Jul-24	2.6
Aug-24	3.8
Sep-24	3.2
Oct-24	3.4
Dec-24	3.6
Jan-25	4.5
Feb-25	2.6
Mar-25	2.4
Apr-25	2.8
May-25	2.4
Jun-25	2.8
Jul-25	3.1
Aug-25	2.8

Madison Gas and Electric Company
P.O. Box 1231
Madison, WI 53701-1231
608-252-7000
your community energy company

January 19, 2026

9489 0090 0027 6456 6741 67
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Kenzie Ostien
Wisconsin Department of Natural Resources
Bureau of Water Quality
Fitchburg Service Center
3911 Fish Hatchery Road
Fitchburg WI 53711

Subject: Madison Gas and Electric Company's (MGE) Blount Station
WPDES Permit No. WI-0001961-10-0
Initial PFAS Minimization Plan Submission

Dear Ms. Ostien:

In response to your October 22, 2025, request, MGE is submitting the attached Initial PFAS Minimization Plan for review and approval by the Department. We look forward to receiving your comments.

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

If there are any outstanding questions, please contact Brenda Sargent at (608) 252-7281.

Sincerely,

Ryan C. Johnson
Assistant Manager Blount

dsh/Enclosure

cc. Brenda Sargent, MGE

PFAS Minimization Plan (PMP)

Facility: Madison Gas and Electric Company (MGE)
Blount Generating Station, Madison, Wisconsin
WPDES Permit No.: 0001961-10-1
Date: January 16, 2026

Background Information

The Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System (WPDES) No. WI-0001961-10-1 for MGE's Blount Generating Station was issued September 21, 2023, and requires monthly sampling of cooling water effluent at Outfall 003 for PFOS and PFOA. MGE submitted a report on Effluent Discharge and Evaluation of Need for a PFOS/PFOA Minimization Plan as required by the WPDES permit by October 1, 2025, which included the results of the previous 24 months of PFOS and PFOA sampling. Based on this sampling results data set, available data from the source water, and the procedures in Wis. Admin. Code s. NR 106.98(4), the WDNR determined that the effluent at Outfall 003 has reasonable potential to cause or contribute to an exceedance of the water quality criterion for PFOS, but not for PFOA. Accordingly, WDNR notified MGE that a PFAS Pollutant Minimization Plan "PMP" is required. This document outlines MGE's proposed PMP and was developed in accordance with Wis. Admin. Code NR 106.99, WDNR's "PFOS and PFOA Minimization Plans" Guidance document dated October 22, 2024, and discussions with WDNR staff.

Facility Overview

Outfall 003 at the Blount Generating Station is used for the discharge of noncontact cooling water, which is withdrawn from Lake Monona and discharged back to Lake Monona in a closed-loop system. The Blount facility operates primarily as a "peaking plant", which means it generally operates only during periods of high electricity demand, when called upon by the Midcontinent Independent System Operator (MISO). No additives or water treatment beyond physical screening for debris takes place in the cooling water system. In addition, the Blount facility does not use any products on-site containing PFAS. Besides the cooling water, there are two turbine sumps and a set of roof drains that could potentially discharge into Outfall 003, although these sources are intermittent and low volume in nature.

Flow rates from the cooling water pumps are calculated based on pump capacity and the number of pumps in operation at one time and have generally ranged from about 31 to 63 million gallons per day when the plant is operating. When the plant is not in operation, the pumps are not normally used and there is zero flow.

Flow from the turbine sumps would only occur if water levels exceeded certain levels in the sumps requiring them to be pumped out. The flow rate from the turbine sumps is estimated at about 300 gal/min.

Flow from the roof drains only occurs during rainfall events and has not been measured.

Data Analysis

MGE has conducted monthly sampling for PFOS and PFOA at Outfall 003 since the permit's effective date of October 1, 2023, with the exception of November 2024 when there was no opportunity to take a sample. The sample results are included in the attached table and chart and include 26 months of results.

General Plan Elements

Wis. Admin. Code s. NR 106.99(1) outlines general goals and actions for inclusion in all PMPs.

a. Identification of source reduction activities and timeline.

MGE's source reduction activities will consist of an initial two years of sampling for PFOS, as outlined further in the "1) Source identification and inventory" section of this PMP. Based on an analysis of that data, MGE will evaluate and implement source reduction activities as outlined in the remaining sections of the PMP below.

b. List of previously completed source reduction activities.

Prior to submittal of this plan, MGE conducted 26 months of sampling for PFOS and PFOA at Outfall 003. MGE has previously taken a chemical inventory of all facilities and determined that there are no PFAS-containing chemicals or processes at the Blount facility.

c. Documentation plans.

MGE will document implementation of the PMP through submittal of reports to WDNR. MGE will submit reports to the WDNR on an annual basis and will include a summary of all sampling results and any other activities that were done as part of the PMP.

d. Steps to ensure effectiveness in PFAS reductions.

MGE will document all sample results from the planned two years of PFOS sampling for comparison with prior sampling results. If, based on the additional sample results, MGE undertakes source reduction activities such as cleanout activities described in the "2) Improvement of operational controls or maintenance" section below, MGE will collect samples following clean out for comparison with previously collected sample results.

Plan Elements for Industry Plans

Wis. Admin. Code s. NR 106.99(3) also requires that a PFAS PMP for industrial dischargers include an evaluation of all of the following elements:

1. **Source Identification and Inventory**

MGE's source identification activities will consist of sampling for PFOS from all potential discharge sources leading to Outfall 003. Sampling will begin upon approval of the PFAS PMP and modification of the Blount Generating Station WPDES Permit and will consist of a minimum of two years of sampling events as proposed below.

a. **Intake Water Characterization**

- Monthly PFOS sampling of the intake water at the screen house to be done concurrently with effluent sampling to support mass-balance insights.
- Equipment blanks will be taken for at least the first three months of sampling concurrently with intake and effluent sampling. If no PFOS is detected in the equipment blank samples, MGE may elect to discontinue collecting equipment blank samples.

b. **In-Plant Contributors**

- Quarterly PFOS sampling at Turbine 6 and Turbine 7 sumps to confirm the absence/presence of in-plant PFOS sources.
- Quarterly PFOS sampling at Boiler 8 and Boiler 9 roof drain header sample lines during rainfall events to confirm absence/presence of environmental/ambient PFOS sources.
- Equipment blanks will be taken with the three rounds of sampling. If no PFOS is detected in the equipment blank samples, MGE may elect to discontinue collecting equipment blank samples.

2. **Improvement of Operational Controls or Maintenance**

If results of two years of sampling indicates the presence of PFOS in the plant sumps or roof drains, these locations will be evaluated for cleanout or sealing of sump joints, which will include proper handling of any wastewater generated. If cleanout activities are required, MGE will resample for PFOS from these locations after cleanout activities are completed to verify the cleanout activities were successful. Other potential solutions could include equipment or piping replacement but will depend upon the results of the initial two years of sampling.

3. **Substitution of Raw Materials or Chemical Additives with Low or Zero PFOS, PFOA, and PFOS and PFOA Precursor Alternatives**

Since the Blount facility does not use any raw materials or chemical additives containing PFAS, MGE will continue to maintain PFAS-free procurement controls and product inventory with regular SDS reviews.

4. **Institution of Alternative Processes**

The Blount facility does not operate any processes which use PFAS.

5. **Clean-Up of Historical Contamination**

There is no history of historical contamination from PFAS at the Blount facility.

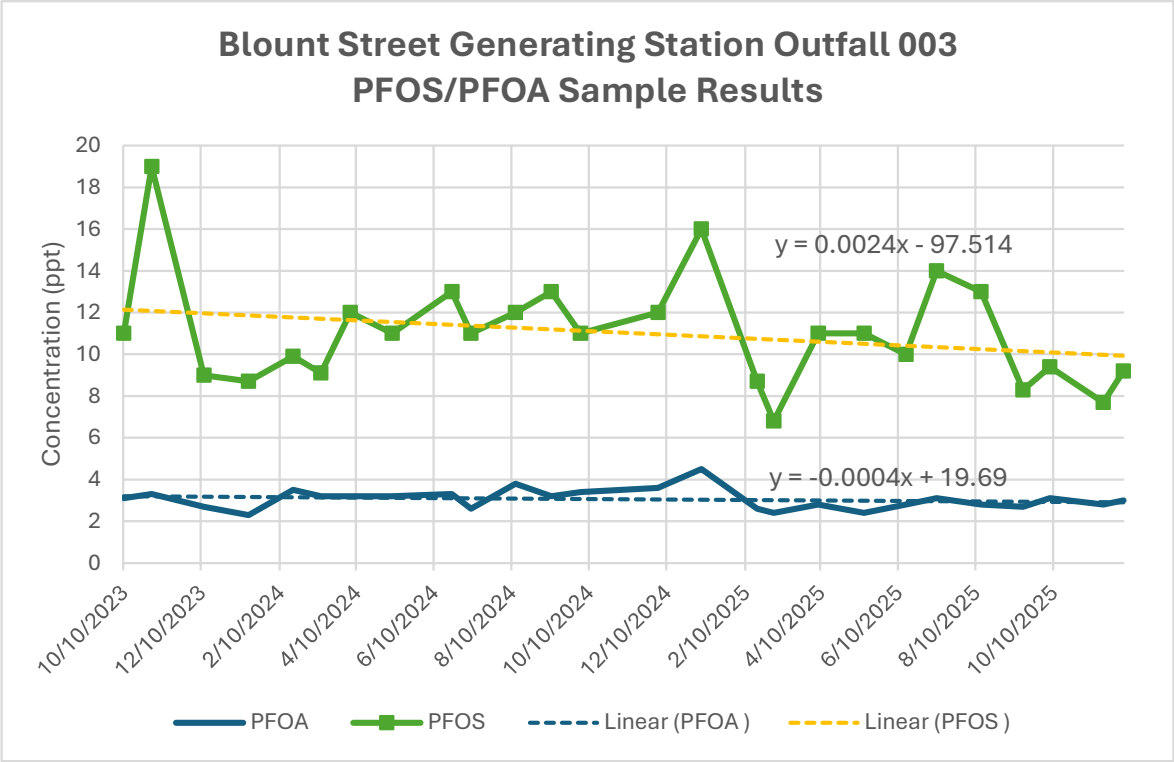
6. **Other Activities**

If results of two years of sampling indicates the presence of PFOS outside the source intake water taken from Lake Monona, MGE will discuss other potential activities with the Department at that time.

Blount Generating Station Outfall 003

Table of PFOS/PFOA Sample Results

Date	PFOA	PFOS
10/10/2023	3.1	11
11/01/2023	3.3	19
12/12/2023	2.7	9
01/16/2024	2.3	8.7
02/20/2024	3.5	9.9
03/13/2024	3.2	9.1
04/05/2024	3.2	12
05/08/2024	3.2	11
06/24/2024	3.3	13
07/09/2024	2.6	11
08/13/2024	3.8	12
09/10/2024	3.2	13
10/03/2024	3.4	11
12/03/2024	3.6	12
01/06/2025	4.5	16
02/19/2025	2.6	8.7
03/04/2025	2.4	6.8
04/08/2025	2.8	11
05/14/2025	2.4	11
06/16/2025	2.8	10
07/10/2025	3.1	14
08/14/2025	2.8	13
09/16/2025	2.7	8.3
10/07/2025	3.1	9.4
11/18/2025	2.8	7.7
12/04/2025	3	9.2


Blount Street Generating Station Outfall 003
PFOS/PFOA Sample Results
Concentration (ppt)
20
18
16
14
12
10
8
6
4
2
0
y = 0.0024x - 97.514
y = -0.0004x + 19.69
10/10/2023
12/10/2023
2/10/2024
4/10/2024
6/10/2024
8/10/2024
10/10/2024
12/10/2024
2/10/2025
4/10/2025
6/10/2025
8/10/2025
10/10/2025
PFOA
PFOS
Linear (PFOA)
Linear (PFOS)

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor
Karen Hyun, Ph.D., Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

03/02/2026

Ryan C. Johnson, Assistant Manager
Madison Gas and Electric Company's Blount Station
P.O. Box 1231
Madison, WI 53701-1231

Subject: Approval of PFOS Minimization Plan

Dear Ryan Johnson:

The Wisconsin Department of Natural Resources (hereafter department) is conditionally approving the PFOS minimization plan (PMP) for the Madison Gas & Electric Blount Generating Station (MGE) facility in Madison, Wisconsin, submitted by yourself, and received for approval on 01/19/2026.

MGE does not intentionally add or use PFOS in the operating processes at the facility, but background sampling data for Lake Monona shows that the intake water is a potential source. The department anticipates that this PMP will be modified over time to address any additional sources if they are identified.

In addition to the two years of permit-required effluent PFOS monitoring, MGE is proposing to take ongoing intake and internal samples to identify potential sources. This data will provide a baseline for determining and/or confirming additional possible PFOS inputs.

The PMP is hereby approved in accordance with s. 283.31, Wis. Stats. and s. NR 106.985(2)(a), Wis. Adm. Code, subject to the following conditions:

1. That if modifications to the approved PMP are necessary, a revised PMP shall be submitted to the department for its approval prior to commencement of the modifications.
2. That the PMP be followed in accordance with the requirements of WPDES Permit No. WI-0001961-10-1 and subsequent approved modifications to the PMP and the permit.

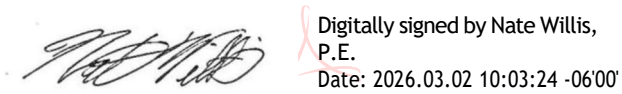
Per s. NR 106.985(2)(b), Wis. Adm. Code, the department will modify MGE's WPDES permit to include the PFOS minimization plan, and other related terms and conditions, including annual progress reporting requirements and a schedule of compliance to meet applicable water quality based effluent limitations. As part of the modification, the approved PMP will be available for public comment as part of the public noticed package.

This conditional approval is not to be construed as a department determination on the issuance of a WPDES permit or an opinion as to the ability of the proposed PMP to comply with effluent limitations in such a permit. Also, this letter is not to be construed as an approval for activities requiring approval under other Wisconsin administrative codes or statutes or by other federal, state or local agencies.

If you believe you have a right to challenge this decision, the Wisconsin statutes and administrative codes establish time periods which requests to review department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the department, to file your petition with the appropriate circuit court and serve the petition on the department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review. The filing of a request for a contested case hearing is not prerequisite for judicial review.

Please contact Nate Willis by phone (608) 535-2369 or email: nathaniel.willis@wisconsin.gov if you have any questions regarding this letter.



Nate Willis, P.E.
Wastewater Section Manager
Bureau of Water Quality

e-cc: Brenda Sargent – MGE
Lisa Creegan – DNR
Sarah Donoughe – DNR
Kenzie Ostien – DNR
Amy Garbe – DNR