Permit Fact Sheet

General Information

Permit Number:	WI-0001961-10-1
Permittee Name:	Madison Gas & Electric Company
Address:	201 S Blount Street
City/State/Zip:	Madison WI 53701-1231
Discharge Location:	Outfall 003 discharges into Lake Monona at the end of Livingston Street
	Latitude and Longitude: 43°04'38.2"N 89°22'12.9"W
	Outfall 009 discharges into the City of Madison's storm sewer on East Main Street
Receiving Water:	Lake Monona
StreamFlow (Q _{7,10}):	Not Applicable
Stream Classification:	Warm Water Sports Fishery (WWSF)

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 version 0001961-10-0.

Changes in this modification are highlighted in gray.

Substantial Compliance Determination

After a desk top review of all discharge monitoring reports, compliance schedule items, and a site visit on 1/4/2023 this facility has been found to be in substantial compliance with their current permit.

	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 ¹	INTAKE: Blount St. Intake Water Temperature for Condenser Cooling Water without additives discharged Thru Outfall 002.			
703	68 MGD Maximum Design Intake ²	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.			

¹ No flow reported on "Wisconsin Pollutant Discharge Elimination System (WPDES) Wastewater Discharge Individual Permit Application" (Form 3400-178)

² Data submitted on "Wisconsin Pollutant Discharge Elimination System (WPDES) Wastewater Discharge Individual Permit Application" (Form 3400-178) by MG&E

	Sample Point Designation					
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)				
003	63.4 MGD Maximum Day ² 63.4 MGD Maximum 7-day Average ² 46.8 MGD Maximum 30-day Average ² 14.1 MGD Maximum Annual Average ²	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	6.348 MGD Maximum Day ² 9068 gpd Maximum 7-day Average ² 2116 gpd Maximum 30-day Average ² 333 gpd Maximum Annual Average ²	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	BLANK: Field blank sample to confirm good quality mercury sample collection procedures.				

Changes from Previous Permit:

Sample Point – Sample point 002 removed

Explanation of Changes from Previous Permit:

Sample point 002 has been removed due to it no longer being used to discharge wastewater from any industrial process and it now being covered by a stormwater permit.

1 Influent - Cooling Water Intake Structure - Proposed Monitoring

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	

Changes from Previous Permit:

No changes from previous permit.

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.	

Changes from Previous Permit

Mercury – mention of Influent Mercury Sampling section removed

Explanation of Limits and Monitoring Requirements

Mercury

The previous version of the permit mentioned seeing the "Influent Mercury Sampling section" for more details, however this section was never included and the mention of it was intended to be removed prior to issuance. Since the mention to that section was not removed prior to reissuance it is being removed as part of this modification.

2 Inplant - Monitoring and Limitations

Sample Point Number: 110- Mercury Field Blank

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

Changes from Previous Permit:

No changes from previous permit.

3 Surface Water - Monitoring and Limitations

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		
PFOA		ng/L	Monthly	Grab		

Changes from Previous Permit

Mercury - Note added

Permit Language – "In either case," removed from section 3.2.1.2 and the list of approved additives removed

Explanation of Limits and Monitoring Requirements

Mercury

Note added to help clarify where to find information about mercury monitoring. This addition does not change any requirements of the permit.

Sample Point Number: 009- Emergency Generator NCCW

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

Changes from Previous Permit:

No changes from previous permit.

4 Schedules

4.1 Annual Certification Statements and Reports for Intake Structure

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.	

4.2 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

4.3 Optimization Study

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

4.4 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), Wis. Adm. Code.	10/01/2024
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.	10/01/2025
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.	

Attachments:

Expiration Date:

9/30/2028

Prepared By: Sawyer Hanson Wastewater Engineer

Date: Enter Date

Notice of modification was published in the Wisconsin State Journal, 1901 Fish Hatchery Road, PO Box 8056, Madison, WI 53708.