

Public Noticed Arrowhead Resort Draft Permit Fact Sheet

General Information

Permit Number	WI-0031909-09-0
Permittee Name and Address	MHC Arrowhead, LLC c/o MSA 1230 South Blvd, Baraboo, WI 53913-2791
Permitted Facility Name and Address	Arrowhead Resort Campground Arrowhead Resort Campground, W1530 Arrowhead Rd, Wisconsin Dells, WI
Permit Term	July 01, 2025 to June 30, 2030
Discharge Location	NW 14, Section 25, T 14N, 4.5E
Receiving Water	groundwaters of the Dell Creek Watershed in Dell Creek of Baraboo-Lemonweir in Juneau County
Discharge Type	Existing, Seasonal April-October
Annual Average Design Flow (MGD)	0.0259 MGD
Industrial or Commercial Contributors	None
Plant Classification	A4 - Ponds, Lagoons and Natural Systems; SS - Sanitary Sewage Collection System
Approved Pretreatment Program?	N/A

Facility Description

The Arrowhead Resort Campground generates domestic wastewater that passes through two septic tanks prior to entering a lift station. The facility has an annual average design flow of 0.0259 million gallons per day (MGD) discharged seasonally, with an actual annual average influent flow for 2023 of 0.005 MGD. Two submersible pumps convey the water to a 150,000 gallon aerated pond. The pond effluent discharges to the groundwater of the Dell Creek watershed via a seepage cell. The sludge generated in the septic tank is hauled by a private septage hauler and therefore handled under NR 113 (as septage). Operational changes since the last permit term include the installation of new influent and effluent flow monitoring equipment. Monitoring changes proposed for this permit issuance include influent and effluent flow now monitored continuously, and a compliance schedule to address the new pond liner installation.

Substantial Compliance Determination

Enforcement During Last Permit: Enforcement During Last Permit: A Notice of Noncompliance (NON) was issued on October 6, 2021 for repeated exceedances of the maximum water loss rate of 1,000 gal/acre/day per s.

NR 110.24(4)(b)1, Wis. Adm. Code. So far, the facility has installed and calibrated flow meters, cleaned the influent lift station tanks, and has upgraded the control panels. The facility's final step will be to replace the liner system in the aerated lagoon in the Spring of 2025.

After a desk top review of all: discharge monitoring reports, and a site visit on 9/18/2024, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Michael Chang on 9/18/2024.

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)
701	0.005 MGD (2023)	Representative influent samples shall be collected from the lift station wet well.
001	0.0034 MGD (2023)	Representative effluent samples shall be collected from the manhole after the aerated lagoon.
901		Solids from septic tank.

Permit Requirements

Influent – Monitoring Requirements

Sample Point Number: 701- FROM LIFT STATION WET WELL

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	2/Month	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Monthly	Grab	
Nitrogen, Organic Total		mg/L	Monthly	Calculated	

Changes from Previous Permit:

Influent limitations and monitoring requirements were evaluated for this permit term and determined that flow sample type be changed from calculated to continuous to reflect new flow monitoring equipment capability.

Explanation of Limits and Monitoring Requirements

Influent monitoring is needed to assess loading to the facility and treatment performance. The required parameters and sampling frequency are appropriate for a land treatment system as outlined in ch NR 206, Wis. Adm. Code.

Land Treatment – Monitoring and Limitations

Sample Point Number: 001- EFFLUENT MANHOLE

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total	Monthly Avg	50 mg/L	2/Month	Grab	
Solids, Total Dissolved		mg/L	Monthly	Grab	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Nitrogen, Nitrite + Nitrate Total		mg/L	Monthly	Grab	
Nitrogen, Total		mg/L	Monthly	Calculated	
Nitrogen, Organic Total		mg/L	Monthly	Calculated	
Chloride		mg/L	Monthly	Grab	

Changes from Previous Permit:

Effluent limitations and monitoring requirements were evaluated for this permit term and flow monitoring sampling type has been changed from calculated to continuous to reflect new flow monitoring equipment capability.

Explanation of Limits and Monitoring Requirements

All requirements for land treatment of municipal wastewater are determined in accordance with ch. NR 206, Wis. Adm. code. All categorical limits are based on s. NR 206.08(1) absorption pond Wis. Adm. Code.

Septage Management - Monitoring and Limitations

Septage management is required in accordance ch. NR 113, Wisconsin Administrative Code. Records must be kept and made available to the Department on request. Required record keeping includes volumes of septage pumped, dates when the septage was removed, land application site DNR number and method used to satisfy pathogen and vector control, and/or the treatment plant where septage is disposed. Annual reporting is required when the permittee land applies the septage. Annual reporting is also required when the permittee disposes of septage at a designated treatment facility.

Sample Point Number: 901- SEPTIC TANK

Changes from Previous Permit:

None

Explanation of Limits and Monitoring Requirements

Requirements for septage management are determined in accordance with ch. NR 113, Wis. Adm. Code.

Schedules

Pond Liner Installation

Required Action	Due Date
Submit Liner Plans and Specs: The permittee shall submit plans and specifications of the new liner to the WDNR Plans and Specs unit for review and approval.	08/31/2025
Installation Completion: The permittee shall complete the installation of the new liner in the aerated lagoon.	10/31/2025

Other Comments

Influent and effluent sampling points have had flow meters installed (Installed March 2023). The flow meters are calibrated annually. The facility is planning to replace the aeration lagoon liner in Spring of 2025 to address the effluent leakage rates and have been given a corresponding compliance schedule.

Attachments

Public Notice - Wisconsin Dells Events, 716 Elm St, PO Box 116, Wisconsin Dells, WI53965.

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By: Angela Parkhurst Wastewater Specialist

Date: 04/09/2025