

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division

MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)

Permit Fact Sheet

Permittee: John Collins

Permit No.: MT0031658

Receiving Waters: Whitefish Lake

Facility Information:

Name: Collins Pool House
Contact: John Collins
Location: 3080 East Lakeshore Dr.
Whitefish, MT 59937
County: Flathead

Fee Information:

Major/Minor: Minor
Type: Private
Number of Outfalls: 1 (for fee determination only)
Outfall 001: Noncontact Cooling Water

TABLE OF CONTENTS

1	BACKGROUND	3
1.1	PERMIT AND APPLICATION INFORMATION.....	3
1.2	FACILITY DESCRIPTION.....	3
1.3	WASTEWATER TREATMENT OR CONTROLS	3
1.4	DISCHARGE POINTS.....	3
1.5	COMPLIANCE SUMMARY	5
2	EFFLUENT LIMITATIONS.....	5
2.1	TECHNOLOGY-BASED EFFLUENT LIMITATIONS (TBELs).....	5
2.2	WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBELs)	6
2.3	PROPOSED FINAL EFFLUENT LIMITATIONS AND CONDITIONS.....	11
3	MONITORING AND REPORTING REQUIREMENTS	12
3.1	MONITORING LOCATION	13
3.2	MONITORING REQUIREMENTS	13
4	SPECIAL CONDITIONS.....	15
5	STANDARD CONDITIONS.....	15
6	NONSIGNIFICANCE DETERMINATION	15
7	PUBLIC PARTICIPATION	15

1 BACKGROUND

John Collins (hereinafter Permittee) is the owner and operator of the Collins Pool House (hereafter Facility), which is a private residence.

In this permit and fact sheet, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, policy, plans, or implementation procedures are held to be equivalent to references to the Permittee in the permit and fact sheet.

Montana has adopted a number of federal regulations by reference which are used as a basis for effluent limitations and permit conditions. Reference to “director” or “state director” in these federal regulations means the Department of Environmental Quality (DEQ) when these references are to a delegated state program, otherwise, it refers to the Regional Administrator of the Environmental Protection Agency (EPA).

1.1 Permit and Application Information

Discharges from this Facility was first regulated by MPDES permit number MT0031658, which was issued on July 22, 2010 and renewed on November 23, 2015. The 2015 permit expired on December 31, 2020 and was administratively continued on September 9, 2020.

The terms and conditions of the 2015 MPDES permit have been administratively continued and remain in effect until a new permit becomes effective.

1.2 Facility Description

The discharge is from an open end heat exchange system that withdraws water from Whitefish Lake (Lake) and uses it for heating or cooling purposes. The water is then discharged back into the Lake. The water is used to heat and cool an indoor pool and a 6,500 square foot structure. The system runs intermittently between 0 and 24 hours per day depending upon conditions. The system employs a once through cooling and heating water loop and does not inject or use any chemical controls.

The intake structure is located approximately 40 feet from shore at a depth of 45 feet below the surface. The intake pump is secured to a metal pump bracket approximately 2-feet off the Lake floor. The discharge pipe is located approximately 60 feet south of the intake pipe at a depth of 50 feet below the surface and is secured approximately 2 feet above the Lake bottom.

1.3 Wastewater Treatment or Controls

Water is extracted from the Lake and returned at the same rate. There is no treatment provided by the system.

1.4 Discharge Points

The discharge is to Whitefish Lake through a 3 inch pipe which is located 60 feet from the east shore near Eagle Point at a depth of 50 feet below the surface. Discharge location and receiving water information is described in Table 1-1. The beneficial use classifications and applicable water quality standards for the receiving water are identified in Section 2.

Table 1-1. Discharge Location(s)				
Outfall	Latitude	Longitude	Receiving Water	Water-Use Classification
001	48° 28' 40"N	114°23 '60"W	Whitefish Lake	A-1

1.4.1 Permit Fee Determinations

The Montana Water Quality Act (MWQA) requires that permit fees be assessed that are sufficient to cover the cost of administering the permit program. Permit fees are based on the type of waste (sewage, process wastewater, storm water, noncontact cooling water, etc.) and receiving water or stream segment. An annual fee for multiple outfalls is not required unless the discharges are to different receiving waters or result in multiple or variable effluent limits. Table 1-2 identifies, individually or by group, the type of wastewater and receiving water by outfall for which effluent limits will be required.

Table 1-2. Summary Outfall Categories for Fee Purposes			
Group	Effluent Description	Receiving/Source Water	Outfall
A	Noncontact Cooling Water	Whitefish Lake	001

1.4.2 Effluent Characteristics

The Permittee is required to provide quantitative data on certain pollutants in the effluent and volume of the discharge in the permit application. This information is used to determine what pollutants are present in the discharge and determine the level of treatment necessary to comply with the applicable water quality standards. Effluent characteristics provided by the Permittee in the permit application are summarized below.

The only pollutant added to the discharge is heat generated by the cooling process. According to the 2010 permit application the heat pump discharges 357,100 British thermal units per hour (Btu/h) at design capacity. The maximum pumping capacity of the heat exchange pumps is 75 gallons per minute (gpm) or 0.108 million gallons per day.

The 2015 permit set effluent limitations on temperature which required the temperature to be maintained between 32 and 75° Fahrenheit (F). During the last permit, the temperatures ranged from 38.2 to 67.0° F.

1.4.3 Planned Changes

There are no changes in the operation of the heat exchange system proposed by the Permittee.

1.4.4 Other Information

The Permittee has requested that the maximum temperature limit be 75° F. This request is a result of the location and depth of the intake structure in the Lake.

1.5 Compliance Summary

The DEQ conducted a compliance evaluation inspection on October 11, 2017 and found the Facility to be in compliance with the permit.

2 EFFLUENT LIMITATIONS

Permits specify any limitations imposed on the strength and other significant characteristics of the waste to be discharged. There are two principal bases for effluent limitations: technology-based effluent limitations (TBELs) that specify the minimum level of treatment or control for conventional, non-conventional, and toxic pollutants and water quality-based effluent limitations (WQBELs) that attain and maintain applicable numeric and narrative water quality standards.

2.1 Technology-based Effluent Limitations (TBELs)

Section 402(a)(1) of the federal Clean Water Act (CWA) and the federal regulations at 40 CFR 125.3(a) require that permits issued under Section 402, including those issued by state programs, contain TBELs that implement the technology-based treatment requirements specified in the CWA. These technology-based requirements may be national technology standards for existing sources or new sources established by EPA or, in some cases, standards established by the permit writer on a case-by-case basis.

2.1.1 Applicable Federal Effluent Limit Guidelines (ELG)

There are no federal ELG that apply to residential heat exchanges systems.

2.1.2 Case-by-Case Requirement

Thermal discharges are subject to the effluent limitations reflecting the best technology economically achievable (BAT). Since EPA has not promulgated BAT requirements for heat exchange systems, BAT requirements can be established on a case-by- case basis.

According to the 2010 permit application, the manufacturer's design temperature change for the open water heat exchange system is 10° F. Conformance to the design standard of 10° F is considered BAT for this discharge.

2.2 Water Quality-based Effluent Limitations (WQBELs)

Permits must include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. The degree of waste treatment required to restore and maintain the quality of state water shall be based on the surface water quality standards and: 1) the state's policy of nondegradation of existing water quality; 2) present and anticipated (designated) uses of the receiving water; 3) the quality and nature of flow of the receiving water; 4) the quantity and quality of sewage, industrial or other wastes to be treated; and, 5) the presence or absence of other sources of pollution in the watershed.

2.2.1 Applicable Water Quality Standards

The specific standards are given in ARM 17.30.621 - 629 and incorporate by reference DEQ Circular DEQ-7 which contains numeric water quality standards for protection of aquatic life and human health.

ARM 17.30.637(1) requires that state waters must be free from substances which will: (a) settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines; (b) create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials; (c) produce odors, colors or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible; (d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life; and (e) create conditions which produce undesirable aquatic life.

For new sources discharging to high quality waters effluent limitations for numeric and narrative standards are modified by the criteria in ARM 17.30.715 which are based on the protection of existing water quality.

Water Use Classification and Standards

The Facility discharges into Whitefish Lake which is located in Flathead River drainage. The watershed is located in USGS Hydrological Unit Code (HUC) 17010210 and identified as Montana stream assessment unit MT76P004_010. The designated water-use classification for Whitefish Lake and its tributaries is A-1. Designated beneficial uses are summarized in Table 2-1.

Classification	Beneficial Uses
A-1	Drinking, culinary, and food processing purposes after conventional treatment for removal of natural impurities; Bathing, swimming, and recreation; Growth and propagation of non-salmonid fishes and associated aquatic life, waterfowl, and furbearers; and, agricultural and industrial water supply.

The discharge of thermally heated or cooled effluent will cause a change in temperature of the receiving water in the vicinity of the discharge. Temperature standards address both the maximum temperature and rate of change which are summarized in Table 2-2. These standards apply to the waterbody outside any approved mixing zone.

Table 2-2. Temperature Standard	
Condition	°F
Maximum	67
Range	32 to 66
Maximum increase within range	1
Maximum increase if > 66.5	0.5
Maximum decrease 55-32	2° per hour

2.2.2 Design Conditions

Montana water quality standards state that no wastes may be discharged, either alone or in combination with other wastes, or activities that will violate or can reasonably be expected to violate any of the standards. In order to establish discharge limitations in permits it is necessary to determine certain characteristics of the receiving water that are critical for the protection of designated uses. Both the quantity and quality of the receiving water vary on a daily and seasonal basis. Montana water quality standards establish certain critical conditions for surface water that establish the basis for limiting the discharge of pollutants in surface water.

Critical Stream Flow (Q_s)

Critical stream flow is based on the specific standards of ARM 17.30.620-629 which requires that discharge permits not cause receiving water concentrations to exceed applicable standards when stream flows equal or exceed the design flows specified in ARM 17.30.635(2). This rule states that the receiving water design flow for point source discharges must be based on the minimum consecutive seven day average flow which may be expected to occur on the average once in 10 years (7Q10).

Lake and reservoirs with residence times greater than 20 days are generally considered to have zero flow through. Critical conditions in lakes are usually determined by local conditions based on thermal stratification, wind speed and direction, and solar radiation. Therefore, a determination of critical stream flow is not applicable to this discharge.

Critical Background Receiving Water Pollutant Concentration (C_s)

The critical pollutant concentration is the average or mean concentration expected in the receiving water during the flow period corresponding to the critical stream flow (7Q10). Since the critical stream flow is an infrequent event, the pollutant concentration must be estimated based on existing water quality data that are collected at non-critical conditions. The critical receiving water pollutant concentration is not given by a single value but is estimated to be in a range defined by the first quartile (25th percentile) and third quartile (75th) percentile of the measured background data.

Temperature data was collected from Whitefish Lake by the Whitefish Lake Institute (WLI) for 2007, 2008, and 2009 at Site IP-1. This location is approximately 2,000 feet south of the intake structure at the deepest part of the Lake. The WLI data shows a thermocline between 35 and 65 feet below the

surface. The temperature below the thermocline is typically in the 40 to 45° F range whereas, the temperature in and above the thermocline averages 65 to 55°F in late summer and fall, respectively. The position of the thermocline can therefore impact the temperature of water entering and leaving the heat exchange system.

2.2.3 Impaired Waters

Section 75-5-703, MCA requires that DEQ complete a total maximum daily load (TMDL) for those water bodies that are identified as threatened or impaired. These requirements satisfy sections 303(d) and 305(b) of the federal Clean Water Act.

Upon approval of the TMDL, the wasteload allocation (WLA) developed for a point source must be incorporated into the Facility's discharge permit. Pending completion of a TMDL on a listed waterbody, a point source discharge may continue or commence provided that: 1) the discharge is in conformance with the state's nondegradation policy and rules; 2) the discharge will not cause a decline in water quality for any parameter by which the water body is impaired; and, 3) minimum treatment requirements are met. A WLA is defined as the portion of the receiving water's loading capacity that is allocated to one of its existing or future point sources.

2020 303(d) List

The discharge is to Whitefish Lake (MT76P004_010) which is listed as a Category 5 waterbody on Montana's draft 2020 Clean Water Act 303(d) list. Category 5 means one or more beneficial uses are impaired or threatened and a TMDL is required to address the factors causing the impairment. Probable causes of impairment are mercury and polychlorinated biphenyls.

TMDL

A TMDL has not been completed for the receiving water or any applicable downstream receiving water.

2.2.4 Pollutants of Concern for WQBELs

WQBELs are assessed for pollutants of concern (POC) based on the effluent characteristics and the water quality objectives for the affected receiving water(s). POC include but are not limited to, those pollutants listed in Appendix D to 40 CFR 122 and that are present in the discharge or are subject to a federal effluent limit guideline (ELG). These pollutants are required to be reported on the Facility's MPDES permit application. In addition any pollutant that has been assigned a wasteload allocation as part of a TMDL or for which the receiving water body is listed as impaired on the State's 303(d) list, or whose critical effluent concentration exceeds a numeric or narrative water quality standard or when applicable, a numeric or narrative nondegradation criterion.

Due to the nature of the discharge, once through cooling water, heat is the only pollutant of concern. The discharge will not affect any of the pollutants on the 303(d) list.

2.2.5 Nondegradation Analysis

The MWQA includes a nondegradation policy at 75-5-303, MCA which protects both the existing uses of state waters and requires that the quality of those waters must be maintained and protected.

Degradation is defined as any change in water quality that lowers the quality of high quality water for a parameter. This policy applies to any new or increased activity which results in a change in existing water quality. The MWQA states that it is unlawful to cause degradation of state waters unless authorized by DEQ pursuant to ARM 17.30.706-708. The regulations at ARM 17.30.701-718 implement the state's nondegradation policy. The level of protection provided to the receiving water(s) is specified in ARM 17.30.705(2) and conforms to three "tiers" of the federal antidegradation policy at 40 CFR 131.12. These three levels of protection are as follows:

Protection of Existing Uses (Tier 1): Existing and anticipated (designated) uses of state waters and the level of water quality necessary to protect those uses must be maintained and protected (ARM 17.30.705(2)(a)). Tier I protection applies to all state waters including waters not designated as high quality. The effluent limitations applied to outfalls subject to this level of protection are derived from and comply with the state's numeric and narrative water quality standards and, therefore, ensure the level of water quality necessary to attain and maintain existing and anticipated uses are fully protected. In accordance with ARM 17.30.706(3)(d), effluent limitations based on this level of protection might need to be based on protection of any downstream or downgradient receiving waters, which could require a higher level of protection.

Protection of High Quality Waters (Tier 2): Unless authorized by the Department under ARM 17.30.706 – 708 (Authorization to Degrade) or exempted from review under 75-5-317, MCA, the quality of high-quality waters must be maintained. ARM 17.30.705(2)(b) and 75-5-303(2), MCA. High quality waters as defined in 75-5-103(10), MCA and ARM 17.30.702(8), includes all state surface waters except those not capable of supporting any one of the designated uses for their classification or that have zero flow or surface expression for more than 270 days during most years. Any water body for which the critical receiving water pollutant concentration (C_s) is less than the applicable water quality standard (S) is considered high quality. This determination is made on a parameter by parameter basis and may include waters listed on the state's 303(d) list.

Protection of Outstanding Resource Waters (Tier 3): ARM 17.30.705(2)(c) requires that, for outstanding resource waters, no degradation is allowed and no permanent change in the quality of outstanding resources waters resulting from a new or increased point source discharge is allowed.

Though the nondegradation criteria are not numeric water quality standards, a discharge that meets these criteria is in compliance with Montana's nondegradation policy. New discharges (or sources) that are able to meet WQBELs based on application of nonsignificance criteria in 17.30.715 (1) are not required to submit an authorization to degrade state waters under ARM 17.30.706-708.

DETERMINATION – NEW OR INCREASE SOURCES

Since the heat exchange system came online after April 29, 1993, the discharge from Outfall 001 is a new source. The receiving water, Whitefish Lake, is considered high quality. The appropriate level of protection under Montana's nondegradation requirements is Tier 2.

2.2.6 Mixing Zones

A mixing zone is an area where the effluent mixes with the receiving water and certain numeric water quality standards may be exceeded. The Board has adopted rules governing the granting of mixing zones in surface and ground water. These rules require that DEQ determine the applicability of any

mixing zone in the permitting process. Mixing zones allowed under a permit issued prior to April 29, 1993, will remain in effect unless there is evidence that previously allowed mixing zones will impair existing or anticipated uses. Discharges that do not conform to the criteria of ARM 17.30.501-518 are subject to review and modification.

Where a mixing zone is requested by a discharger, DEQ must determine whether the requested mixing zone may or may not be granted for a particular parameter and, if a mixing zone is granted, the type of mixing zone. Unless specifically requested, granted, and identified in the permit and permit fact sheet, a mixing zone is not assumed for any parameter. The effluent must comply with all applicable effluent limitations and standards, and other treatment requirements in ARM 17.30.1203, 1206, and 1207 prior to the issuance of a mixing zone.

The discharge must also comply with the general prohibitions of ARM 17.30.637(1), which require that state waters, including mixing zones, be free from certain substances. DEQ may not grant a mixing zone without information provided by the permittee to complete a water quality assessment.

The 2015 permit granted a source specific mixing zone for temperature up to a radius of 76 feet from the point of discharge. This mixing zone was based on a discharge of 75 gpm and a 10°F change in the temperature not to exceed 66° F in the discharge. The analysis demonstrated compliance with both the water quality standard and nondegradation criterion within the mixing zone. The permit will maintain the 76 foot mixing zone granted in the 2015 permit.

2.2.7 Reasonable Potential Analysis (RPA)

No wastes may be discharged, either alone or in combination with other wastes, or activities, which will violate, or can reasonably be expected to violate any of the standards. All discharges must be assessed to determine the need for effluent limitations more stringent than TBELs. Limitations must be established in permits to control all pollutants that are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard. A “reasonable potential analysis” (RPA) is used to determine whether a discharge could lead to an exceedance of a numeric or narrative water quality standard. For new sources subject to the nondegradation requirements the water quality standard is modified by the nonsignificance criterion given in ARM 17.30.715.

The RPA must account for other sources of pollution in the receiving water, the variability of the effluent, and where appropriate, dilution of the effluent in the receiving water. Pollutant concentration in the receiving water must reflect the current condition of the receiving water.

The only pollutant in the discharge is waste heat generated by the cooling process. The permit will maintain the effluent limitation for temperature established by the 2015 permit. RPA for additional pollutants is not necessary.

REASONABLE POTENTIAL ANALYSIS (RPA)—WHOLE EFFLUENT TOXICITY

In addition to effluent limitations for individual pollutants, the aggregate toxicity of the effluent must be considered and effluent limitations included where there is a reasonable potential to cause or contribute to toxicity in the receiving water.

The effluent consists once through cooling water which is withdrawn from the Lake and returned after heat is removed or added. There are no chemical or other pollutants added to the cooling water, therefore toxicity is not expected.

2.2.8 Water Quality Based Effluent Limits (WQBELs)

Water quality based effluent limits must be included in the discharge permit both individual pollutants and for WET when there is a reasonable potential to exceed a numeric or narrative standard. The procedures, model inputs and derived WLAs are described in EPA's *Technical Support Document for Water Quality Based Toxic Control*, EPA/505/2-90-001, March 1991 (TSD).

The proposed maximum effluent limit for temperature is 75° F based on the mixing zone analysis discussed in section 2.2.6 of this fact sheet.

2.3 Proposed Final Effluent Limitations and Conditions

The final effluent limitations in the permit are based on the more stringent of the calculated TBELs and WQBELs for each parameter, subject to an anti-backsliding analysis. The stringency analysis ensures that the more stringent of the TBELs and WQBELs are included in the permit as final limits. The final proposed effluent limits are given in Section 2.3.3.

2.3.1 Stringency Analysis

In the absence of federal TBELs the design standard of a temperature change of 10° F was considered BAT. The permit will continue to require monitoring of influent and effluent temperature. The proposed final effluent limits in the permit are for temperature only.

2.3.2 Anti-backsliding Analysis

Section 402(o) of the Clean Water Act (CWA) and section 122.44(l) require, with some exceptions, that effluent limitations or conditions in reissued permits be at least as stringent as those in the existing permit. The draft permit does not propose any limits less stringent than the existing permit

2.3.3 Final Proposed Effluent Limitations and Conditions

The quality of pollutants discharged from Outfall 001 shall not exceed the following:

The maximum discharge temperature is 75° F.

The minimum discharge temperature is 32° F.

3 MONITORING AND REPORTING REQUIREMENTS

All permits must specify: 1) requirements concerning the proper use, maintenance, and, when appropriate installation of monitoring equipment or methods (including biological monitoring); 2) required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity, including continuous monitoring; 3) applicable reporting requirements based upon the impact of the regulated activity and; 4) as applicable, include monitoring and reporting of storm water discharges. ARM 17.30.1351. This section provides the basis for the monitoring and reporting requirements included in the permit.

In addition to the requirements of ARM 17.30.1351, permits must include monitoring requirements sufficient to determine compliance with permit limitations and other conditions of the permit including requirements to monitor: 1) the mass or other measurement specified in the permit, for each pollutant limited in the permit; 2) the total volume of effluent discharged from each outfall; 3) other measurements, as specified in 40 CFR 122.44(i)(iii); and, 4) pollutants according to test procedures approved under 40 CFR 136, unless another method is specified in 40 CFR Subchapters N or O.

Analytical methods must achieve the required reporting value (RRV) specified in the latest version of DEQ Circular DEQ-7, unless otherwise specified in the permit. In order to maintain consistency with federally approved analytical methods and regulation, the minimum reporting limit is specified in terms of minimum level which is a function of the method detection limit (MDL) (40 CFR 136, Appendix B). The Permittee may use any approved analytical method capable of achieving the reporting level specified in the permit.

Effluents must be measured and sampled prior to dilution with any receiving waters for compliance with the effluent limitations given in the discharge permit. Effluent limitations are based on daily discharge. Daily discharge means the discharge of pollutants measured during a calendar day. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

In addition to the specific monitoring requirements described in this section, the permit contains standard monitoring requirements contained in ARM 17.30.1342.

3.1 Monitoring Location

The authorization to discharge is limited to those locations specially identified in the Facility’s MPDES permit application and designated in the permit. The Permittee must monitor the effluent to demonstrate compliance with the effluent limitations and other requirements of the permit at the locations specified below.

Table 3-1. Monitoring Locations		
Outfall Designation	Monitoring Location Designation	Monitoring Location Description
001	001A	Effluent line located in control room prior to discharge to the Lake and after passing through the heat exchange system
001	001B	Influent line located in control room prior to heat exchange unit

Influent and effluent lines are continually monitored with a SCADA (supervisory control and data acquisition) unit located in the mechanical equipment room. The SCADA system is designed to record flow and temperature of the inflow (Lake water) and outflow from the heat exchange system at a minimum of 10 minute intervals. Because the SCADA unit is located in a heated building, temperature readings taken when the pump is not running may reflect the ambient temperature of the building and not the water. The SCADA system was modified to only take temperature readings when the system is running.

3.2 Monitoring Requirements

The proposed monitoring requirements for influent and effluent are given in Tables 3.2 and 3.3 for effluent and influent, respectively. The permit will continue to require monitoring and reporting of minimum and maximum monthly effluent temperature to comply with permit limits. In addition, the Permittee will be required to record and calculate the average monthly temperature change (ΔT) based on monthly average influent and monthly average effluent temperature, as follows:

$$\Delta T = T_{EFF} - T_{INF}$$

Where: T_{EFF} = Effluent Temperature, and
 T_{INF} = Influent Temperature.

Monitoring for pH, duration of discharge, and oil and grease in the effluent are no longer required. Monitoring for pH and flow of the influent are no longer required.

Table 3-2. Effluent Monitoring Requirements at Monitoring Location 001A

Parameter	Units	Minimum Monitoring Frequency	Sample Type	Minimum Level	Basis
Effluent Flow Rate	gal/d	Continuous	Recorder	--	Report Only
Temperature, Instantaneous Maximum	°F	Continuous	Recorder	0.1	Permit Compliance
Temperature, Instantaneous Minimum	°F	Continuous	Recorder	0.1	Permit Compliance
Temperature, Average Monthly	°F	1/Month	Calculate	0.1	Report Only
Temperature Change Monthly Average	°F	1/Month	Calculate	0.1	Report Only

Table 3-3. Influent Monitoring Requirements at Monitoring Location 001B

Parameter and Code	Units	Minimum Monitoring Frequency	Sample Type	Minimum Level	Basis
Temperature, Average Monthly	°F	1/Month	Calculate	0.1	Report Only

4 SPECIAL CONDITIONS

No Special Conditions are necessary in this permit.

5 STANDARD CONDITIONS

Standard conditions must be included in all MPDES permits and the Permittee must comply with all standard conditions at all times. These requirements are expressly incorporated into the permit. In addition to these requirements, ARM 17.30.1343 and 40 CFR 122.42 establishes additional conditions applicable to specific categories of MPDES permits including: notification requirements for municipal and non-municipal dischargers, reporting requirements for municipal separate storm sewer systems, compliance requirements for individual storm water permits, and additional requirement for concentrated animal feeding operations.

6 NONSIGNIFICANCE DETERMINATION

The MWQA states that it is unlawful to cause degradation of state waters without an authorization issued pursuant to 75-5-303, MCA [75-5-605(1)(d), MCA]. ARM 17.30.706(2) states that DEQ will determine whether a proposed activity may cause degradation for all activities which are permitted, approved licensed or otherwise authorized by DEQ such as issuance of a discharge permit. A nondegradation analysis was conducted in Section 2 of this permit fact sheet for the proposed discharges and activities regulated by this permit.

Based on this analysis DEQ has determined that the discharge authorized by this permit will not cause degradation of state waters. The mixing zone analysis demonstrates that the thermally heated or cooled effluent will meet nonsignificance criteria for temperature in the receiving water.

7 PUBLIC PARTICIPATION

DEQ issued Public Notice No. MT-21-02 dated January 25, 2021. The public notice states that a tentative decision has been made to issue an MPDES permit to the Permittee and that a draft permit, fact sheet and environmental assessment (EA) have been prepared. Public comments are invited any time prior to the close of the business on February 24, 2021. Comments may be directed to:

DEQ Permitting and Compliance Division
Water Protection Bureau
PO Box 200901
Helena, MT 59620

or

DEQWPBPublicComments@mt.gov

All comments received or postmarked prior to the close of the public comment period will be considered in the formulation of the final permit. DEQ will respond to all substantive comments and issue a final decision within sixty days of the close of the public comment period or as soon as possible thereafter.

All persons, including the applicant, who believe any condition of a draft permit is inappropriate or that DEQ's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available

arguments supporting their position by the close of the public comment period (including any public hearing).

7.1.1 Notification of Interested Parties

Copies of the public notice were mailed to the discharger, state and federal agencies and interested persons who have expressed an interest in being notified of permit actions. A copy of the distribution list is available in the administrative record for this permit. In addition to mailing the public notice, a copy of the notice and applicable draft permit, fact sheet and EA were posted on DEQ's website for 30 days.

Any person interested in being placed on the mailing list for information regarding this MPDES permit should contact DEQ, reference this Facility, and provide a name, address, and email address.

7.1.2 Public Hearing Written Comments

During the public comment period provided by the notice, DEQ will accept requests for a public hearing. A request for a public hearing must be in writing and must state the nature of the issue proposed to be raised in the hearing.

7.1.3 Permit Appeal

After the close of the public comment period DEQ will issue a final permit decision. A final permit decision means a final decision to issue, deny, modify, revoke and reissue, or, terminate a permit. A permit decision is effective 30 days after the date of issuance unless a later date is specified in the decision, a stay is granted pursuant to ARM 17.30.1379, or the applicant files an appeal pursuant to 75-5-403, MCA.

The Applicant may file an appeal within 30 days of DEQ's action to the following address:

Secretary, Board of Environmental Review
Department of Environmental Quality
1520 East Sixth Avenue
PO Box 200901
Helena, Montana 59620-0901

7.1.4 Additional Information

Requests for additional information or questions regarding this permit should be directed to: Jon Kenning at jkenning@mt.gov.