



Industrial User Facility Inspection Report U.S. EPA, Region 8

Name of industry and location:		Control Authority / NPDES Permit No.	
Montana Craft Malt 50 Sod Farm Road Butte, MT 59750		City and County of Butte-Silver Bow NPDES Permit No. MT-0022012	
IU – NPDES ID		MTPU00124	
Date of visit:		Approximate Time of visit:	
August 15, 2023		1045 – 1230	
Name(s) / Affiliation / email of inspector(s):			
<u>U.S. EPA:</u> Al Garcia, garcia.al@epa.gov <u>City and County of Butte-Silver Bow:</u> - Eric Gonder, egonder@bsb.mt.gov - Bill Andrene, bandrene@bsb.mt.gov - John Osterman, josterman@bsb.mt.gov - Christina Eggensperger, ceggensperger@waterenvtech.com			
General Facility Information:			
<u>Representatives at Inspection:</u> - Jen Obrien – President, jen@montanacraftmalt.com - Gunnar Brekke, Plant Manager, gunnar@montanacraftmalt.com <u>Type of Business Operations:</u> - Malt Production <u>Facility Information (truck/tanker wash):</u> 16 employees - Malthouse: 7 days/week, 12-hour shift - Warehouse: Mon-Friday, 8-hour shift			
Inspection Description:			
Al Garcia from the U.S. Environmental Protection Agency (EPA), Eric Gonder, Bill Andrene, John Osterman from the City and County of Butte-Silver Bow (BSB) and Christina Eggensperger from WET Consulting conducted an oversight significant industrial user (SIU) inspection of the Montana Craft Malt facility (the facility) located on 50 Sod Farm Road, Butte, MT 59750. The SIU inspection was conducted as part of the EPA Pretreatment audit of BSB's Publicly Owned Treatment Works (POTW) Pretreatment Program and is intended to provide a general overview of the facility to ensure the Pretreatment records reviewed by the EPA adequately address current conditions at the facility. The EPA oversight SIU inspection consisted of an evaluation of the			

wastestreams generated from the unit operations and processes at the facility, including potential for spills and slug discharges. The facility discharges to the sewer collection system leading to BSB's POTW.

Upon arriving at the facility on August 15, 2023 at approximately 10:45 p.m., Al Garcia of the EPA presented credentials to the facility representatives and explained the purpose of the inspection. During the opening interview, the facility representatives provided an overview of the operations and processes at the facility, wastestreams generated and management of these wastestreams. The opening interview was followed by a facility tour to visually inspect the unit operations. The EPA conducted a closing conference to discuss potential findings and recommendations identified during the inspection.

Process Description:

The Montana Craft Malt facility located at 50 Sod Farm Road, Butte MT 59750 is a malt production facility and produces about 10,000 metric tons annually. The barley and grains are received from the independent, local growers in trucks or grain trailers. The facility contract with the growers requires sorting and cleaning of the purchased grain, prior to receipt by the facility. This helps the facility maintain quality of the finished product. The facility performs dockage calculations of the grain received at its facility to ensure it meets quality criteria. The grain is conveyORIZED into a bucket elevator and stored in the 14 storage bins dedicated to specific grains. The storage bins hold 175,000 lbs.

The grain stored in the bins are conveyORIZED to the two steep tanks, capable of steeping up to 80,000 lbs. The grain is put into the steeping tank and the tank is filled with water and a displacement blower located at the bottom of the tank allow the barley to absorb moisture during the immersion cycle. The immersion cycle lasts about 10 to 12 hours and approximately 7,000 to 8,000 gallons of wastewater is drained to the wastewater collection tank. The wastewater collection tank has a designed capacity of about 22,000 gallons but due to the installation dynamics of the equipment has a capacity that is significantly less, according to Mr. Brekke.

The grain is allowed to dry after the 1st immersion cycle and carbon dioxide is removed from the grain load to the atmosphere for about 10-14 hours and a 2nd immersion cycle is performed. The grain then undergoes a dry arrest and is conveyORIZED to the germination vessels in the malt house. The malt house has four 80,000 lb germination vessels. The germination operation is a four-day process in which the temperature and humidity is maintained above and below the grain mass to promote germination. Each vessel is equipped with rotating augers to help mix the grain in the vessel.

The germinated grain is then conveyORIZED to the kiln vessel to dry the grain and arrest germination. This grain is contained in the malt kiln for about 18-24 hours. The finished malt is conveyORIZED from the malt kiln to the 24 finished malt bins, each with a storage capacity of 175,000 lbs. The finished malt, prior to packaging/shipping is cleaned in a 2-screen shaker to separate the whole kernel grain from the fines, with the exception of grain purchased by one customer. The screened fines are augered into the dust collection system and the baghouse. The dust bin is reused for cattle feed. The cleaned grain may be blended for final shipments. The facility ships its malt product in either supersacks, bags or by bulk truck.

Wastewater Treatment

The 22,000-gallon design capacity wastewater collection tank receives wastewater from the immersion cycle in the steep tanks and from the trench drains in the malt house and steeping process area used to convey wastewater from equipment cleaning and floor washdowns. The wastewater collection tank is used to equalize the wastewater, prior to discharge to the sewer. The facility has an automatic sampler that it uses to gather representative samples over the production day from the permitted monitoring point. Based on information gathered from Butte-Silver Bow, it samples directly from the discharges of the steep tanks.

EPA Classification of the Industrial User

The facility produces malt from grains purchased from growers. Butte-Silver Bow has determined that this wastestream is subject to its local limits and has permitted the facility as an SIU, subject to the Pretreatment Regulation found in Butte-Silver Bow's ordinance and 40 C.F.R. Part 403.

Summary of Findings

Montana Craft Malt
NPDES ID# MTPU00124
August 15, 2023

Pretreatment Inspection Findings	Follow up Action Items
None identified during the facility inspection	NA

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Al Garcia	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202 303-312-6382	08/21/2023
Reviewer Name	Address/Phone Number	Date
Stephanie Passarelli	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202 303-312-6803	9/1/23
Supervisor Signature/Name	Address/Phone Number	Date
	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202	9/7/2023
Michael Boeglin	303-312-6250	