

FOREMOST FARMS – MILAN FACT SHEET

GENERAL INFORMATION	
Permit Number: WI-0057541-06	FID: 737097900
Permittee Name and Address: Foremost Farms at Milan, 2294 Randall Rd., Athens, WI 54411	
Receiving Waters: an unnamed tributary to Randall Creek in the Upper Big Eau Pleine River Watershed of the Central Wisconsin River Basin, and the groundwaters of the Upper Wisconsin River Basin in Marathon County.	
Flows:	Outfall 001: Discharge is permitted to surface water, but historically has been discharged to Milan SD WWTP so there has been no effluent flow. Outfall 002: High Strength WW: 4.23 million gallons per year is landspread Outfall 005: Biosolids/High Strength WW: 230 tons/year Outfall 006: Whey/Permeate/Antibiotic Milk: 1.6 million gallons per year
Stream Classification: Limited Aquatic Life, Non-Public Water Supply	
Q(7,10): 0 cfs	

FACILITY DESCRIPTION

<p>Facility Description: Foremost Farms at Milan produces cheese and whey products which generates noncontact cooling wastewater (NCCW), condensate of whey (COW) wastewater, dairy high strength wastewater, plant biosolids, dairy whey, permeate, and antibiotic milk. The NCCW/COW wastewaters are pretreated prior to being discharged to the Milan Sanitary District. The pretreatment train includes equalization, screening of large solids with a strainer, aeration and then additional solids separation with a dissolved air flotation (DAF) system. Biosolids from the DAF is stored onsite and landspread on Department approved sites year round. Even though the facility has not used the surface water outfall designed to discharge the treated NCCW/COW directly to surface water in the past, the facility has requested to retain the outfall in the proposed reissuance. This inclusion gives the permittee the option to renew the direct NCCW/COW water discharge to the unnamed tributary of Randall Creek after notifying the Department and receiving approval prior to initiation of discharge. The remainder of the wastewaters generated are monitored prior to being discharged via landspreading. High strength wastewater is produced at a rate of 4.23 million gallons per year, a mix of biosolids and high strength wastewater a rate of 230 tons/year, and whey/permeate/antibiotic milk at 1.6 million gallons per year. Liquid wastes or sludge are stored in 3 vertical tanks with 90,000 gallon total capacity, a 318,000 gallon steel tank, or in manure pits prior to land application. No major changes in operations are proposed for this reissuance. Monitoring changes proposed for this issuance include 1) the addition of an 86F temperature limit if the surface water outfall will be used, and 2) a requirement to update the land management plan.</p>
Publishing Newspaper: Wausau Daily Herald, PO Box 1286, Wausau, WI 54402-1286

SUBSTANTIAL COMPLIANCE DETERMINATION – Surface Water

	Compliance	Comments
Discharge Limits	N/A	No discharge to surface water
Sampling/testing requirements	N/A	No discharge to surface water
Groundwater standards	N/A	No groundwater discharge
Reporting requirements	N/A	None required
Compliance schedules	N/A	None required
Other:		
Enforcement considerations	No	

In substantial compliance? Yes	Concurrence: N. Wells	Date: 03/03/2016
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SUBSTANTIAL COMPLIANCE DETERMINATION – Land Application

	Compliance	Comments
Discharge Limits	Yes	
Sampling/testing requirements	Yes	
Groundwater standards	n/a	
Reporting requirements	Yes	
Compliance schedules	n/a	
Other:	n/a	
Enforcement considerations	None	
In substantial compliance?	Concurrence: L Hinke	Date: 02-19-16

PERMIT MONITORING AND LIMITATIONS

Outfall Location: Unnamed tributary to Randall Creek/stormwater ditch adjacent to the facility			
Outfall No: 001	Sample Location: Representative samples shall be collected prior to discharge to the unnamed tributary to Randall Creek. Permittee must receive Departmental approval prior to commencing discharge through Outfall 001. Discharge is limited to noncontact cooling water (NCCW) and condensate of whey (COW) water.		
PARAMETER	LIMITATION	SAMPLE FREQUENCY	SAMPLE TYPE
Flow	MGD	Weekly	Total Daily
BOD₅¹	40 mg/L, 53.6 lbs/day Daily Max 20 mg/L, 26.8 lbs/day Monthly Ave	Weekly	24 Hr Comp and Calculated
pH	6.0 su Daily Min, 9.0 su Daily Max	Daily	Grab
Dissolved Oxygen	4.0 mg/L Daily Min	Daily	Grab
Temperature	86°F Dail Max	Weekly	Grab
Ammonia Nitrogen	mg/L	Monthly	24 Hr Comp
Total Kjeldahl Nitrogen	mg/L	Monthly	24 Hr Comp
Chloride	mg/L	Monthly	24 Hr Comp
Copper	µg/L	2X Weekly	24 Hr Comp
Zinc	µg/L	2X Weekly	24 Hr Comp
Hardness	mg/L	2X Weekly	24 Hr Comp
Total Phosphorus	mg/L	Quarterly	24 Hr Comp
Acute WET Testing	TU _a	Quarterly	24 Hr Comp
Explanation of effluent changes from last permit: Addition of an 86F temperature daily max limit. See limit memo dated January 14, 2016 from Pat Oldenburg to Angela Parkhurst.			
Chlorine monitoring or limits: None			
Phosphorus monitoring or limits: Quarterly monitoring since the discharge should be fairly low in phosphorus.			
Ammonia monitoring or limits: Monthly monitoring for one year after discharge begins.			
Temperature: Since the permit was last issued, new temperature criteria have been adopted. Due to the nature of the discharge and receiving stream, a 86F daily max limit is included.			

BIOMONITORING REQUIREMENTS

Is biomonitoring required at this outfall? Yes, acute WET tests required quarterly only if discharge to outfall 001 begins.	Q_s:Q_e: N/A	IWC= N/A
Discussion of existing biomonitoring data: Not applicable		
Primary Control Water: Big Eau Pleine River in Cherokee Park		

CHLORIDES

Is this facility in the targeted category for chlorides? Yes, SIC number 2022 (Cheese, Natural and Processed)	Discuss how the chlorides were addressed at this facility: If discharge to outfall 001 begins, monthly sampling is required for one year to determine a baseline of data for limits calculations during the next permit term.
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LANDSPREADING OF LIQUID WASTES/LEACHATE

All sludge management requirements were determined ch. NR 214, Wis. Adm. Code

Outfall No: 002	Sample Location: Representative samples shall be collected from a truckload of liquid waste prior to land application and prior to mixing with any other landspreading wastestream. Discharge is limited to high-strength wastewater.			
	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
PARAMETER	QUANTITY	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
Total Kjeldahl N		mg/L	Monthly	Grab
Total Chlorides		mg/L	Monthly	Grab
Total Phosphorus		mg/L	Monthly	Grab
Explanation of changes: Additional record keeping for waste going to manure pits.				

LANDSPREADING OF SLUDGE/BY-PRODUCT SOLIDS

All sludge management requirements were determined ch. NR 214, Wis. Adm. Code

Outfall No: 005	Sample Location: Representative samples shall be collected from a truckload of waste prior to land application and prior to mixing with any other landspreading wastestream. Discharge is limited to mixed high strength wastewater and pretreatment plant biosolids.			
	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
PARAMETER	QUANTITY	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
Total Kjeldahl N		mg/L	Monthly	Grab
Total Chlorides		mg/L	Monthly	Grab
Total Phosphorus		mg/L	Monthly	Grab
Explanation of changes: Additional record keeping for waste going to manure pits.				

LANDSPREADING OF WHEY, PERMEATE & ANTIBIOTIC MILK WASTE

All sludge management requirements were determined ch. NR 214, Wis. Adm. Code

Outfall No: 006	Sample Location: Representative samples shall be collected from a truckload of waste prior to land application and prior to mixing with any other landspreading wastestream. Discharge is limited to whey, permeate and antibiotic milk waste.			
	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
PARAMETER	QUANTITY	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
Total Kjeldahl N		mg/L	Monthly	Grab
Total Chlorides		mg/L	Monthly	Grab
Total Phosphorus		mg/L	Monthly	Grab
Explanation of changes: Additional record keeping for waste going to manure pits.				

DAILY LOG AND ANNUAL REPORT REQUIRED FOR OUTFALLS 002, 005, & 006

Daily Log – Monitoring Requirements and Limitations				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department.				
Parameters	Limit	Units	Sample Frequency	Sample Type
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Frozen Site Maximum Daily Loading Volume	6,800	Gal/Acre/Day	Daily	Calculated
Unfrozen Site Maximum Daily Loading Volume	13,500	Gal/Acre/Day	Daily	Calculated
Weekly Loading Volume	See NR 214 - Tbl 3	Inches/Week	Weekly	Calculated
Volume to Manure Pits	See NR 214.17(1)	Gallons/Day	Daily	Log
Manure Pit ID Number	-	Number		Log

Annual Report – Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Volume Per Site	-	Gallons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated

Annual Report – Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated
Total Volume to Manure Pits	-	Gallons	Annual	Total Annual

COMPLIANCE SCHEDULE

Land Application Management Plan

Required Action	Due Date
Management Plan: Submit an updated management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214	09/30/2016

COMMENTS

Currently the non-contact cooling water (NCCW) and condensate of whey (COW) water are discharged to the plant pretreatment wastewater operation which eventually discharges to the Milan Sanitary District treatment plant.

The proposed permit continues to allow for this wastestream combination of NCCW and COW water to outfall 001 as a possibility for future use at the request of FFUSA.

The permittee must receive Department approval *prior to* commencing discharge from outfall 001. Until such approval is granted, submittal of DMRs is suspended. Submittal of DMRs will be required following Department approval of discharge from outfall 001.

Proposed expiration date: June 30, 2021

Prepared by: Angela Parkhurst

Date: April 13, 2016

CORRESPONDENCE / MEMORANDUM

State of Wisconsin

DATE: January 14, 2016

TO: Angela Parkhurst – Eau Claire

FROM: Pat Oldenburg - Eau Claire

SUBJECT: Water Quality-Based Effluent Limitations for Foremost Farms USA Cooperative
- Milan (WI-0057541)

This is in response to your request for an evaluation of water quality-based effluent limitations for toxic substances using chs. NR 102, 104, 105, 106, and 207 of the Wisconsin Administrative Code (where applicable), for Foremost Farms USA Cooperative - Milan's discharge to an unnamed tributary to Randall Creek. The discharge is located in Upper Big Eau Pleine River Watershed of the Upper Wisconsin River Basin in Marathon County.

This outfall has not been used by the permittee in the past 15 years, although they have indicated an interest with retaining it in the permit. Discharge from Outfall 001 is limited to noncontact cooling water and condensate of whey water. Currently this wastewater and process wastewater is pretreated prior to discharge to the Milan Sanitary District WWTP. Since the permit was last issued, new temperature and phosphorus criteria have been adopted. Due to the nature of the discharge and receiving stream, it is recommended that an 86°F daily maximum temperature limitation be included in the reissued permit. Given that the discharge should be relatively low in phosphorus, it is recommended that phosphorus monitoring rather than a limit be included in the reissued permit.

No other changes are recommended to the limitations, monitoring, or other relevant conditions contained in the current (WI-0057541-05-0) permit.

If there are any questions or comments, please contact Pat Oldenburg at (715) 831-3262 or via e-mail at Patrick.Oldenburg@wisconsin.gov.

e-cc: Nathan Wells - Wausau
Scott Provost - WI Rapids
Diane Figiel – WT/3
Amanda Minks – WT/3