

Permit Fact Sheet

1 General Information

Permit Number:	WI-0055131-07-0
Permittee Name:	Northern Door Cherry Corporation
Address:	2182 County Road ZZ
City/State/Zip:	SISTER BAY WI 54234
Discharge Location:	2790 Ahrens Road, Baileys Harbor, Door County
Receiving Water:	Groundwater of the Upper Door County Watershed (TK06) of the Twin-Door-Kewaunee Basin via spray irrigation and land application in the Town of Baileys Harbor, Door County
StreamFlow (Q _{7,10}):	NA
Stream Classification:	NA

2 Facility Description

The Northern Door Cherry Corporation is a food processing facility for red tart cherries. The processing facility typically only operates for one to three weeks during late July or early August and usually processes an average of 1.3 million pounds of cherries each season. Processing of the cherries involves cooling, de-stemming, pitting, sorting, and packaging in bulk containers for cold storage or shipment to buyers. This activity has historically produced a maximum of 64,000 gallons per day of process wastewater that is composed primarily of contact cooling water. The remainder of the wastewater comes from water conveyance systems for the cherries and cherry pits within the processing plant, and machine cleaning and sanitation processes. The wastewater is then sprayed onto 17 acres of agricultural land adjacent to the processing facility that is located in the SW ¼ of SW ¼ of Section 6 of T30N, R28E, in the Town of Baileys Harbor, Door County. Sanitary wastes are disposed to a septic tank and subsurface absorption field and therefore will not be regulated under this WPDES permit.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
001	44,606 gpd annual average over 2010 to 2015	Discharge from sample point 001 shall be limited to process wastewater and contact cooling water. Representative samples shall be collected prior to the spray irrigation system.
002	Approximately 1,000 gallons per year	Discharge from sample point 002 shall be limited to by-product solids (pits, stems, skins) which result from cherry processing. Representative samples shall be collected prior to landspreading on the spray irrigation fields.

3 Land Treatment – Proposed Monitoring and Limitations

3.1 Sample Point Number:001- Spray Irrigation

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	4,000 gal/ac/day	Monthly	Calculated	
Nitrogen, Total Kjeldahl		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Nitrogen, Ammonia (NH3-N) Total		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Nitrogen, Nitrite + Nitrate Total		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Phosphorus, Total		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Chloride		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
BOD5, Total		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Suspended Solids, Total		mg/L	Annual	Grab	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
pH Lab		mg/L	Annual	Grab	Samples shall be obtained

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.

3.1.1 Changes from Previous Permit:

Samples shall be taken each year during the 3rd calendar quarter. In the previous permit, samples had only been required twice during the entire permit 5 year duration.

3.1.2 Explanation of Limits and Monitoring Requirements

This facility discharges wastewater to a spray irrigation system. The above requirements are suitable for this type of system.

4 Land Application - Sludge/By-Product Solids (industrial only)

4.1 Sample Point Number:002- BY-PRODUCT SOLIDS to LAND APPL

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Annual	Composite	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Nitrogen, Total Kjeldahl		Percent	Annual	Composite	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Chloride		Percent	Annual	Composite	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.
Phosphorus, Total		Percent	Annual	Composite	Samples shall be obtained during the 3rd calendar quarter, i.e., between July 1 and September 30, each year.

4.1.1 Changes from Previous Permit:

002 is a new outfall which has been added to the permit to regulate residual by-product disposal to land application. New outfall (proposed 002) for land application of by-product solids generated from cherry processing. Solids are residuals from processed cherries that are carried through the processing equipment and are discharged to the wastewater holding tank along with liquid industrial wastes generated by the facility. The solids accumulate at the bottom of the holding tank and must be removed for proper emptying of the holding tank each season. The solids are land applied on a portion of the spray irrigation field. Due to the low strength quality of the wastewater generated by this facility it has been determined that the small volume of residuals that would be land applied as part of a liquid slurry would not pose a risk of overapplication of nutrients to the spray irrigation field or cause any limits or land application requirements to be exceeded for the site. Language should be added to the permit for this outfall that the land application activity may be periodically reevaluated for continuation of monitoring and reporting requirements.

The land application management plan for the land application of cherry residuals can be incorporated into the management plan compliance schedule item for spray irrigation.

Same deadline for the spray irrigation management plan compliance schedule deadline as the two land treatment methods can be addressed in one management plan for the facility. They should be listed separately in the compliance schedule, but have the same deadline.

4.1.2 Explanation of Limits and Monitoring Requirements

Proposed monitoring changes from the current permit are as follows to remain consistent with the WPDES General Permit for Land Application of By-Product Solids (WI-0057665):

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Land Application Rate		Tons/day	Daily	Daily Record	Keep record on site
Solids Total		Percent, dry wt	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent, dry wt	Quarterly	Composite	
Chloride		Percent, dry wt	Quarterly	Composite	
Phosphorus		Percent, dry wt	Annual	Composite	

Daily log requirements and annual reporting requirements and limitations should be specified in the permit as they appear in the WPDES General Permit.

5 Compliance Schedules

5.1 Land Treatment Management Plan

Required Action	Due Date
Management Plan: Submit a management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. The land treatment management plan may be combined with the land application management plan as one submittal to the Department.	06/30/2017

5.2 Land Application Management Plan

Required Action	Due Date
Management Plan: Submit a management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. The land application management plan may be combined with the land treatment management plan as one submittal to the Department.	06/30/2017

5.3 Explanation of Compliance Schedules

The land treatment management plan should be current & up to date. Therefore, a compliance schedule item has been added to the permit.

Separate compliance schedule item should be added to the compliance schedule for a land application management plan for the land application of the cherry residuals/solids. This can be included with the land treatment management plan and should have the same due date as the land treatment management plan, one year from permit reissuance. Both types of land disposal can be included in the same management plan and submitted as one management plan for the facility.

One compliance schedule for the updated land management plan to include the spray irrigation outfall and the land application of solids outfall should be added to the reissued permit. Management plans for both outfalls/types of discharge may be included in one management plan submittal for the facility, separated into sections based upon outfall/discharge types. They should be listed separately in the compliance schedule in the reissued permit to address that both outfalls/methods of discharge require management plans. The due date for plans for both outfalls or the combined plan for both outfalls shall be one year from permit issuance.

6 Special Reporting Requirements

None

7 Other Comments:

None

8 Attachments:

Substantial Compliance Determination is available as a separate document.

9 Proposed Expiration Date: June 30, 2020 (5 year duration)

Prepared By:

Heidi Schmitt Marquez, Wastewater Specialist, March 23, 2016

Nan Jameson, Permit Drafter, March 10, 2016, revised April 11, 2016

Date: **March 23, 2016**

cc: **Kelley O'Connor**

Substantial Compliance Determination

Permittee Name: Northern Door Cherry Corporation		Permit Number: 0055131-07-0
	Compliance?	Comments
Discharge Limits	Yes	Permittee has maintained compliance with all discharge limits for the past five years and during issuance -06 of the permit. Limits are currently: 4,000 gal/ac/day monthly avg; 0.9 in/load cycle daily; 165 lbs/ac/yr annual.
Sampling/testing requirements	Yes	The previous permit term required only two sampling events, in 2008 and 2012. The facility did not operate during these years and so no monitoring was reported. However, the permittee has continued to collect samples and report results in addition to those years specified in the permit so that there are monitoring data available for its wastewater discharge.
Groundwater standards	NA	There are no groundwater monitoring requirements or wells associated with this permit at this time. There have been no groundwater related complaints received for this facility.
Reporting requirements	Yes	There were one or two late reports over the last permit term, but those were anomalies. All reports and monitoring are managed and completed in a timely manner by the facility.
Compliance schedules	NA	There were no compliance schedules in the previous permit term.
Management plan	Yes	The current management plan on file was received in 1993. An updated management plan is required and will be added as a compliance schedule item to the reissued permit. The due date for the updated management plan will be one year from the date of permit issuance.
Other:	NA	
Enforcement Considerations	No	

In substantial compliance?	<p>Yes</p> <p>Comments: This permittee has maintained a good compliance history and demonstrates a good understanding of permit requirements. Permittee maintains good communication with the Department and understands reporting and monitoring requirements well.</p> <p>Signature: Heidi Schmitt Marquez</p> <p>Date:</p> <p>Concurrence: _____ Date: _____</p>
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