

Permit Fact Sheet

General Information

| | |
|---------------------|---|
| Permit Number: | WI-0052124-10-0 |
| Permittee Name: | Seaquist Orchards LLC |
| Address: | 2023 Highview Rd |
| City/State/Zip: | Ellison Bay, WI 54210-9726 |
| Discharge Location: | 4399 County Road E, Egg Harbor, WI 54209 (R27E T30N Section 30) |
| Receiving Water: | Groundwaters of the Upper Door County Watershed (TK06) within the Door Peninsula Drainage Basin via spray irrigation and landspreading in Door County |

Facility Description

The facility is a processing plant for tart red cherries. The processing plant is a seasonal operation and typically operates from one to four weeks between mid-July and mid-August. When the facility is operating, it operates 22 hours per day, 6 days per week. Production varies from about one to three million pounds annually. Fresh harvested cherries are initially cooled and rinsed in the orchards and quickly transported to the processing plant in water-filled containers. Once at the plant, the cherries undergo additional cooling by pumping well water through the shipping containers. The cooling water accounts for most of the wastewater discharge volume. After cooling, the cherries are de-stemmed, pitted, sorted, cold-packed, and shipped to an off-site freezer. Water is used to transport the cherries or pits within some of the in-plant processing stages and contributes to the wastewater discharge. The combined cooling and process wastewater is spray irrigated onto fields adjacent to the processing plant. The facility also generates wastewater during the cherry washing/rinsing process which may be landspread on Department approved sites. Sanitary wastewater is plumbed separately, discharging to an on-site septic system, and therefore is not regulated under this permit.

Substantial Compliance Determination

Enforcement During Last Permit: There were no formal enforcement actions taken during the previous permit term.

After a desk top review of all land application reports, compliance schedule items, and a site visit on September 28, 2023, this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by Teresa Hall (Wastewater Specialist) on July 2, 2024.

| Sample Point Designation | | |
|--------------------------|---|--|
| Sample Point Number | Discharge Flow, Units, and Averaging Period | Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable) |
| 001 | 24 days - Average Days of Discharge per season (2019-2023) Liquid Waste - 1,368,000 MGD per year (2019-2023) Avg Annual Flow - 22,556 GPD (2019-2023) | Effluent: Discharge of contact cooling water and process wastewater to the spray irrigation (drip) system. Grab samples shall be collected from the holding tank, prior to pumping. Flow meter is located at the pump. |

| Sample Point Designation | | |
|--------------------------|---|---|
| Sample Point Number | Discharge Flow, Units, and Averaging Period | Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable) |
| 002 | Contact Cooling Avg Flow - 78,000 GPD (2019-2023) Process Wastewater Avg Flow – 12,000 GPD (2019-2023) | Land application of liquid industrial waste generated by the process of washing/rinsing cherries. Samples shall be collected prior to landspreading on Department approved sites. |

1 Land Treatment – Monitoring and Limitations

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 | 2,700 gal/ac/day | Daily | Calculated | Limit effective May through September. |
| Hydraulic Application Rate | Monthly Avg | 0 gal/ac/day | Daily | Calculated | Limit effective October through April. |
| Nitrogen, Total Kjeldahl | | mg/L | Monthly | Grab | |
| Nitrogen, Ammonia (NH3-N) Total | | mg/L | Monthly | Grab | |
| Nitrogen, Nitrite + Nitrate Total | | mg/L | Monthly | Grab | |
| Phosphorus, Total | | mg/L | Monthly | Grab | |
| Chloride | | mg/L | Monthly | Grab | |
| BOD5, Total | | mg/L | Monthly | Grab | |
| Suspended Solids, Total | | mg/L | Monthly | Grab | |
| pH Field | | mg/L | Monthly | Grab | |
| Nitrogen, Max Applied On Any Zone | Annual Total | 165 lbs/ac/yr | Annual | Calculated | |

Changes from Previous Permit:

Hydraulic Application Rate: Parameter added and limits added for both the canning and non-canning seasons.

Nitrogen, Max Applied On Any Zone: A limit of 165 lbs/ac/yr, annually, has been added.

Explanation of Limits and Monitoring Requirements

Requirements for land treatment of industrial wastewater are determined in accordance with ch. NR 214, Wis. Adm. Code.

2 Land Application - Liquid Waste (industrial only)

Sample Point Number: 002- Liquid Wastewater

| Monitoring Requirements and Limitations | | | | | |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Solids, Total | | Percent | Annual | Grab | |
| Chloride | | mg/L | Annual | Grab | |
| Nitrogen, Total Kjeldahl | | mg/L | Annual | Grab | |
| Phosphorus, Total | | mg/L | Annual | Grab | |
| Phosphorus, Water Extractable | | % of Tot P | Annual | Grab | |

Changes from Previous Permit:

No changes from the previous permit are proposed.

Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial sludge are determined in accordance with ch. NR 214 Wis. Adm. Code.

3 Schedules

3.1 Land Treatment Management Plan

A management plan is required for the land treatment system.

| Required Action | Due Date |
|---|----------|
| <p>Land Treatment Management Plan: Submit an update to the management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.</p> <p>Submit the updated management plan 60 days prior to land treatment.</p> | |

Explanation of Schedule

Submit the updated management plan 60 days prior to land treatment.

3.2 Land Treatment Annual Report

| Required Action | Due Date |
|--|------------|
| Submit Annual Land Treatment Report #1: Submit the Annual Land Treatment Report by January 31st for the previous calendar year. | 01/31/2025 |
| Submit Annual Land Treatment Report #2: Submit the Annual Land Treatment Report by January 31st for the previous calendar year. | 01/31/2026 |
| Submit Annual Land Treatment Report #3: Submit the Annual Land Treatment Report by January 31st for the previous calendar year. | 01/31/2027 |
| Submit Annual Land Treatment Report #4: Submit the Annual Land Treatment Report by January 31st for the previous calendar year. | 01/31/2028 |
| Submit Annual Land Treatment Report #5: Submit the Annual Land Treatment Report by January 31st for the previous calendar year. | 01/31/2029 |

Explanation of Schedule

Annual Land Treatment Report submittal is required by January 31st, each year.

3.3 Groundwater Monitoring Well - Installation

| Required Action | Due Date |
|---|------------|
| Plans and Specifications: Submit plans and specifications for installation of monitoring wells. A minimum of three groundwater monitoring wells needs to be installed. | 12/31/2024 |
| Installation: Complete well installation in accordance with ch NR 141, Wisconsin Administrative Code. Within 6 months of the approval for the plans and specs of the groundwater monitoring wells the facility should have the groundwater monitoring wells installed by a certified well driller. A schedule of installation should be submitted to the Department once the work has been contracted. (Note: Documentation of well construction must be submitted to the Department within 60 days of well installation.) | 06/30/2025 |

Explanation of Schedule

Section NR 214.21 (1) (b) Wis. Adm. Code requires a facility with a land treatment system to install a simple groundwater monitoring system for discharges that exceed 15,000 gallons a day. This volume was measured using only Seaquist's discharge for Outfall 001. The facility's volumes exceed this threshold. These volumes did not include the volume increases anticipated from Outfall 002 and any potential increased volumes due to facility expansion. In addition, Door County is in a geologic area known as karst bedrock. Karst bedrock is highly susceptible to negative groundwater impacts. Therefore, a groundwater monitoring system is required.

The facility is required to install a minimum of three groundwater monitoring wells to assess any potential impacts to groundwater from the land treatment system discharge. One of these wells should be up-gradient of, and outside of the influence of the land treatment system. At least one groundwater monitoring well should be down-gradient of the land treatment system.

The groundwater monitoring wells should be sampled per Groundwater Sampling Field Manual, PUBL-DG-038-96, 1996. Samples should be collected twice annually, once second quarter and once third quarter (before irrigation and after irrigating each year).

Attachments:

Water Quality-Based Effluent Limitations – 05/02/2022

Phosphorus Multi-discharger Variance Application for Municipal Facilities – 07/12/2023

Multi-discharger Variance Evaluation Checklist – 08/21/2023

Conditional Approval of the Multi-discharger Phosphorus Variance – 08/21/2023

Public Notice

Expiration Date:

September 30, 2029

Justification Of Any Waivers From Permit Application Requirements

No waivers from permit application requirements granted.

Prepared By: Sarah Adkins, Wastewater Specialist

Date: August 15, 2024