



State of Oregon
Department of
Environmental
Quality

National Pollutant Discharge Elimination System Permit Fact Sheet Duckwall-Odell

Permittee	Duckwall-Pooley Fruit Company Duckwall-Odell 3430 Davis Drive Odell, Oregon 97044
Existing Permit Information	File Number: 25434 Permit Number: 100645 EPA Reference Number: OR0026867 Category: Industrial Class: Minor Expiration Date: 11/30/2023
Permittee Contact	Craig Mallon Quality Control Manager 541-354-1694 P.O. Box 150 Odell, OR 90744
Receiving Water Information	Receiving stream/NHD name: Lenz Creek NHD Reach Code & % along reach: 17070105000987 94.01% USGS 12-digit HUC: 170701050702 OWRD Administrative Basin: Middle Columbia/Hood ODEQ LLID & River Mile: 1215146456436-1.72 Assessment Unit ID: OR_WS_170701050702_02_102006
Proposed Action	Permit Renewal Application Number: 948282 Date Application Received: May 30, 2023
Permit Writer	Stuart Blois 514-714-0035 Date Prepared: March 2024

NPDES Permit Fact Sheet Duckwall-Pooley Fruit Co. (Odell)

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NPDES Permit Renewal Fact Sheet

Duckwall Pooley Fruit Co. (Odell)

1. Introduction

As required by Oregon Administrative Rule 340-045-0035, this fact sheet describes the basis and methodology used in developing the permit. The permit is divided into several sections:

- Schedule A – Waste discharge limitations
- Schedule B – Minimum monitoring and report requirements
- Schedule C – Compliance conditions and schedules
- Schedule D – Special conditions
- Schedule E – Pretreatment conditions
- Schedule F – General conditions

A summary of the major changes to the permit are listed below:

- Monitoring and limits associated with several parameters have been removed because the facility separated its fruit washing operations from its noncontact cooling water.
- The fruit washing wastewater is now routed to the Odell Sanitary District and is no longer permitted to be discharged to Lenz Creek.

2. Facility Description

2.1 Wastewater Facility

The Duckwall-Pooley Fruit Company operates an approximate 247,000 square-foot fresh fruit packing and cold storage facility in Odell, Oregon. The fruit packing operations are located in a 76,641 square-foot building that includes a pre-size line and two fruit packing lines. During the harvest season, domestic fruit from local orchards are brought into the facility where they are separated by size and weight, washed, and packed for storage or shipment. The cold storage portion of the facility consists of a connected 170,682 square-foot refrigerated building that provides long-term cold storage of domestic fruit. During the last permit cycle, the company completed construction of a new 38,000 square-foot cold storage building immediately adjacent to the existing facility. The addition is not used for fruit packing. Stored fruit from the new addition will be brought into the existing facility for washing and packing. The facility mainly stores and packs domestic pears for wholesale distribution. No processing of fruit into other fruit-based products, such as juice, occurs at the facility.

The wash water from the fruit packing used to be discharged to Lenz Creek but is now routed to the Sanitary District, and at the permittee's request, wash water is now prohibited from being discharged to Lenz Creek.

The facility no longer uses floatation as a means to sort and size fruit. This practice historically required the addition of sodium sulfate in the initial dump tanks to help float the fruit for sorting. The floatation wastewater was transported off-site by a contractor for disposal. This practice was discontinued in 2008. As such, the permittee no longer has a need to discharge floatation water.

Cold Storage Operations

The cold storage operations rely on non-contact cooling water to cool mechanical elements within the refrigeration systems that maintain critical cold temperatures for long-term fruit storage. The water for the refrigeration system is obtained from a natural spring that supplies the local municipal water system (Davis Springs). The spring water is directed to the facility through gravity-fed pipes and open ditches and is not chlorinated prior to use. Prior to use at the cold storage building, the unchlorinated spring water is screened for large debris and then directed to a settlement box. From the settlement box, the water is piped into a closed loop refrigeration system once before being discharged into the facility's storm drains where it is comingled with the stormwater runoff from the facility's parking lot and discharged through Outfall 001 into Lenz Creek. No other additives or chemicals are introduced to the cooling water. The cooling water has no contact with solvents, oils, ammonia, or cleaning fluids during the operation of the refrigeration system. A general schematic showing the flow of non-contact cooling water through the facility's refrigeration system is included in Figure 2-2.

The new cold storage addition also uses non-contact cooling water to cool mechanical elements within the refrigeration system. The non-contact cooling water from the addition is piped to the larger existing facility for re-use and is discharged through Outfall 001.

Discharges

The facility typically discharges from August into June of the following year. The facility typically does not discharge from late July to early August.

The discharges from the non-contact cooling water (when all elements are operational) is approximately 47,000 gallons per day (gpd). The discharge of non-contact cooling water is variable depending on the demands of the refrigeration systems. The highest demands and discharges are on very warm days in August and September.

All non-contact cooling water discharges from the facility (and cold storage addition) are through Outfall 001 located along a ditch on the north side of the facility. There is some stormwater discharged through Outfall 002. The facility had previously discharged some non-contact cooling water through Outfall 002 but that has now ceased as of May 2022. There is some facility stormwater that also connects into Outfall 001 downstream from the compliance sampling location. These outfalls are further described in Section 3.4. A site map is provided below.

Figure 2-1: Site Map

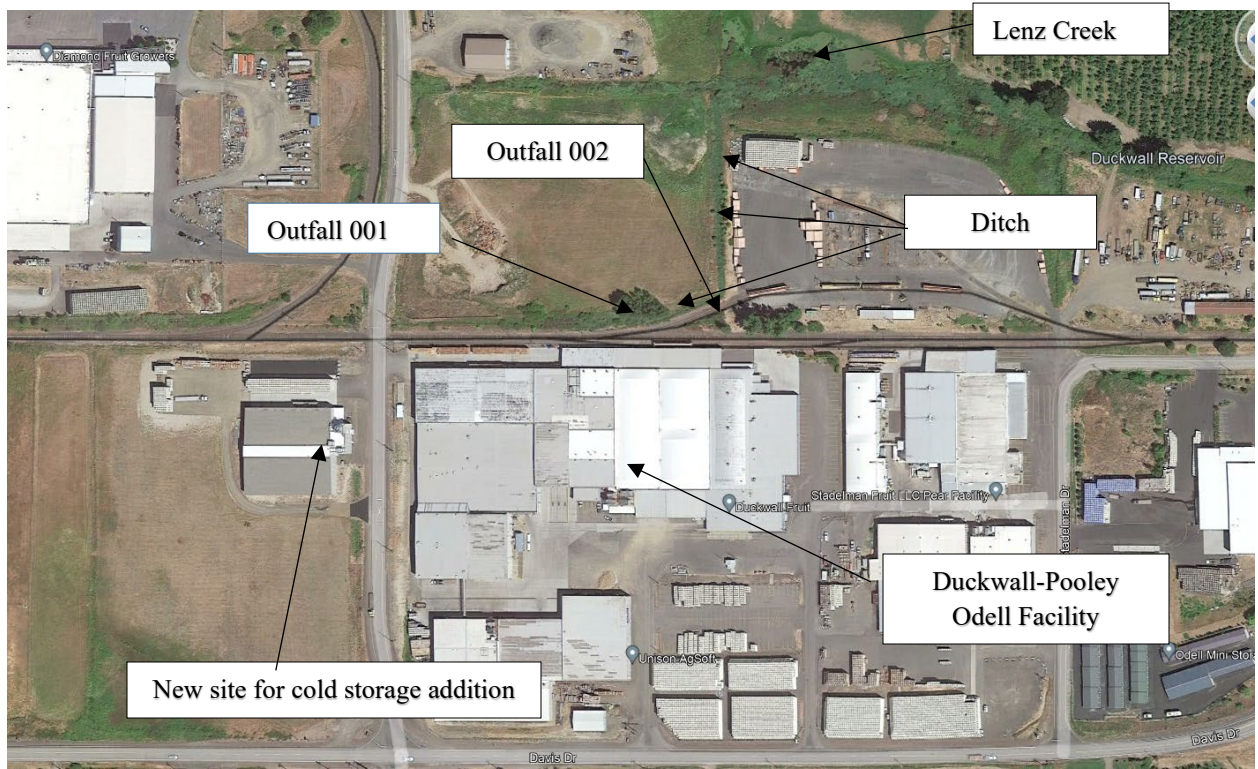


Figure 2-2: Process Flow Schematic

Duckwall Fruit Company

Odell Non-Contact Cooling Water Flow Chart

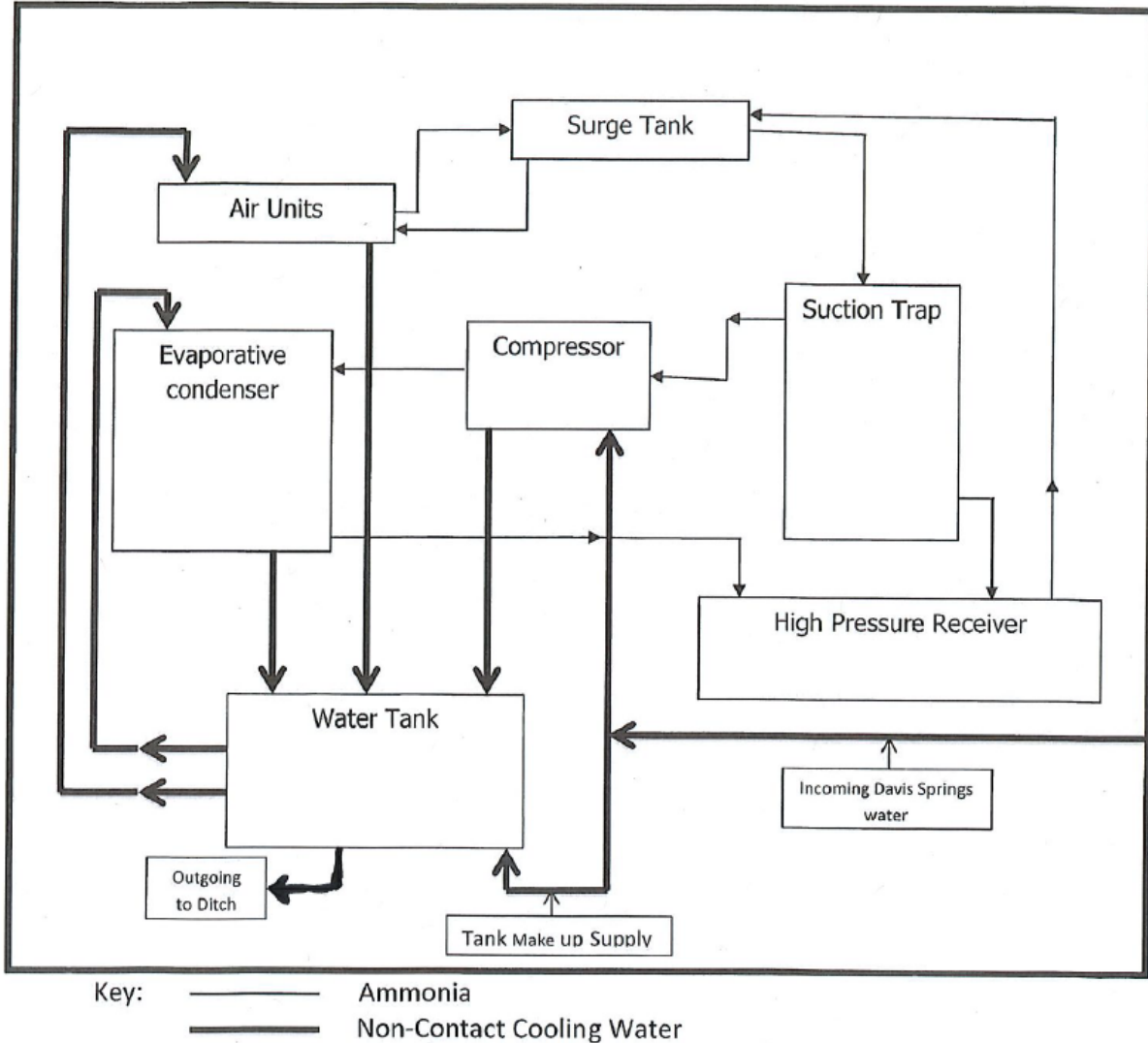


Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long	Existing Flow ¹ (mgd)
001	Non-contact Cooling Water & Stormwater	45.626703 N / -121.531811W	0.022
002	Stormwater	45.626740 N / -121.532463W	0.003
1. Existing Flow = existing average monthly dry weather flow			

2.2 Compliance History

The current NPDES Permit expired on November 30th, 2023. DEQ received Renewal Application Number 948282 from the city on May 30th, 2023. Because the permittee submitted a complete renewal application to DEQ in a timely manner, the current permit is administratively extended until DEQ takes final action on the renewal application as per OAR 340-045-0040.

The compliance history for Duckwall-Pooley Odell's facility was reviewed in the file record since the last permit renewal (2018). A compliance inspection was conducted by DEQ on January 25, 2023. The following compliance issues were noted during this inspection: The permittee was operating without a QA/QC plan and the facility submitted DMRs from November 2019 to March 2023 with data discrepancies (2023-WLOTC-8319).

Upon resubmittal of DMRs to correct data discrepancies since November 2019, several violations for failure to monitor and effluent limit exceedances were noted. At the time of this permit drafting, this is still under review in accordance with DEQ enforcement guidance for follow-up.

2.3 Stormwater

Stormwater discharges are not currently covered under this permit. Refer to the Industrial Stormwater Discharge Permit No. 1200-Z Tables 1 and 2 for stormwater discharge coverage requirements.

2.4 Industrial Rating

DEQ uses EPA's non-municipal rating system to classify a permittee as a major or a minor facility. EPA developed a rating worksheet that considers factors such as type of facility, relative flow rate, potential to impact human health and other water quality factors. DEQ completed the rating worksheet and determined the permittee is a minor facility. The rating sheet is part of the administrative record.

3. Schedule A: Effluent Limit Development

Effluent limits serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters. Effluent limitations can be based on either the technology available to control the pollutants or limits that are protecting the water quality standards for the receiving water. DEQ refers to these two types of permit limits as technology-based effluent limitations (TBELs) and water quality-based effluent limits (WQBELs) respectively. When a TBEL is not restrictive enough to protect the receiving stream, DEQ must include a WQBEL in the permit.

3.1 Existing Effluent Limits

The tables below show the limits contained in the existing permit.

3.1.1 Outfall 001 – Permit Limits (Year-round)

- a. Non-contact Cooling Water and Fruit Packing Wastewater
 - i. During all periods of discharge from Outfall 001, the permittee must comply with the limits in the following table:

Table A1: Outfall 001 Waste Discharge Limits

Parameter (Year-Round)	Units	Daily Maximum
pH	SU	Between 6.5 and 8.5
Foam	Yes/No	None shall be visible.

3.1.2 Outfall 002 – Permit Limits (Year-round)

- a. Fruit Packing Wastewater and Non-Contact Cooling Water
 - (a) During all periods of discharge from Outfall 002, the permittee must comply with the limits in the following table:

Table A2: Outfall 002 Waste Discharge Limits

Parameter (Year-Round)	Units	Monthly Average	Average Weekly	Daily Maximum
pH	SU	Between 6.5 and 8.5		
Foam	Yes/No	None shall be visible.		
Turbidity over Background ^{a,b}	NTU	Effluent turbidity (T_E) shall not exceed $T_R + 0.1T_R (Q_E + Q_R)/Q_E$		

Notes:

- a. Effluent turbidity shall not exceed 10 percent over background turbidity in Lenz Creek in accordance with the following equation:

$$T_E = T_R + 0.1T_R (Q_E + Q_R)/Q_E$$

Where T_E is effluent turbidity, NTU
 T_R is background creek turbidity, NTU
 Q_E is weekly average effluent flow, gpd, and
 Q_R is the weekly average upstream stream flow, gpd

- b. Background turbidity in Lenz Creek (T_R) to be monitored in accordance with Table B4.

3.1.3 Outfall 001 and 002 – Combined Permit Limits (Year-round)

a. Fruit Packing Wastewater and Non-Contact Cooling Water

(a) During all periods of discharge from Outfalls 001 and 002, the permittee must comply with the combined limits in the following table:

Table A3: Combined Waste Discharge Limits for Outfalls 001 and 002

Parameter ^a (Year-round)	Units	Monthly Average	Average Weekly	Daily Maximum
Excess Thermal Load ^b	Mkcal/day	Shall not exceed a 7-day moving average of the daily excess thermal loads of 0.2 million kilocalories per day.		
Effluent Flow ^c	MGD	N/A	N/A	0.25
Chlorine, Total Residual ^{d,e}	mg/L	0.01	N/A	0.02
Chlorine, Total Residual ^{d,e}	lbs./day	0.02	N/A	0.04
Total Dissolved Solids (TDS) ^e	mg/L	N/A	N/A	500
Dissolved Oxygen	mg/L	N/A	N/A	8.5
Biochemical Oxygen Demand	mg/L	N/A	N/A	30
Notes: a. Limits are based upon combined discharges from Outfalls 001 and 002. Monitoring of individual contributions from each outfall shall be in accordance with Tables B1 and B2. Table B3 requires permittee to report weighted total of discharge from both outfalls. Weighted total based upon percentage of total discharge from each outfall: 10 percent for Outfall 001 and 90 percent for Outfall 002. The monitoring results reported in Table B3 shall be used for determining compliance with the limits in Table A3. b. Excess Thermal Load limit is a combined limit of the individual ETLs from Outfalls 001 and 002. Refer to Tables B1 and B2 for formulas to calculate the individual Excess Thermal Load. c. Combined flows from Outfalls 001 and 002 may not exceed 0.25 MGD. Permittee will be required to report individual flows from each outfall in accordance with Tables B1 and B2. Reporting of combined totals shall be in accordance with Table B3. d. Permittee to monitor for total residual chlorine from Outfall 001 during periods of pre-size wastewater discharges, when non-contact cooling water is obtained from the public water supply and when chlorine or chlorine compounds are added to the non-contact cooling water system for disinfection and cleaning. e. DEQ has established a minimum Quantitation Limit of 0.05 mg/L for Total Residual Chlorine. In cases where the average monthly or maximum daily limit for Total Residual Chlorine is lower than the Quantitation Limit, DEQ will use the reported Quantitation Limit as the compliance evaluation level.				

3.2 Technology-Based Effluent Limit Development

EPA is required to develop technology-based effluent limits for categories of industrial facilities. These limits are called effluent limitation guidelines (ELGs). EPA established these based on available treatment technologies for facilities within an industrial category or subcategory.

The ELGs typically identify effluent limitations for biochemical oxygen demand (BOD), total suspended solids (TSS), and pH. As described in Section 2.1, the permittee's facility is used for fruit packing and cold storage of whole fruit for shipment. No fruit processing to produce juice or other fruit-based products will take place in the facility. The ELGs listed under 40 CFR Part 407 – Canned and Preserved Fruits and Vegetables Processing Point Source Category only apply to fruit processing discharges. As such, there are no ELGs that apply to the permittee's fruit packing or cold storage activities.

3.3 Water Quality-Based Effluent Limit Development

40 CFR 122.44(d) requires that permits include limitations more stringent than technology-based requirements where necessary to meet water quality standards. Water quality-based effluent limits may be in the form of a wasteload allocation required as part of a Total Maximum Daily Load (TMDL). They may also be required if a site-specific analysis indicates the discharge has the reasonable potential to cause or contribute to an exceedance of a water quality criterion. DEQ establishes effluent limits for pollutants that have a reasonable potential to exceed a criterion. The analyses are discussed below.

3.3.1 Designated Beneficial Uses

NPDES permits issued by DEQ must protect the following designated beneficial uses of the Lenz Creek. These uses are listed in OAR-340-041-0160 for the Hood Basin.

- Public and private domestic water supply
- Industrial water supply
- Irrigation and livestock watering
- Fish and aquatic life (including salmonid rearing, migration and spawning)
- Wildlife and hunting
- Fishing
- Boating
- Water contact recreation
- Aesthetic quality
- Hydro power

3.3.2 303d Listed Parameters and Total Maximum Daily Loads

The following table lists the parameters that are on the 2022 303(d) list (Category 5) within the discharge's stream reach. The table also lists any parameters with a TMDL wasteload allocation assigned to the facility (Category 4).

Table 3-1: 303d and TMDL Parameters

Water Quality Limited Parameters (Category 5)	
AU ID:	OR_WS_170701050702_02_102006
AU Name:	Odell Creek-Hood River
AU Status:	Impaired
Year Listed	2004
Year Last Assessed	2022
303d Parameters (Category 5)	DDD 4,4'- Human Health Toxics, DDE 4,4'- Aquatic Life Toxics, DDE 4,4'- Human Health Toxics, DDT 4,4'- Human Health Toxics, Dieldrin- Human Health Toxics, Guthion- Aquatic Life Toxics
TMDL Parameters (Category 4)	
Temperature (spawning and rearing/migration)	

There is no data to support that discharge from Duckwall Odell is contributing to any of the 303(d) listed parameters, with the exception of temperature. Therefore, these parameters are not identified as pollutants of concern for this discharger. Furthermore, these pollutants are not expected to be present based on the nature of the effluent.

3.3.3 TMDL Wasteload Allocations

A Total Maximum Daily Load (TMDL) for temperature in the Western Hood Subbasin (WHS) was developed by DEQ in 2001 and approved by the USEPA in January 2002. The 2001 TMDL was revised by DEQ in 2018 and approved by USEPA in June 2018. The TMDL addresses the temperature listings for the Western Hood Subbasin which includes Lenz Creek. These listings relate to the beneficial uses of salmon and trout rearing and migration (year-round) and salmon and steelhead spawning. The TMDL assigned a wasteload allocation to the facility as noted in the table below. The implementation of this wasteload allocation in the permit is discussed in Section 3.3.7.

Table 3-2: Applicable WLAs

Parameter	WLA	Time Period
Temperature	0.2 gigacalories per day (gcal/day)	May 1 – October 31

3.3.4 Pollutants of Concern

To ensure that a permit is protecting water quality, DEQ must identify pollutants of concern. These are pollutants that are expected to be present in the effluent at concentrations that could adversely impact water quality. DEQ uses the following information to identify pollutants of concern:

- Effluent monitoring data.
- Knowledge about the permittee's processes.
- Knowledge about the receiving stream water quality.
- Pollutants identified by applicable federal effluent limitation guidelines.

Based on EPA's NPDES permit application requirements, toxic pollutants of concern are listed in the following table.

DEQ identified the following pollutants of concern for this facility listed in the following table.

Table 3-3: Pollutants of Concern

Pollutant	How was pollutant identified?
pH	Effluent Monitoring
Temperature	Effluent Monitoring
Total Residual Chlorine	Effluent Monitoring

The sections below discuss the analyses that were conducted for the pollutants of concern to determine if water quality based effluent limits are needed to meet water quality standards.

3.3.5 Regulatory Mixing Zone

DEQ performed an analysis in 2023 that estimated that 7Q10 flows in Lenz Creek below the point of discharge are zero for the months of August, September, and October. Because at times there is no water available for mixing, the permit does not include a mixing zone. A description of that analysis is available in a 2023 mixing zone memo that is part of the administrative record.

3.3.6 pH

The pH criterion for this basin is 6.5 – 8.5 per OAR 340-041-0165. The current permit limits are 6.5 to 8.5 and are equivalent to the basin standard. Since the permittee has no mixing zone the limits will remain the same (6.5 to 8.5) and are a Water Quality Based Effluent Limit. The permittee is capable of meeting this limit based on past discharge monitoring report history.

3.3.7 Temperature

3.3.7.1 Temperature Criteria OAR 340-041-0028

The following table summarizes the temperature criteria that apply at the discharge location along with whether the receiving stream is water quality-limited for temperature and whether a TMDL wasteload allocation has been assigned. Using this information, DEQ performed several analyses to determine if effluent limits were needed to comply with the temperature criteria.

Table 3-4: Temperature Criteria Information

Applicable Temperature Criterion	Rearing/Migration 18°C (OAR 340-041-0028(4)(c))
Applicable dates: Year-Round	
Salmon/Steelhead Spawning 13°C? OAR 340-041-0028(4)(a)	☒ Yes ☐ No
Applicable dates: October 15 – May 15	
WQ-limited?	☒ Yes ☐ No
TMDL wasteload allocation assigned?	☒ Yes ☐ No
Applicable dates: May 1 – October 31	
TMDL based on natural conditions criterion?	☐ Yes ☒ No
Cold water summer protection criterion applies?	☐ Yes ☒ No
Cold water spawning protection applies?	☐ Yes ☒ No
Comments:	

As described in the section above, the permittee's facility will initially discharge into the ditch prior to being conveyed into Lenz Creek. Figure 160A under OAR 340-41-0230 lists Lenz Creek as having a Salmon and Trout Rearing and Migration fish use designation (year-round). In accordance with OAR 340-041-0028(5), the criterion for Lenz Creek also applies to its tributaries, which includes the ditch. Additionally, OAR 340-41-0230 Figure 160B lists Lenz Creek as having a salmon and steelhead spawning use designation from October 15 through May 15. This spawning use designation starts at a location approximately 1700 feet downstream of the outfall.

For streams identified as having salmon and steelhead spawning use, OAR 340-041-0028(4)(a) states that the 7-day-average maximum temperature (7DADM) may not exceed 13.0 °C (55.4 °F) at the times indicated on the salmonid spawning use maps. For the streams identified as having salmon and trout rearing and migration uses, OAR 340-041-0028(4)(c) states that the 7-day average maximum temperature (7DADM) may not exceed 18 °C (64.4°F). This criterion applies in Lenz Creek from May 16 through October 14. Insignificant anthropogenic inputs are allowed during implementation of these criteria under OAR 340-041-0028(12).

An additional rule, OAR 340-041-0028 (11)(a), states that streams with summer seven-day-average maximum ambient temperatures colder than the biologically-based criteria may not be warmed by more than 0.3 °C above the colder ambient water temperature. The maximum summer temperatures of the ditch and Lenz Creek are expected to be above the biologically-based criterion (18 °C), so this section of the temperature rule is not applicable to those streams.

As noted in Section 3.3.3, above, the 2018 Western Hood Subbasin was developed to address temperature exceedances in streams throughout the basin. The TMDL includes a temperature wasteload allocation (WLA) for this facility that addresses both the rearing and migration criterion and the spawning criterion in Lenz Creek. This WLA is expressed as an excess thermal

load of 0.2 million kilocalories per day¹ (calculated as a 7-day average) and applies from May 1 – October 31.² The TMDL determined that regulating the facility at existing permitted loads would be protective of the criteria during the remainder of the year.

The proposed permit directly addresses the requirements of the TMDL by applying this WLA as a limit. The limit is applicable year-round to ensure the facility is regulated during the November – April period as required under the TMDL.

The actual excess thermal load discharges from the facility is calculated using the following formula:

$$ETL = 3785 * Q_e * \Delta T * C_p * \rho$$

Where:

ETL =	Excess Thermal Load (Kcal/day)
Q_e =	Daily Average Effluent Flow (MGD)
ΔT =	Daily Maximum Effluent Temperature (°C) minus ambient criterion (18 °C) ³
C_p =	Specific Heat of Water = 1 Kcal/1 Kg °C
ρ =	Density of Water = 1000 Kg/m ³
3785=	Conversion from MGD to m ³ /day (1 MGD = 3785 m ³ /day)

Compliance with a WLA can be achieved by different combinations of lower discharge temperatures and effluent flow, as long as the ETL is at or below the limit of 0.2 million kcal/day. For example, the permittee can meet the 0.2 million kcal/day limit by keeping the volume of daily discharge to below 0.25 MGD (250,000 gpd) while discharging at 18.2 °C (64.3 °F) or lowering discharge volumes to 0.12 MGD (120,000 gpd) while discharging at temperatures below 18.4 °C (64.7 °F).

Proposed effluent limit is listed in the following table.

Table 3-5: Temperature Criterion Effluent Limits

Effluent limit needed? ☒ Yes ☐ No
TMDL WLA Limit: Shall not exceed a 7-day moving average of the daily excess thermal loads of 0.2 gigacalories per day (gcal/day)
Applicable time period: Year-Round
Temperature Criterion Limit: N/A
Applicable time period: Dates ☒ NA
Comments:

¹ The WLA listed in the TMDL is 0.2 gigacalories for day. This equates to 0.2 million kilocalories per day (million kcal/day). The permit will require reporting in million kilocalories per day (Mkcal/day).

² *Western Hood Subbasin Temperature Total Maximum Daily Load – Revision to the 2001 Western Hood Subbasin TMDL*. Section 3 - Seasonal Variation and Critical Period. Page 13. DEQ. February 2018.

3.3.7.2 Thermal Plume OAR 340-041-0053(2)(d)

In addition to compliance with the temperature criteria, OAR 340-041-0053(2)(d) contains thermal plume limitation provisions designed to prevent or minimize adverse effects to salmonids that may result from thermal plumes. The discharge was evaluated for compliance with these provisions as follows:

- OAR 340-041-0053(2)(d)(A): Impairment of an active salmonid spawning area where spawning redds are located or likely to be located. This adverse effect is prevented or minimized by limiting potential fish exposure to temperatures of 13 °C or more for salmon and steelhead, and 9 °C or more for bull trout.

Duckwall-Pooley Odell Facility: As previously indicated, the permittee's facility discharges to a ditch and a section of Lenz Creek that contains no active salmonid spawning areas. The silty substrate of the ditch and creek do not support spawning activity. Discharge from the permittee's facility must first flow approximately 1700 feet before entering a portion of Lenz Creek with a spawning use designation. Based on a review of the prior permit cycle effluent data, the maximum effluent temperature at the Outfall during the spawning season (October-May) was 16.4 °C. Given the distance in which the permittee's discharge must travel before entering the spawning areas of Lenz Creek, it is highly likely that the permittee's discharge will cool quickly. In addition, the discharge will also mix with the flows from springs along Lenz Creek located above that spawning areas which will also serve to reduce discharge temperatures by the time the effluent reaches a portion of Lenz Creek with a spawning use designation. As such, impairment of an active salmonid spawning area is not expected to occur.

- OAR 340-041-0053(2)(d)(B): Acute impairment or instantaneous lethality is prevented or minimized by limiting potential fish exposure to temperatures of 32 °C or more to less than 2 seconds.

Duckwall-Pooley Odell Facility: Based upon a review of the prior permit cycle effluent data, the maximum effluent temperature at Outfall 001 was around 19.1 °C (79 °F). Outfall 002 has ceased discharging. Thus, anticipated peak temperatures are expected to be well below 32 °C and are not expected to cause an acute impairment or instantaneous lethality due to the thermal plume in Lenz Creek.

- OAR 340-041-0053(2)(d)(C): Thermal shock caused by a sudden increase in water temperature is prevented or minimized by limiting potential fish exposure to temperatures of 25 °C or more to less than 5 % of the cross-section of 100 % of the 7Q10 flow of the water body.

Duckwall-Pooley Odell Facility: Based upon a review of the prior permit cycle effluent data, the maximum effluent temperature at Outfall 001 was around 19.1 °C (79 °F) during the month of August 2021. Outfall 002 has ceased discharging. Thus, anticipated

peak temperatures are expected to be well below 25 °C and are not expected to cause thermal shock due to the thermal plume in Lenz Creek.

- OAR 340-041-0053(2)(d)(D): Unless ambient temperature is 21 °C or greater, migration blockage is prevented or minimized by limiting potential fish exposure to temperatures of 21 °C or more to less than 25% of the cross-section of 100 % of the 7Q10 flow of the water body.

Duckwall-Pooley Odell Facility: Based upon a review of the prior permit cycle effluent data, the maximum effluent temperature at Outfall 001 was around 19.1 °C (79 °F) during the month of August 2021. Outfall 002 has ceased discharging. Thus, anticipated peak temperatures are expected to be well below 25 °C and are not expected to cause migration blockage due to the thermal plume in Lenz Creek.

In summary, the analysis indicates that an effluent temperature limit is not needed to meet the temperature thermal plume limits in OAR 340-041-0053(2)(d).

Effluent limits needed to comply with the thermal plume requirements are shown in the following table.

Table 3-6: Thermal Plume Effluent Limit

Effluent limit needed? ☐ Yes ☒ No
Calculated limit: N/A
Applicable timeframe: N/A
Comments:

3.3.8 Toxic Pollutants

DEQ typically performs the reasonable potential analysis for toxics according to EPA guidance provided in the Technical Support Document for Water Quality-Based Toxics Control (TSD) (Office of Water Enforcement and Permits, U.S. EPA, March 1991). The factors incorporated into this analysis include:

1. Effluent concentrations and variability
2. Water quality criteria for aquatic life and human health
3. Receiving water concentrations
4. Receiving water dilution (if applicable)

DEQ performs these analyses using spreadsheets that incorporate EPA's statistical methodology. The following sections describe the analyses for various toxic pollutants below.

3.3.8.1 Total Residual Chlorine

The existing permit contains chlorine limits. The existing limits of 0.01 mg/L average monthly limit (AML) and 0.02 mg/L maximum daily limit (MDL) were evaluated to ensure that they are protective of water quality using updated information. The existing limits are being retained because the chlorine RPA calculation resulted in the same limits as the existing permit after applying DEQ's rounding conventions. The existing chlorine mass load limits are being retained due to antibacksliding and antidegradation concerns.

3.3.8.2 Mercury – Human Health Criterion

DEQ determined that this facility is not a likely source of mercury. Therefore, no additional controls or monitoring will be required.

3.4 Antibacksliding

The proposed permit complies with the antibacksliding provisions of CWA sections 402(o) and 303(d)(4) and 40 CFR 122.44(l). The proposed limits are the same or more stringent than the existing permit so the antibacksliding provision is satisfied. The proposed permit removed certain limits associated with the fruit washing process, because the facility no longer discharges fruit washing wastewater to Lenz Creek.

3.5 Antidegradation

DEQ must ensure the permit complies with Oregon's antidegradation policy found in OAR 340-041-0004. This policy is designed to protect water quality by limiting unnecessary degradation from new or increased sources of pollution.

DEQ has performed an antidegradation review for this discharge. The proposed permit contains the same or more stringent discharge loadings as the existing permit. Permit renewals with the same or more stringent discharge loadings as the previous permit are not considered to lower water quality from the existing condition. DEQ is not aware of any information that existing limits are not protecting the receiving stream's designated beneficial uses. DEQ is also not aware of any existing uses present within the water body that are not currently protected by standards developed to protect the designated uses. Therefore, DEQ has determined that the proposed discharge complies with DEQ's antidegradation policy. DEQ's antidegradation worksheet for this permit renewal is available upon request.

3.6 Whole Effluent Toxicity

DEQ determined that whole effluent toxicity (WET) testing is not warranted due to the low levels of toxics present in the final effluent.

3.7 Groundwater

The treatment facility does not have any basins, ponds or lagoons that have the potential to leach into the groundwater. The facility does not irrigate wastewater effluent and only discharges to the ditch. No groundwater monitoring or limits are required.

4. Schedule A: Other Limitations

4.1 Mixing Zone

DEQ performed an analysis in 2023 that estimated that 7Q10 flows in Lenz Creek below the point of discharge are zero for the months of August, September and October. Because at times there is no water available for mixing, the permit does not include a mixing zone A description of that analysis is available in a 2023 mixing zone memo that is part of the administrative record.

5. Schedule B: Monitoring and Reporting Requirements

Schedule B of the permit describes the minimum monitoring and reporting necessary to demonstrate compliance with the proposed effluent limits. In addition, monitoring for other parameters is required to better characterize the effluent quality and the receiving stream. This data will be used during the next permit renewal. Detailed monitoring frequency and reporting requirements are in Schedule B of the proposed permit. The required monitoring, reporting and frequency for many of the parameters are based on DEQ's monitoring and reporting matrix guidelines, permit writer judgment, and to ensure the needed data is available for the next permit renewal.

6. Schedule C: Compliance Schedule

The permittee is expected to meet all effluent limits once the permit becomes effective and therefore a compliance schedule is not needed.

7. Schedule D: Special Conditions

The proposed permit contains the following special conditions. The conditions include the following:

7.1 Emergency Response and Public Notification Plan

A requirement to develop and submit an emergency and spill response plan or ensure the existing one is current per General Condition B.7 in Schedule F.

7.2 Spill/Emergency Response Plan

The permittee must have an up-to-date spill response plan for prevention and handling of spills and unplanned discharges.

7.3 Effluent Flow Monitoring

A requirement for the permittee to submit documentation of compliance with Schedule F, Condition C2, that an effluent flow monitoring device is in place, or that there are plans to for installing such a device.

8. Schedule F: NPDES General Conditions

Schedule F contains the following general conditions that apply to all NPDES permittees. These conditions are reviewed by EPA on a regular basis.

- Section A. Standard Conditions
- Section B. Operation and Maintenance of Pollution Controls
- Section C. Monitoring and Records
- Section D. Reporting Requirements
- Section E. Definitions