

Fact Sheet for State Waste Discharge Permit ST0003861

Perdue Foods, LLC – Draper Valley Farms

Effective Date: August 1, 2022

Purpose of this fact sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge permit for Perdue Foods, LLC – Draper Valley Farms that will allow discharge of wastewater to the City of Mount Vernon Wastewater Treatment Plant.

State law requires any commercial or industrial facility to obtain a permit before discharging waste or chemicals to municipal sanitary sewer collection and treatment systems.

Ecology makes the draft permit and fact sheet available for public review and comment at least 30 days before it issues the final permit to the facility operator. Copies of the fact sheet and draft permit for Perdue Foods, LLC – Draper Valley Farms, State Waste Discharge permit ST0003861, are available for public review and comment from May 10, 2022 until the close of business on June 9, 2022. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

Perdue Foods, LLC reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions about the facility's location, history, product type, production rate, or discharges prior to publishing this draft fact sheet for public notice.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this fact sheet as **Appendix E - Response to Comments**, and publish it when we issue the final State Waste Discharge permit. Ecology generally will not revise the rest of the fact sheet. The full document will become part of the legal history contained in the facility's permit file.

Summary

Perdue Foods, LLC – Draper Valley Farms processes chickens. The proposed permit includes the following changes,

- A reduced flow limit.
- A variable BOD₅ discharge limit.
- Compliance schedule meeting the BOD₅ limit effective in 2023.
- Operations and maintenance manual submittal.
- Nutrient monitoring requirements.

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I. Introduction

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in the Water Pollution Control law, chapter 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State waste discharge program (chapter 173-216 WAC)
- Submission of plans and reports for construction of wastewater facilities (chapter 173-240 WAC)

These rules require any industrial facility owner/operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

Under the State Waste Discharge permit program and in response to a complete and accepted permit application, Ecology generally prepares a draft permit and accompanying fact sheet, and makes it available for public review before final issuance. If the volume of the discharge has not changed or if the characteristics of the discharge have not changed Ecology may choose not to issue a public notice. When Ecology publishes an announcement (public notice); it tells people where they can read the draft permit, and where to send their comments, during a period of 30 days. (See **Appendix A - Public Involvement Information** for more detail about the public notice and comment procedures). After the public comment period ends, Ecology may make changes to the draft State Waste Discharge permit in response to comment(s). Ecology will summarize the responses to comments and any changes to the permit in **Appendix E**.

II. Background Information

Table 1: General Facility Information

Facility Information	
Applicant and Mailing Address	Perdue Foods, LLC 1500 E. College Way Suite A PMB 449 Mount Vernon, WA 98273
Facility Name and Address	Draper Valley Farms 1000 Jason Lane Mount Vernon, WA 98273
Contact at Facility	Name: Jennifer Schmidt Title: Environmental Manager Telephone #: (360) 419-7854
Responsible Official	Name: Matt Junkel Title: Vice President of Operations
Industrial User Type	Other Significant Industrial User

Facility Information	
Industry Type	Poultry Processing
Permit Fee Category (WAC 173-224)	Food Processing; (g) 500,000 -< 750,000 gpd
Type of Treatment by Industry	Dissolved air flotation and pH neutralization
SIC Codes	2015
NAICS Codes	311615
Facility Location (NAD83/WGS84 reference datum)	Latitude: 48.433529 Longitude: -122.330796
Treatment Plant Receiving Discharge	City of Mount Vernon WWTP NPDES Permit No. WA0024074
Discharge Location (NAD83/WGS84 reference datum)	Latitude: 48.41307 Longitude: -122.349485
Permit Status	
Issuance Date of Previous Permit	8/17/2016
Application for Permit Renewal Submittal Date	3/11/2021
Date of Ecology Acceptance of Application	4/8/2021
Inspection Status	
Date of Last Inspection	6/17/2021



Figure 1: Facility Site Map

(Source: Google Maps)

A. Facility description

Production processes and wastewater generation

Draper Valley Farms processes approximately 80,000 chickens per day, yielding 425,000 pounds of chicken product per day. The facility has two shifts which span 16 hours and typically work 5-6 days per week all year.

Chickens are trucked to the plant from nearby farms. The trucks are held in a covered area until an unloading bay is available.

After chickens are unloaded, the truck and cages are hosed off. This occurs on a pad outdoors which slopes to an influent drain to the onsite wastewater treatment system. Likewise, any stormwater that falls in this area, which could become contaminated through outdoor staging or other processes, is directed to the treatment system.

Initial processing consists of stunning, slaughtering, scalding, feather removal, and evisceration.

First, chickens are stunned and slaughtered. In 2018, Draper Valley Farms installed a bridge point between the slaughter machine and the bleed table and reconfigured catch pans to improve blood capture and minimize blood flow onto the floors. The collected blood is routed to a trailer staged outdoors.

After slaughtering, chickens are put through a bath of hot water for scalding, which helps loosen the feathers, followed by feather removal. After feather removal, chickens are sent to an eviscerating line to remove internal organs and feet. The majority of feathers and viscera are collected at this point and routed to a trailer staged outdoors.

Wastewater from facility washdown, including any remaining blood, feathers, and other viscera is routed via floor drains to the treatment system.

Next, the chickens are cleaned and inspected. Any chickens flagged with issues are removed from the production line and collected for a different use. At this point in the production line, all carcasses are frequently dipped into tanks of food-grade disinfectants as required by food safety regulations. Different disinfectants are used dependent on the type (organic or non-organic) of chicken. Beginning in mid-2018, Draper Valley Farms switched to a disinfection product containing peracetic acid (PAA) in order to comply with changing food safety regulations. Water overflow and discharge from the dip tanks are routed to the treatment system via floor drains.

After inspection, chickens are chilled in an air chiller room at about 40 °F to keep them fresh and clean. A previously used water bath chiller process has been decommissioned.

Chilled carcasses are sent to second processing, which consists of cutting and packaging. Chickens are deboned and cut into various parts and portions, dependent on customer orders. Food safety disinfection products are used in this process as well. Water is used to cool the packaging machines. All wastewater is discharged to the treatment system.

Draper Valley Farms uses food-grade disinfectants in the process. These disinfectants include an acidic solution which is composed of acetic acid, peracetic acid, and a hydrogen peroxide/caustic solution composed primarily of sodium hydroxide; an

estimated 30,954 gallons and 6,875 gallons of each, respectively are used annually. In addition, Draper Valley Farms uses 50% citric acid solution and calcium hypochlorite tablets.

The facility is cleaned once per shift which involves collecting viscera and other by-products from the floor drain screens, hosing down the floors, and cleaning all surfaces.

In addition to the process wastewater, there is periodic cooling tower blowdown and drawdown for maintenance.

Wastewater pretreatment

First processing wastewater, from chicken slaughtering and cleaning, is routed to a rotary drum screen to remove feathers and any meat particles. Second processing wastewater, from cutting and packaging, is also routed through a drum screen to remove any solids. First and second processing wastewater, along with cooling water and boiler blowdown and contaminated stormwater, is routed to a sump and then secondary screening with a rotary screen.

Screened wastewater is then routed to an equalization (EQ) tank. Wastewater then flows through a pipe mix sequence where treatment chemicals, including ferric chloride, caustic, and polymer are injected. Wastewater continues through the dissolved air flotation (DAF) tank where primarily insoluble BOD is removed. Sludge removed from the bottom of the DAF tank and scum skimmed from the top is routed to a truck for offsite disposal. Effluent from the DAF tank is then treated with caustic to maintain the pH of the wastewater within permit limits prior to final discharge to the sanitary sewer.

A schematic of the wastewater treatment system is included in Appendix D.

As described in Section II.D below, Draper Valley Farms has had difficulty consistently meeting the BOD₅ loading limits assigned by the City of Mount Vernon and included in the previous permit as effluent limits. From April 2019 through March 2021, Draper Valley Farms exceeded the effluent BOD₅ load limit 73 times. The cause of the exceedances is primarily attributed to the change in microintervention chemicals used in production which contribute to higher soluble BOD. The wastewater pretreatment system is also outdated and had numerous leaks and inefficiencies.

In response to the effluent BOD₅ load limit violations, from late 2019 through 2020, Draper Valley Farms trialed several biological and chemical treatments aimed at reducing the soluble BOD in the effluent. These included a two-part bioaugmentation from AFCO and a coagulant/polymer mix from NALCO. These trials did not substantially improve BOD removal and were abandoned.

Since the Mount Vernon WWTP is primarily designed to treat for BOD, Draper Valley Farms brought up discussions to increase their allocation, and therefore, increase the BOD₅ load limit in the permit. The City agreed to a higher allocation. However, based on a Consent Decree between Perdue Foods and Waste Action Project, Draper Valley Farms requested a modification of the BOD₅ limits in a letter to Ecology dated February 15, 2022. Ecology is proposing to use the requested BOD₅ limits, which are lower than the

allocation from the City, in this permit. In addition, Draper Valley Farms is in the process of designing a major treatment system upgrade including improved BOD removal. Ecology is proposing to include a report requirement for the final engineering report and operations and maintenance manual.

Stormwater

Stormwater runoff and discharge from this site, not directed to the wastewater treatment system, is regulated by Ecology's Industrial Stormwater General Permit under permit coverage WAR000552.

B. Discharge location to the City of Mount Vernon

Draper Valley Farms discharges to the City of Mount Vernon (Mount Vernon) sewer system. The discharge occurs after all pretreatment processes, as described in Section II.A. A composite sampler is set up at the sample location, see Figure 2. Mount Vernon visits the site daily to collect the composite sample and analyze for 5-day biological oxygen demand (BOD₅) and total suspended solids (TSS) at their accredited lab. Oil and grease grab samples are collected and sent to an outside lab for analysis. Draper Valley Farms utilizes a continuous pH meter and recorder. Effluent flow is measured by the incoming potable water meter on a daily basis.



Figure 2: Sample point location map

(Source: Google Maps)

The Mount Vernon wastewater treatment plant (WWTP) is a 15 million gallon per day (MGD) activated sludge facility that discharges to the Skagit River. The current operating

maximum monthly BOD₅ and TSS influent loading capacity are 17,300 lbs/day and 18,300 lbs/day, respectively.

C. Wastewater characterization

Draper Valley Farms reported the concentration of pollutants in discharge monitoring reports. The tabulated data represents the quality of the effluent discharged from September 1, 2016 through March 31, 2021.

Table 2: Wastewater Characterization

Parameter	Units	Frequency of Sampling	Average Value	Maximum Value
Flow, Rolling 3-Day Average (R3DA)	gpd	Daily	330,549	616,000
Biochemical Oxygen Demand (BOD ₅)	mg/L	Daily	276	1,072
BOD ₅	lbs/day	Daily	794	2,786
BOD ₅ , R3DA	lbs/day	Daily	794	2,163
Total Suspended Solids (TSS)	mg/L	Daily	52	616
TSS	lbs/day	Daily	120	782
TSS, R3DA	mg/L	Daily	120	494
Oil and Grease	mg/L	Quarterly	5.7	29

Parameter	Units	Frequency of Sampling	Minimum Value	Maximum Value
pH	standard units	Continuous	4.2	13.3

D. Summary of compliance with previous permit issued

The previous permit placed effluent limits on the maximum 3-day rolling average (R3DA) flow (gpd), R3DA BOD₅ load (lbs/day), R3DA TSS load (lbs/day), pH, and oil and grease concentration (mg/L).

Draper Valley Farms has not consistently complied with the effluent limits and permit conditions throughout the duration of the permit issued on August 17, 2016. Ecology assessed compliance based on its review of the facility's discharge monitoring reports (DMRs) and on inspections conducted by Ecology.

The majority of the violations are from exceedance of the BOD₅ R3DA effluent load limit. Figure 3 graphically displays the BOD₅ R3DA effluent load daily values compared to the limit. In August 2018, Draper Valley Farms started recording higher BOD₅ effluent loads

and in September 2018 violated the BOD₅ R3DA effluent load limit on two consecutive days (9/6/18 – 1,799 lbs/day and 9/7/18 – 1,591 lbs/day). Draper Valley Farms attributed the exceedances to soluble BOD₅ coming from excess blood entering the wastewater systems since the corresponding TSS was low. Draper Valley Farms implemented corrective action measures, as outlined in the Section II.A – Production processes and wastewater generation, to improve blood collection and minimize the amount that enters the wastewater system.

In addition, in mid-2018, Draper Valley Farms began using new microintervention chemicals to comply with changing USDA food safety regulations. These chemicals and estimated usages are outlined in Section II.A – Production processes and wastewater generation. As shown by the graph in Figure 3, although BOD₅ R3DA values did decline after improvements to blood collection, BOD₅ in the effluent increased until peaking at a R3DA of 2,163 lbs/day. At the peak of use, Draper Valley Farms was using approximately 200 gallons per day of the microintervention chemicals. However, beginning in late-February 2020, Draper Valley Farms had reduced microintervention chemical usage to about 140 gallons per day while still complying with USDA regulations. Although still exceeding the BOD₅ R3DA effluent load limit on a periodic basis, the peaks and frequency of exceedance had reduced substantially. Between the period of April 2019 through March 2021, Draper Valley Farms exceeded the BOD₅ R3DA effluent load limit 73 times. An explanation of the corrective actions taken by Draper Valley Farms is included in Section II. A – Wastewater pretreatment.

Ecology sent warning letters addressing the BOD₅ limit exceedances on 11/26/2018, 10/15/2019, 3/25/2020, 9/16/2020, and 1/29/2021.

In addition to the above mentioned BOD₅ R3DA effluent load limit exceedances, Draper Valley Farms has exceeded the daily minimum pH limit twice and the daily maximum pH limit twice, as outlined in Table 3.

Figure 3: 3-day rolling average BOD₅ compared to R3DA BOD₅ load limit

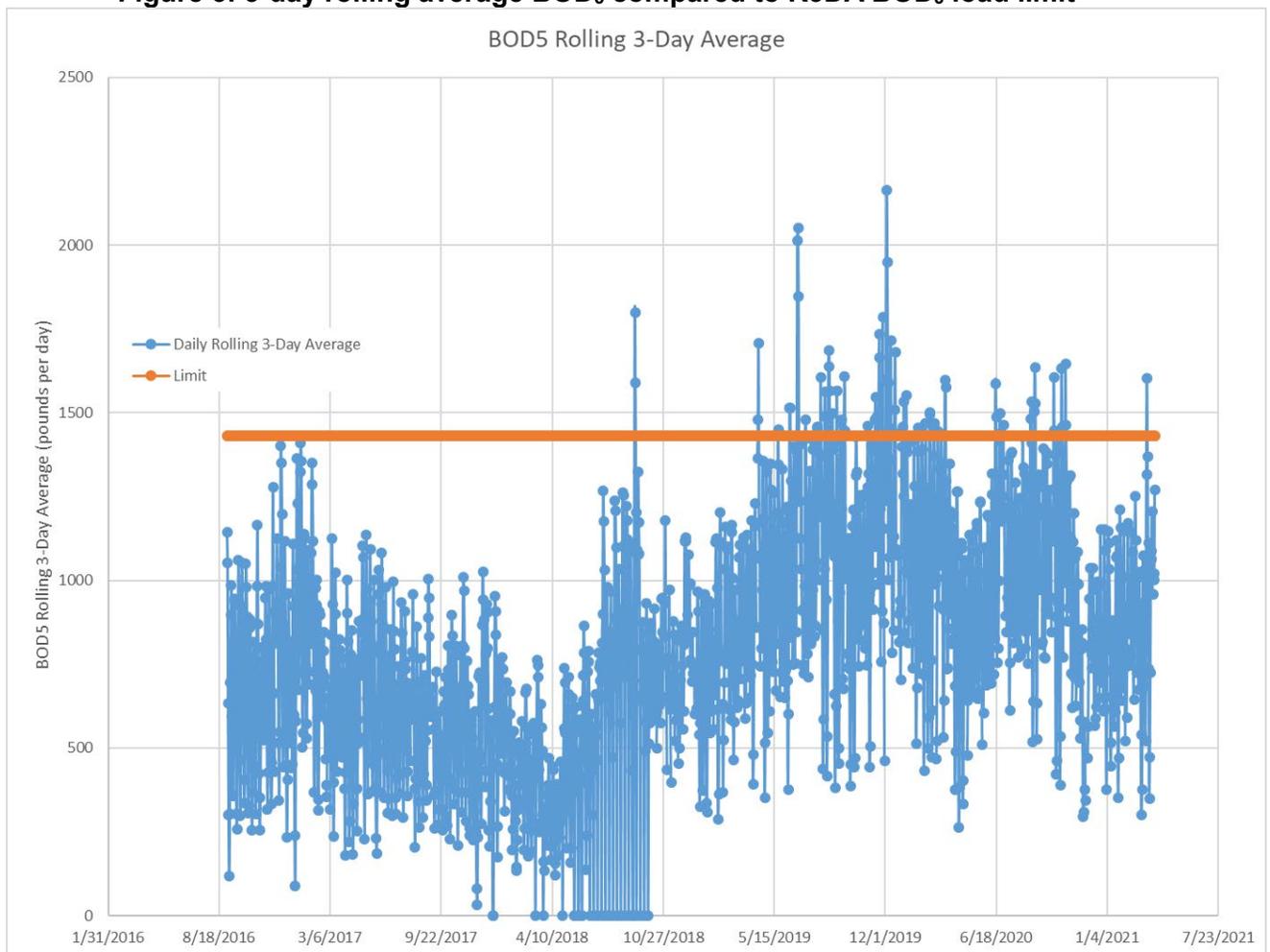


Table 3: Violations/Permit Triggers

Violation	Date	Additional Information
pH daily min exceedance	12/10/2016	Minimum measured value was 4.2 standard units (s.u.), the daily min limit is 6.2 s.u. Ecology issued a No Further Action statement for this violation based on the corrective actions taken.
pH daily max exceedance	12/10/2016	Maximum measured value was 13.3 s.u., the daily max limit is 11.0 s.u. Ecology issued a No Further Action statement for this violation based on the corrective actions taken.
pH daily max exceedance	12/11/2016	Maximum measured value was 12.7 s.u., the daily max limit is 11.0 s.u. Ecology issued a No Further Action statement for this violation based on the corrective actions taken.
pH daily max exceedance	1/9/2021	Maximum measured value was 12.3 s.u., the daily max limit is 11.0 s.u. Ecology issued a No Further Action statement for this violation based on the corrective actions in progress.

E. State environmental policy act (SEPA) compliance

State law exempts the issuance, reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions that are no less stringent than federal and state rules and regulations (RCW 43.21C.0383). The exemption applies only to existing discharges, not to new discharges. This permit covers an existing discharge.

III. Proposed Permit Limits

State regulations require that Ecology base limits in a State Waste Discharge permit on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation (40 CFR 400 - 471), or Ecology develops limits on a case-by-case basis (40 CFR 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).
- Effects of the pollutants on the publicly-owned treatment works (POTW). Wastewater must not interfere with the operation of the POTW. Ecology considers local limits in developing permit limits.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

The limits in this permit reflect the information received in the application and from supporting reports (engineering, monitoring, etc.). Ecology evaluated the permit application and determined the limits needed to comply with the rules adopted by the state of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in the regulation.

Ecology does not usually develop permit limits for pollutants not reported in the permit application but may be present in the discharge. The permit does not authorize the discharge of non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Until Ecology modifies the permit to reflect additional discharge of pollutants, a permitted facility could be violating its permit.

A. Technology-based effluent limits

Waste discharge permits issued by Ecology specify conditions requiring all available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (RCW 90.48).

There are no federal categorical pretreatment standards for this facility.

The state waste discharge permit regulations include restrictions and prohibitions to protect publicly-owned sewerage systems. A facility may not discharge any wastewater

having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel unless the:

- System is specifically designed to accommodate such discharge.
- Discharge is authorized by a permit (WAC 173-216-060).

Federal regulations (40 CFR 403.5b) also prohibits the discharge of pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the collection and treatment system is designed to accommodate such discharges.

40 CFR Part 401.17 gives an allowance for temporary excursions of the pH effluent limitations under continuous monitoring in NPDES permits. An EPA memo, dated May 13, 1993, states that an analogous policy can be applied to discharges to POTWs as long as the excursion does not cause pass through or interference at the receiving POTW. Ecology consulted with the City regarding any operational challenges associated with the excursion allowance of the maximum daily pH limit in the previous permit; the City did not express any concerns from the time-limited excursions. Additionally, this upper limit is based on state law which allows for an excursion above 11.0 if authorized in permit. Therefore, Ecology has maintained the same time limited excursion allowance for the daily maximum pH effluent limit as provided for in the previous permit. However, the excursion allowance for the daily minimum pH has been removed since this lower limit is based on the City's local limit.

Due to the ongoing BOD₅ limit exceedances, Draper Valley Farms has already started investigating treatment system upgrades and submitted a 30% design report to Ecology in May 2021. Ecology is proposing to include a compliance schedule for Draper Valley Farms to submit a final engineering report. When received, Ecology will determine if the facility meets the minimum requirements demonstrating compliance with the AKART standard and approve (or deny) the engineering report. In addition, Ecology proposes to require the submittal of an operations and maintenance manual.

B. Effluent limits based on local limits

To protect the Mount Vernon WWTP from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, Ecology believes it is necessary to impose limits for certain parameters. Ecology based these limits on local limits established by the City of Mount Vernon based on allocations for this specific facility.

- The permittee proposed a higher BOD₅ limit in the permit application, which the City approved. However, in a letter dated February 15, 2022, Draper Valley Farms requested a variable BOD₅ limit which has been incorporated into the proposed permit.
- The permittee proposed a lower flow limit, which the City approved in the recent permit application.
- The proposed TSS limit, consistent with the previous permit, was approved by the City in 2005.

- The proposed pH limits are consistent with the previous permit, the permittee has been predominantly able to comply.

Ecology's pretreatment program delegation agreement with EPA includes language in which Ecology agreed to enforce limits adopted by non-delegated programs (local limits). Applicable limits for this discharge include the following:

Table 4: Limits Based on Local Limits

Effluent Limits		
Parameter	3-Day Rolling Average	
Flow	720,000 gpd	
BOD ₅	1,520 lbs/day (effective August 1, 2022 through June 30, 2023) 1,450 lbs/day (effective July 1, 2023)	
TSS	825 lbs/day	
Parameter	Daily Minimum	Daily Maximum
pH	6.2 standard units	10.0 standard units

C. Comparison of effluent limits with the previous permit issued on August 17, 2016

Table 5: Comparison of Effluent Limits

Parameter	Basis of Limit	Previous Effluent Limits: Outfall # 001		Proposed Effluent Limits: Outfall # 001	
		Rolling 3-Day Average	Maximum Daily	Rolling 3-Day Average	Maximum Daily
Flow (gpd)	N/A	760,000	N/A	720,000	N/A
BOD ₅ (lbs/day)	Local	1,430	N/A	1,520 1,450 (effective 7/1/23)	N/A
TSS (lbs/day)	Local	825	N/A	825	N/A
Oil and Grease (mg/L)	Technology	N/A	100	N/A	100
Parameter	Basis of Limit	Daily Minimum		Daily Maximum	
pH	Local	6.2		11.0	

IV. Monitoring Requirements

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the treatment process functions correctly and that the discharge complies with the permit's effluent limits.

If a facility uses a contract laboratory to monitor wastewater, it must ensure that the laboratory uses the methods and meets or exceeds the method detection levels required by the permit. The permit describes when facilities may use alternative methods. It also describes what to do in certain situations when the laboratory encounters matrix effects. When a facility uses an alternative method as allowed by the permit, it must report the test method, detection level (DL), and quantitation level (QL) on the discharge monitoring report or in the required report.

A. Lab accreditation

Ecology requires that facilities must use a laboratory registered or accredited under the provisions of chapter 173-50 WAC, Accreditation of Environmental Laboratories, to prepare all monitoring data (with the exception of certain parameters).

B. Wastewater monitoring

Ecology details the proposed monitoring schedule under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

The proposed permit requires additional monitoring to further characterize the facility's wastewater, including total ammonia, nitrate plus nitrite, and total kjeldahl nitrogen.

V. Other Permit Conditions

A. Reporting and recordkeeping

Ecology based Special Condition S3 on its authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and CFR 403.12 (e),(g), and (h)].

B. Operations and maintenance

Ecology requires dischargers to take all reasonable steps to properly operate and maintain their wastewater treatment system in accordance with state regulations (WAC 173-240-080 and WAC 173-216-110). The facility must prepare and submit an updated operation and maintenance (O&M) manual as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). Implementation of the procedures in the operation and maintenance manual ensures the facility's compliance with the terms and limits in the permit. The proposed permit requires submission of an updated O&M manual for the entire wastewater system by the compliance date of the reduced BOD₅ limit.

C. Prohibited discharges

Ecology prohibits certain pollutants from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (chapter 173-303 WAC).

D. Dilution prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

E. Slug discharge plan

Ecology determined that Draper Valley Farm has the potential for a batch discharge or a spill that could adversely affect the treatment plant, therefore the proposed permit requires a slug discharge control plan [(40 CFR 403.8 (f)(I) (iii)(B)(6) and (f) (2)(vi)].

F. Compliance schedule

Draper Valley Farms has not been able to consistently meet the BOD₅ discharge limit in the previous permit, see Section II.D for more information. Therefore, in order to meet the proposed BOD₅ limits proposed in this permit, Draper Valley Farms must submit an engineering report and plans and specifications for a treatment system upgrade which is capable of treating the wastewater to the discharge limit. The final compliance date for meeting the BOD₅ limit is July 1, 2023.

G. General conditions

Ecology bases the standardized general conditions on state law and regulations. They are included in all state waste discharge permits issued by Ecology.

VI. Public Notification of Noncompliance

Ecology may annually publish a list of all industrial users in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters in a local newspaper. Accordingly, this permit Special Condition informs the Facility that noncompliance with this permit may result in publication of the noncompliance.

VII. Permit Issuance Procedures

A. Permit modifications

Ecology may modify this permit to impose or change the numerical limits, if necessary to comply with changes in the pretreatment requirements, conditions in local sewer ordinances, or based on new information from sources such as inspections and effluent monitoring. It may also modify this permit to comply with new or amended state or federal regulations.

B. Proposed permit issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for five years.

VIII. References for Text and Appendices

Perdue Foods LLC – Draper Valley Farms

All documents available on Ecology’s Permitting and Reporting Information System.

(<https://apps.ecology.wa.gov/paris/FacilitySummary.aspx?FacilityId=39874293>)

Permit Renewal Application. March 2021.

Application Amendment. April 2021.

Permit Modification Request. February 2022.

Washington State Department of Ecology.

[Laws, Rules & Rulemaking](https://ecology.wa.gov/About-us/How-we-operate/rulemaking) (<https://ecology.wa.gov/About-us/How-we-operate/rulemaking>)

[Permit and Wastewater Related Information](https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance) (<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance>)

[Permit Writer’s Manual](#), January 2015. Publication Number 92-109

(<https://fortress.wa.gov/ecy/publications/documents/92109.pdf>)

Water Quality Permitting and Reporting Information System (PARIS), Facility Name: Draper Valley Farms Mount Vernon, Permit Number ST0003861

(<https://apps.ecology.wa.gov/paris/FacilitySummary.aspx?FacilityId=39874293>)

Appendix A - Public Involvement Information

Ecology proposes to issue a permit to Perdue Foods, LLC – Draper Valley Farms. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology placed a Public Notice of Application on April 13, 2021 and April 20, 2021 in the Skagit Valley Herald to inform the public about the submitted application and to invite comment on the issuance of this permit.

Ecology placed a Public Notice of Draft on May 10, 2022 in the Skagit Valley Herald to inform the public and to invite comment on the proposed draft State Waste Discharge permit and fact sheet.

The notice:

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed state waste discharge permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled [Frequently Asked Questions about Effective Public Commenting](https://fortress.wa.gov/ecy/publications/documents/0307023.pdf), available at <https://fortress.wa.gov/ecy/publications/documents/0307023.pdf>.

You may obtain further information from Ecology by telephone, (206) 594-0000, or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

The primary author of this permit and fact sheet is Maia Hoffman, P.E.

Appendix B – Your Right to Appeal

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
<p>Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503</p>	<p>Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608</p>
<p>Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501</p>	<p>Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903</p>

Appendix C - Glossary

AKART - The acronym for "all known, available, and reasonable methods of prevention, control and treatment." AKART is a technology-based approach to limiting pollutants from wastewater discharges, which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Average monthly discharge limit - The average of the measured values obtained over a calendar month's time.

Best management practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅ - Determining the five-day Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in receiving waters after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD₅ is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass - The intentional diversion of waste streams from any portion of a treatment facility.

Categorical pretreatment standards - National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties, which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Clean water act (CWA) - The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance inspection-without sampling - A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance inspection-with sampling - A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite sample - A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected

either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction activity - Clearing, grading, excavation, and any other activity, which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous monitoring - Uninterrupted, unless otherwise noted in the permit.

Date of receipt - This is defined in RCW 43.21B.001(2) as five business days after the date of mailing; or the date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the agency, constitutes sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing.

Detection limit - The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the pollutant concentration is above zero and is determined from analysis of a sample in a given matrix containing the pollutant.

Engineering report - A document that thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report must contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab sample - A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Groundwater - Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

Industrial user - A discharger of wastewater to the sanitary sewer that is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial wastewater - Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated stormwater and, also, leachate from solid waste facilities.

Interference - A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and

Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local limits - Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Major facility - A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum daily discharge limit - The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is the maximum discharge of a pollutant measured during a calendar day.

Method detection level (MDL) - See Detection Limit.

Minor facility - A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

National pollutant discharge elimination system (NPDES) - The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both state and federal laws.

pH - The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7 is defined as neutral and large variations above or below this value are considered harmful to most aquatic life.

Pass-through - A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Point of compliance - The location in the groundwater where the enforcement limit must not be exceeded and a facility must comply with the Ground Water Quality Standards. Ecology determines this limit on a site-specific basis. Ecology locates the point of compliance in the groundwater as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless it approves an alternative point of compliance.

Quantitation level (QL) - Also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to $(1,2, \text{or } 5) \times 10^n$, where n is an integer. (64 FR 30417).

ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

Reasonable potential - A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Responsible corporate officer - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sample Maximum - No sample may exceed this value.

Significant industrial user (SIU) --

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug discharge - Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate that may cause interference or pass through with the POTW or in any way violate the permit conditions or the POTW's regulations and local limits.

Solid waste - All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD₅ - Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD₅ test is not specifically described in Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD₅ test is sufficient to remove the particulate organic fraction.

State waters - Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater - That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based effluent limit - A permit limit based on the ability of a treatment method to reduce the pollutant.

Total suspended solids (TSS) - Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Upset - An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Appendix D – Process Diagrams

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Appendix E - Response to Comments

Ecology received one comment from Perdue Foods LLC – Draper Valley Farms during the public comment period.

Comment:

In our current permit we are allowed brief pH excursions above 11.0 and below 6.2. The draft renewal permit continues to allow for brief excursions above 11.0. However, the draft renewal permit does not include the excursion allowance for the daily minimum pH below 6.2. Draper Valley request that this allowance be placed back into the renewal permit.

Our current wastewater treatment system is operated manually. The pH excursion allowances give our operators time to manually close the discharge valve to the city to prevent the discharge of wastewater that is out of parameters.

Based on the flow and volume of wastewater we send to the City of Mount Vernon, brief pH excursions are unlikely to cause harm to the City's treatment system, as the pH would likely neutralize with the additional flow of water.

Response:

Ecology described the applicable pH effluent limits and authorized temporary excursions in Section III.A and III.B of this fact sheet.

Ecology understands the operational challenges of the existing treatment infrastructure in immediately restricting discharge if the wastewater is out of compliance with the pH limits. Additionally, Ecology understands that Perdue plans to upgrade the treatment system and install automatic pH control with the upgrades planned to meet the reduced BOD₅ limit. Therefore, Ecology has confirmed with the City of Mount Vernon in allowing a temporary excursion of the lower pH limit, not to fall below 5.0 for more than 5 minutes at a time. Due to the short duration allowed, Ecology does not expect this to contribute to interference at the Mount Vernon WWTP. In addition, Ecology amended the permit to allow for pH excursions of the lower and upper pH limits for a total of less than 2 hours, see Permit Condition S1, Table 2.