

Fact Sheet for State Waste Discharge Permit ST0009253

SunOpta Healthy Fruit Snacks (SunOpta)

November 9, 2020

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 **SunOpta Healthy Fruit Snacks (SunOpta)** that will allow discharge of wastewater to City of Omak Publicly-Owned Treatment Works.

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 thirty (30) days before it issues the final permit to the facility operator. Copies of the fact sheet and draft permit for SunOpta, State Waste Discharge permit ST0009253, are available for public review and comment from September 23, 2020 until the close of business October 23, 2020. For more details on preparing and filing comments about these documents, please see **Appendix B - Public Involvement Information**.

SunOpta 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 F - 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

SunOpta Healthy Fruit Snacks (SunOpta) submitted an application for renewal of its state waste discharge permit, ST0009253, to Ecology on February 25, 2016. Ecology issued SunOpta's existing permit January 18, 2012.

SunOpta is located in Omak, WA. The facility produces finished fruit snack products from fruit purees and juices, and pre-dried ingredients. Process wastewater discharges to the City of Omak publicly owned treatment works (POTW).

Effluent limits for pH and Average Daily Loadings of Flow, BOD and TSS in the proposed permit are based on the City of Omak Industrial Wastewater User Contract dated May 16, 2011. The Schedule A of the 2011 contract includes allowable wastewater discharges for flow, biochemical oxygen demand (BOD), and total suspended solids (TSS). The schedule A is dated January 19, 2010. City of Omak provided an electronic copy of this contract to Ecology in a December 10, 2019 email.

During a November 19, 2019 Compliance Inspection, SunOpta personnel indicated the facility is no longer an affiliate to Kettle Valley. The removal of "Kettle Valley" from the facility's name will become effective in the proposed permit.

The proposed permit requires SunOpta to achieve pH sampling and analysis of final wastewater effluent according to requirements at 40 CFR 403.12 Measurement of pollutants and in accordance with Standard Methods (SM4500-H+ pH value).

The proposed permit also requires SunOpta to submit an engineering report and detailed plans and specifications **prior** to constructing or modifying any wastewater control facilities for Ecology to review and approve.

Additional requirements for the upcoming permit cycle include submittal of the following plans and reports:

- O&M Manual Update
- Solid Waste Plan Update
- Spill and Slug Discharge Control Plan Update

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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 thirty 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 F**.

Background Information

Table 1 General Facility Information

| Facility Information | |
|--|--|
| Applicant | SunOpta Grains and Foods, Inc. |
| Facility Name and Address | SunOpta Healthy Fruit Snacks 1124 5 th Ave. East, Omak, WA, 98841 |
| UBI Number | 603-145-228 |
| Contact at Facility | Name: Garrett Questad, Plant Manager Telephone #: (509) 826-5471 ext. 1002 |
| Responsible Official | Name: Paul J Bruns Title: Vice President Operations Address: 2640 Sturgis Rd., Oxnard, CA 93030 Telephone #: (815) 263-4756 |
| Industrial User Type | Significant Industrial User/Categorical Industrial User |
| Industry Type | Food Processor |
| Categorical Industry | 40 CFR 407 Subpart F-Canned and Preserved Fruit |
| Type of Treatment by Industry | Solids settling during residence time in wastewater buffer tanks. |
| SIC Codes | 2034 |
| NAIC Codes | 31142 |
| Facility Location (NAD83/WGS84 reference datum) | Latitude: 48.404890 Longitude: -119.511640 |
| Treatment Plant Receiving Discharge | City of Omak POTW |
| Discharge Location (NAD83/WGS84 reference datum) | Latitude: 48.404863 Longitude: -119.512143 |
| Permit Status | |
| Renewal Date of Previous Permit | January 18, 2012 |
| Application for Permit Renewal Submittal Date | February 25, 2016 |
| Date of Ecology Acceptance of Application | March 21, 2016 |
| Inspection Status | |
| Date of Last Non-sampling Inspection Date | November 19, 2019 |

Figure 1. Facility Location Map



Figure 2. Facility Location Map, Close-up



A. Facility description

History

Formerly Stake Technology Ltd., SunOpta began operations of Kettle Valley Dried Fruits in Omak, WA in 2003. According to the company's website, SunOpta is a leading global company focused on organic, non-genetically modified ("non-GMO") and specialty foods. Corporate headquarters is located in Mississauga, Ontario. Information posted in SunOpta's 2018 Annual Report lists locations of sales offices and production facilities in Canada, Mexico, United States, Netherlands, and several other countries.

According to information provided by SunOpta in a February 3, 2020, email, the Omak location is associated with UBI Number 603-145-228, and Company Name, SunOpta Grains and Foods Inc. This fact sheet and the proposed permit will continue to refer to the entity as SunOpta.

SunOpta submitted its first permit application to the Department of Ecology (Ecology) for the discharge of process wastewater by its Omak facility on September 20, 2004. The facility discharges to the City of Omak publicly owned treatment works (POTW). Monitoring of wastewater discharged by this facility began on September 10, 2004. Ecology records show the initial discharge permit at this site was issued on February 6, 2005. A permit was reissued on June 1, 2006, and then again on March 1, 2012.

An industrial user contract between the City of Omak and the facility was established May 16, 2011. The Schedule A of the 2011 contract includes allowable wastewater discharges for flow, biochemical oxygen demand (BOD), and total suspended solids (TSS). The schedule A is dated January 19, 2010.

On February 25, 2016, SunOpta's Healthy Fruit Snacks division applied for renewal of State Waste Discharge Permit ST0009253 for its Omak facility. The current version of this permit was previously issued March 1, 2012. It was administratively extended by Ecology March 1, 2017.

Industrial processes

SunOpta employees approximately 125 full-time personnel. Based on information in their application, SunOpta operates 24 hours per day, five days per week, and 52 weeks per year producing finished fruit snack products from fruit purees and juices and pre-dried product. Production varies with product demand. SunOpta estimates up to 50,000 pounds of fruit puree and concentrates are processed per day. Production consists of two hot extrusion lines and one cold press line. The three lines discharge continuous flow wastewater when operating. The wastewater streams contain varying amounts of BOD and TSS. Since the March 1, 2012 issuance of their current permit, SunOpta no longer processes whole fruit on-site.

The processing of dried fruit is listed under the Canned and Preserved Fruits and Vegetables Processing Point Source Category at 40 CFR 407 Subpart F; no categorical limits are listed for 5 day biochemical oxygen demand (BOD5) or total suspended solids (TSS) for existing sources.

In Section C of their application for permit renewal, SunOpta listed their maximum daily and maximum average monthly wastewater discharge as 50,000 gallons per day each. During my pre-inspection research for a site inspection on November 19, 2019, City of Omak's Chief Operator, Jesus Arciniega, said that early in SunOpta's operations, before wastewater management protocols were refined, their discharge volume was close to 25% of the POTW's capacity.

SunOpta listed eight sanitizers, cleaners, and food grade oils in section C.7 of their application. I researched product safety data sheets (SDS) on the applicable website and found at least four products to have pH above 12.0 and one with pH below 2.0. During the November 2019 site inspection, SunOpta personnel confirmed that SunOpta continues use of these products and at least one has a pH below 2.0. The SDS for this product listed a pH of 2.0 – 3.0 “at use dilution.” In a December 19, 2019 email SunOpta personnel explained this acid-based solution is sprayed onto surfaces in minimal amounts. Alkaline-based cleaners are used in larger amounts.

During the November 2019 inspection, SunOpta personnel stated that SunOpta is currently exploring opportunities to expand production. Arciniega was present during the inspection and the potential need for SunOpta to negotiate adjusted waste loading limits with the City of Omak was discussed as a future possibility.

Wastewater pretreatment

Process wastewater is collected throughout the facility by means of a floor gutter and drain system. Process wastewater flows through the drain system to one of two sump pits located inside the facility. Each sump pit has its own dedicated pump for transferring process wastewater. One sump is located in the Main Line process area while the other is located near the Steam Generator area. Process wastewater collected in the Main Line sump is pumped/transferred to the Steam Generator sump. All process wastewater from the Steam Generator sump is then pumped into the first of two, 1,000-gallon buffer tanks in series. The buffer tanks are located in the steam generator room. Residence time in the buffer tanks allows large solids to settle to the bottom and some caking to occur at the highest liquid level on the inside wall of the tanks. The solids are removed every three or four months by a septic service. The wet well at the lift station is also pumped out at that time. The buffer tanks gravity feed to the wastewater lift station. The tanks also aid in dampening system surges.

No additional provisions are in place to reduce solids, and no provisions are in place to adjust pH or lower BOD.

Sanitary sewer from the facility restrooms and wash facilities discharges to an in ground septic style solids separation tank. The liquid outflow of this tank mixes with process wastewater in the lift station. The lift station proceeds to transfer the wastewater through a magnetic flow meter to the City of Omak POTW.

Wastewater sampling is done at the lift station. SunOpta maintains a refrigerated composite sampler unit on site. The unit samples directly from the wet well once per hour over a 24-hour period. City of Omak’s accredited laboratory analyzes the composite sample for pH, BOD₅, and TSS, and reports results to SunOpta. SunOpta

reports these values on their monthly discharge monitoring report (DMR). Wastewater flow (from magnetic flow meter) and pH values are taken once per day by SunOpta during production operations. pH is measured on a grab sample from the lift station using pH strip technology.

The magnetic flow meter located on the discharge pipe of the lift station has the measurement accuracy checked once per year by a third party vendor.

During the November 2019 site inspection, SunOpta personnel indicated that if future production rates increase, a change or modification to the current wastewater management system may be considered in order to accommodate any increase in wastewater volume and loadings.

General condition G5 in the proposed permit requires SunOpta to submit an engineering report and detailed plans and specifications **prior** to constructing or modifying any wastewater control facilities. The documents must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC.

Solid wastes

SunOpta submitted a site Solid Waste Control Plan (SWCP) to Ecology on July 19, 2012. Table 2 summarizes the waste streams described in the plan.

Table 2 Solid Waste

| Source | Description | Disposal Plan | Hauler/ Final Destination |
|---------------------------|---------------------------------|---------------|---|
| Unpackaged Process Waste* | Apple skin and seed | Animal feed | Gebbers Farms 25985 State HWY 97 Brewster, WA 98812 |
| | Puree and concentrate | Animal feed | |
| Packaging Materials | Cardboard cartons and cases | Recycle | RockTenn Recycling 701 Southwest 34th St Seattle, WA 98055 |
| Packaging Materials | Steel drums | Recycle | Randy's Towing 2135 Elmway Okanogan, WA 98840 |
| Alkaline Batteries | Single use | Recycle | Okanogan County Central Landfill 1234 2nd Avenue South Okanogan, WA 98840 |
| Packaging Materials | Nonfiber | Disposal | Sunrise Disposal 330 Ferry St Omak, WA 98841 |
| Domestic Trash | Lunch room, wood debris, office | Disposal | |

* 336,000 pounds per year listed in 2012 SWCP

Any solids accumulated in the process wastewater buffer tanks are removed every three or four months by a septic service. The lift station is pumped out at the same time.

The sanitary sewer tank is inspected every 6 months and solids removed as necessary.

During the November 19, 2019 site inspection SunOpta personnel clarified that SunOpta no longer processes whole fruit on site.

Special condition S5.C. in the proposed permit requires SunOpta to submit an updated SWCP to Ecology during the permit cycle that accurately reflects solid waste generation and management associated with current production processes.

B. Discharge location to the City of Omak.

The physical address of the City of Omak POTW is 635 Fir Street, Omak, Washington. SunOpta wastewater discharge enters the City of Omak collection system by a lift station located at the southwest corner of the SunOpta property.

C. Wastewater characterization

SunOpta reported maximum concentrations of BOD5 (2684 mg/L) and TSS (888 mg/L) in their permit application, and included discharge monitoring report (DMR) data from January 1, 2015 through January 31, 2016 as an attachment. The data in Table 3 represents the quality of the effluent as reported on DMRs from January 1, 2015 through September 30, 2019. The charts in Figures 3 through 5 show average daily values per month compared to current permit limits. The effluent is characterized as follows:

Table 3 Wastewater Characterization

| Parameter | Units | # of Single Samples | Permit Limit | Average Monthly | Maximum Average Monthly | 95 th %TILE |
|---|---------|---------------------|--------------|-----------------|-------------------------|------------------------|
| Flow | MGD | 1734 | 0.050 | 0.013 | 0.023 | 0.022 |
| Biochemical Oxygen Demand (BOD ₅) | lbs/day | 269 | 350 | 75 | 201 | 119 |
| | mg/L | 269 | N/A | 736 | 1429 | 1276 |
| Total Suspended Solids (TSS) | lbs/day | 272 | 50 | 16 | 69 | 35 |
| | mg/L | 272 | N/A | 156 | 664 | 312 |

| Parameter | Units | # of Samples | Permit Limit Daily Min/Max | Minimum Value | Maximum Value |
|-----------|----------------|--------------|----------------------------|---------------|---------------|
| pH* | Standard Units | 57 | 5.0 / 11.0 | 4.42 | 7.59 |

* Samples and analytical values used in pH characterization were not obtained according to permit requirements.

Figure 3. Flow vs. Permit Limit

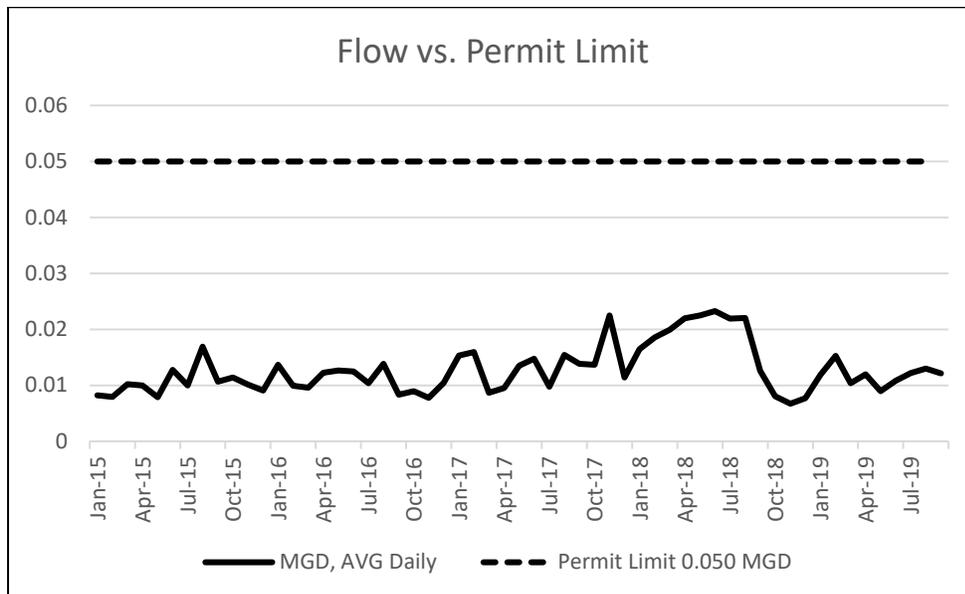


Figure 4. BOD vs. Permit Limit

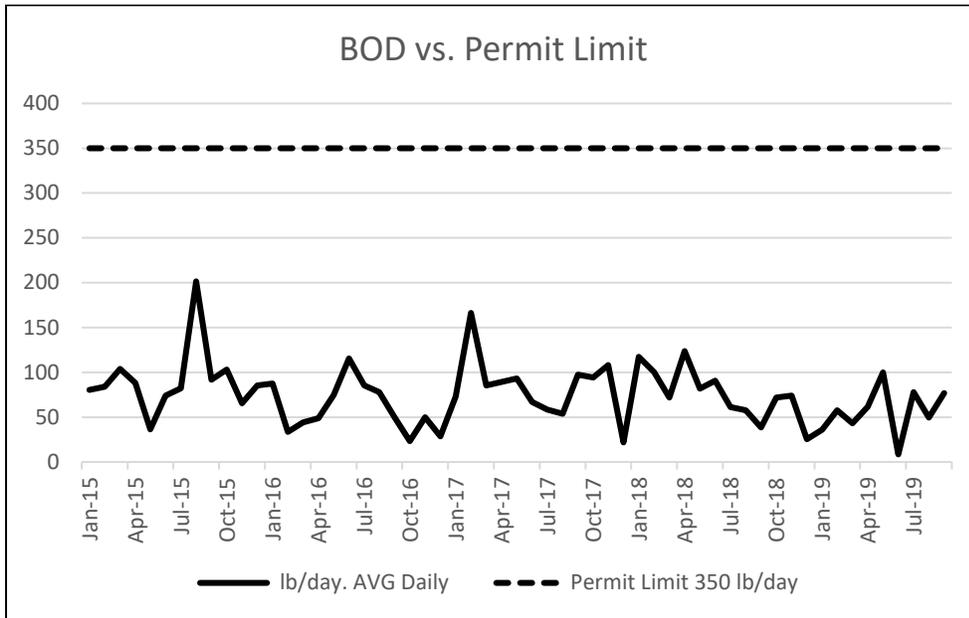
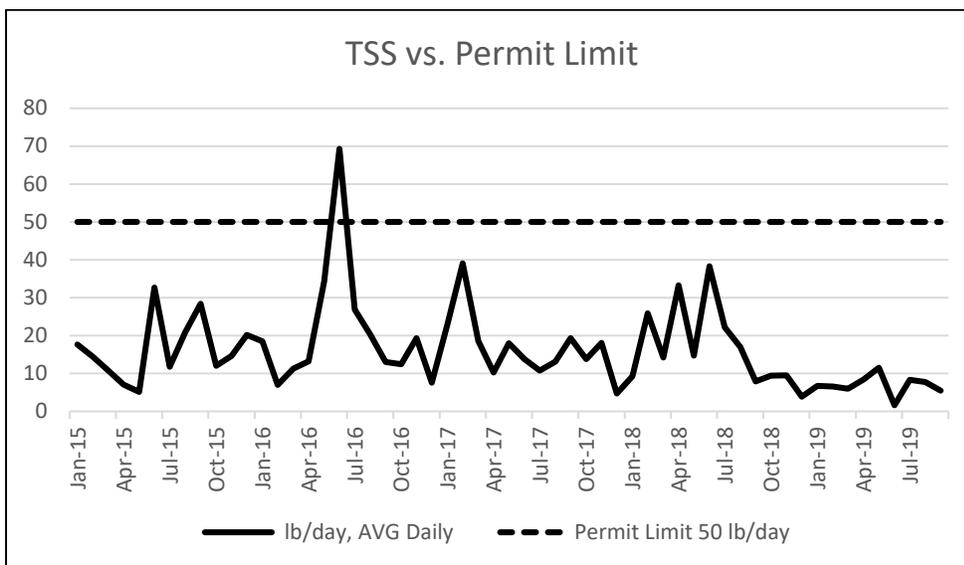


Figure 5. TSS vs. Permit Limit



Note: Information submitted with the June 2016 DMR explained the TSS exceedance in June 2016 was due to build-up of solids in the system. The solids were cleaned out in July 2016.

D. Summary of compliance with previous permit issued

The current permit places effluent limits on flow, BOD₅, TSS, and pH.

SunOpta has not consistently complied with the effluent limits and permit conditions throughout the duration of the permit issued on March 1, 2012. Ecology assessed compliance based on its review of the facility's discharge monitoring reports (DMRs) and on inspections conducted by Ecology.

During a November 19, 2019 compliance inspection Ecology learned that pH sampling and analysis has not been conducted consistently according to requirements described in the current permit ST0009253. In the current permit, Special Condition S.2.A., Monitoring Requirements, specifies analysis of a grab sample. Appendix A, List Of Pollutants With Analytical Methods, Detection Limits And Quantitation Levels, specifies analysis by method SM4500-H⁺B, in Standard Methods For the Examination of Water and Wastewater (SM). SunOpta personnel verified pH values reported on the monthly DMR are a combination of pH paper strip technology on grab samples from the lift station or by analysis of the composite sample obtained by City of Omak. Thus a proper wastewater characterization for pH is to be determined.

The proposed permit requires SunOpta to achieve pH sampling and analysis of wastewater effluent according to requirements at 40 CFR 403.12(5) Measurement of pollutants.

The following table summarizes the violations that occurred during the permit term. The 2018 pH violations were discussed during the November 2019 inspection. SunOpta personnel indicated it has not determined where low pH may occur in the wastewater management system. Low pH is not attributed to sanitation procedures involving chemicals with low pH. These are used at low concentrations and are spray-applied to surfaces in small amounts.

Table 4 Violations/Permit Triggers

| EFFLUENT VIOLATIONS | | | | | | |
|--|------------------|------------------------------|----------------|--------------|------------------|------------------|
| March 01, 2012 through September 30, 2019 | | | | | | |
| Violation Date | Parameter | Statistical Base Type | Units | Value | Limit MIN | Limit MAX |
| 1/30/2014 | pH | Single Sample | Standard Units | 4.95 | 5 | 11 |
| 2/12/2015 | pH | Single Sample | Standard Units | 4.89 | 5 | 11 |
| 5/14/2015 | pH | Single Sample | Standard Units | 4.9 | 5 | 11 |
| 10/24/2018 | pH | Single Sample | Standard Units | 4.42 | 5 | 11 |
| 11/28/2018 | pH | Single Sample | Standard Units | 4.8 | 5 | 11 |
| 12/5/2018 | pH | Single Sample | Standard Units | 4.73 | 5 | 11 |
| 2/1/2014 | BOD5 | Average Monthly | lb/Day | 352.97 | N/A | 350 |
| 6/1/2016 | TSS | Average Monthly | lb/Day | 104.32 | N/A | 50 |
| 11/1/2016 | TSS | Average Monthly | lb/Day | 60.15 | N/A | 50 |
| 6/1/2018 | TSS | Average Monthly | lb/Day | 58.28 | N/A | 50 |

The following table summarizes compliance with report submittal requirements over the permit term.

Table 5 Permit Submittals

| Submittal Name | Submittal Status | Due Date | Received Date | Permit Section |
|---|-------------------------|-----------------|----------------------|-----------------------|
| O&M - Operation And Maintenance Manual (Update) | Received | 8/1/2014 | 7/2/2014 | S4a |
| Solid Waste Control Plan | Received | 8/1/2012 | 7/19/2012 | S7c |
| Application For Permit Renewal | Accepted | 2/28/2016 | 2/25/2016 | S8 |
| Spill & Slug Discharge Control Plan | Received | 8/1/2012 | 7/19/2012 | S9 |
| Signatory Requirements | Received | As necessary | 4/11/2012 | G1 |

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.

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).
- 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 the proposed permit reflect information received in the application and from supporting reports (engineering, hydrogeology, 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 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 the 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. Effluent limits based on local limits

To protect City of Omak POTW 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 necessary to impose limits for certain parameters. Ecology based limits on the City of Omak Industrial Wastewater User Contract (IUC) dated May 16, 2011. The contract details pH limits at section 4.1.B. and includes a Schedule A dated January 19, 2010, listing the allowable waste loading limits for flow, BOD5, and TSS. These limits are based on the combined total of all SunOpta discharges to the City’s wastewater treatment system and remain unchanged from the current permit.

Excerpts from the City of Omak IUC dated May 16, 2011 are included as Appendix A of this fact sheet and will be referenced in Special Condition S.1., Discharge Limits, of the proposed permit. At Special Condition S3.K., the proposed permit requires SunOpta to submit any modifications to the IUC to Ecology for review within one week of a signed and dated modification. In the event the IUC is amended or updated, Ecology can modify the permit to include an updated copy in Appendix B of the permit. Any revised pH limits or BOD/TSS allowable discharges in the updated IUC will become the enforceable limits in the permit as of the date of the revised contract. 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 as of the issuance date of the proposed permit include the following:

Table 6 Local Limits Based on City of Omak IUC, Schedule A, Dated January 19, 2010

| Effluent Limits | |
|-----------------|--------------------------|
| Parameter | Average Daily |
| Flow | 50,000 (gallons per day) |
| BOD5 | 350 (pounds per day) |
| TSS | 50 (pounds per day) |

Table 7 pH Limits Based on City of Omak IUC, Dated May 16, 2011

| Parameter | Daily Minimum | Daily Maximum |
|-----------|--------------------|---------------------|
| pH | 5.0 standard units | 11.0 standard units |

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 SunOpta 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). Ecology accredited the Omak Wastewater laboratory for:

Table 8 Accredited Parameters, Omak Wastewater Laboratory

| Parameter Name | Category | Method Name | Matrix Description |
|---------------------------------|-------------------|--------------------|--------------------|
| Solids, Total Suspended | General Chemistry | SM 2540 D-2011 | Non-Potable Water |
| pH | General Chemistry | SM 4500-H+ B-2011 | Non-Potable Water |
| Dissolved Oxygen | General Chemistry | SM 4500-O G-2011 | Non-Potable Water |
| Biochemical Oxygen Demand (BOD) | General Chemistry | SM 5210 B-2011 | Non-Potable Water |
| Fecal coliform-count | Microbiology | SM 9222 D (mFC)-06 | Non-Potable Water |

B. Wastewater monitoring

Ecology details the proposed monitoring schedule under Special Condition S2 in the proposed permit. 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.

During the November 2019 compliance inspection SunOpta personnel indicated the company is exploring opportunities to expand production. Informal investigations by SunOpta to date have not identified where low pH may occur in the wastewater management system. During the November 2019 site inspection, SunOpta personnel confirmed that SunOpta continues use of both acidic and alkaline cleaning and sanitation products. Additionally, due to historic pH sampling and analysis outside of regulatory protocols, a proper wastewater characterization for pH remains pending. The proposed permit requires SunOpta to achieve pH sampling, analysis and subsequent characterization of wastewater effluent according to requirements at 40 CFR 403.12(5) Measurement of pollutants.

The current permit requires pH analysis monitoring at a frequency of once per week. Special condition S2.A. in the proposed permit requires pH sampling and analysis at a rate of once per day when discharging to the POTW. Sampling must be by grab sample. The sampling point for pH will be from a point in the steam generator room right before the wastewater exits the building to the lift station outside. At least one pH analysis per week must occur during sanitation or cleaning procedures. For pH values taken during cleaning or sanitation procedures, include a specific parameter and date note on the electronic DMR indicating "sample taken during cleaning/sanitation procedures." Instructions for adding notes to the electronic DMR are at the [WQWebDMR](#) website.

Grab samples are single samples collected at a specific spot at a site over a short period of time (typically seconds or minutes). Grab samples should be used when storing or compositing a sample would alter the concentration or characteristics of pollutants being measured. Parameters that necessitate grab sampling techniques include pH (EPA 833-R-12-001A, Industrial User Permitting Guidance Manual).

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 version of an 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.

Updated information must include but not be limited to, revised pH sampling and analysis procedures, recordkeeping procedures, and any changes to wastewater treatment or management. Refer to [WAC 173-240-150](#) for more information.

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).

Sanitation products, or other chemicals, with pH equal to or greater than 12.5 or equal to or below 2.0 that spill and become waste, are examples of materials that may designate as a corrosive dangerous waste as defined in WAC 173-303.

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. Solid waste control plan

SunOpta could cause pollution of the waters of the state through inappropriate disposal of solid waste or through the release of leachate from solid waste. Under the current permit, SunOpta submitted a Solid Waste Control Plan to Ecology July 19, 2012.

The proposed permit requires SunOpta to update the approved solid waste control plan designed to prevent solid waste from causing pollution of waters of the state. SunOpta must submit the updated plan to Ecology for approval (RCW 90.48.080).

Information about how to develop a solid waste control plan is provided in Ecology's [Publication #07-10-024](#).

F. Spill and slug discharge control plan

This facility stores a quantity of chemicals on-site that have the potential to cause water pollution and/or interference or pass through at the receiving POTW if accidentally released. Ecology can require a facility to develop best management plans to prevent this accidental release [Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080].

In addition, Ecology determined that SunOpta 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)].

SunOpta developed a plan for preventing the accidental release of pollutants to state waters, to the receiving treatment plant, and for minimizing damages if such a spill occurs. The plan was submitted to Ecology on July 19, 2012. Special condition S10. in the proposed permit requires the facility to maintain this plan and submit updates as needed.

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.

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.

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 5 years.

References for Text and Appendices

Washington State Department of Ecology.

Laws and Regulations (<https://ecology.wa.gov/About-us/How-we-operate/Laws-rules-rulemaking>)

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

January 2015. *Permit Writer's Manual*, Publication Number 92-109
(<https://fortress.wa.gov/ecy/publications/SummaryPages/92109.html>)

February 2007. *Focus Sheet on Solid Waste Control Plan, Developing a Solid Waste Control Plan for Industrial Wastewater Discharge Permittees*, Publication Number 07-10-024.
<https://fortress.wa.gov/ecy/publications/SummaryPages/0710024.html>

December 2019. Telephone conversation and email exchange with SunOpta Senior Project Engineer, Scott Campbell, P.E.

June 26, 2014. SunOpta Wastewater System Operation and Maintenance Manual received by Ecology July 2, 2014.

Appendix A—Industrial Wastewater User Contract, Excerpts

 ORIGINAL

CITY OF OMAK
INDUSTRIAL WASTEWATER USER CONTRACT
SunOpta Fruit Group
May 16, 2011

1. Parties:

- 1.1. City of Omak, a Washington municipal corporation, hereinafter referred to as "the City."
- 1.2. SunOpta Fruit Group, a private corporation, hereinafter referred to as "SunOpta."

2. Industrial Wastewater Terms, Conditions:

- 2.1. This Contract shall commence upon the signing of this Contract, and shall continue until terminated by SunOpta as provided herein.
- 2.2. SunOpta may terminate this Contract by providing the City with written notice at least six months prior to the date of Contract termination.
- 2.3. Monitoring of the industrial wastewater discharges shall be conducted by the City. SunOpta will be required to pay for and install the wastewater monitoring facilities. SunOpta will own, operate, and maintain the industrial wastewater facilities to the satisfaction of the City of Omak, as determined by the Public Works Director. Access will be provided by SunOpta to the City of Omak during regular working hours and within 1 hour during non-regular working hours.
- 2.4. The City shall gather and handle all samples in accordance with recognized standards and requirements and will use only certified laboratories for testing of the samples.
- 2.5. SunOpta may request that duplicate samples be taken at any time during the period of the Contract. The City will make duplicate samples available to SunOpta, for SunOpta's own testing, at the time the City retrieves their samples from the sampling device.
- 2.6. It is understood that, due to differences in handling and testing procedures, no direct comparison between the City's testing results and SunOpta's testing results can be made.
- 2.7. Testing results of the City shall be used to determine the characteristics of the wastewater for the purpose of establishing industrial wastewater billings.

- 2.8. Unauthorized discharge of industrial wastewater, which has not passed through the industrial monitoring facility by SunOpta to the City's wastewater system, shall be considered a violation of this Contract. The fine for such a violation shall be \$1,000 per day for every day on which such unauthorized discharge occurs. SunOpta may appeal any such fines to the Omak City Council.
- 2.9. Discharges of industrial wastewater to the City's wastewater treatment system shall, in volume and strength, not exceed the amounts listed in Schedule A attached hereto. The listed values are the monthly average values measured at Sun Opta's discharge, and represent the combined total of all SunOpta discharges to the City's wastewater treatment system.

4. Prohibited Discharges:

- 4.1 SunOpta shall not cause or permit the release or discharge of the following pollutants to the City's wastewater system:
 - A. Pollutants that create a fire or explosion hazard in the City's wastewater system, including, but not limited to, discharges with a closed cup flashpoint of less than 140° Fahrenheit or 60° Centigrade using the test method specified in 40 CFR 261.21;
 - B. Pollutants which will cause corrosive structural damage to the wastewater system, but in no cases discharges with a pH lower than 5.0 or greater than 11.0;
 - C. Solid or viscous pollutants in amounts that obstruct the flow in the wastewater system;

CITY OF OMAK
INDUSTRIAL WASTEWATER USER CONTRACT
SUNOPTA FRUIT GROUP

January 19, 2010

SCHEDULE A
ALLOWABLE WASTEWATER DISCHARGES

| Month | Average Daily Flow (gallons per day) | Average Daily BOD Loading (pounds per day) | Average Daily TSS Loading (pounds per day) |
|--------------|---|---|---|
| January | 50,000 | 350 | 50 |
| February | 50,000 | 350 | 50 |
| March | 50,000 | 350 | 50 |
| April | 50,000 | 350 | 50 |
| May | 50,000 | 350 | 50 |
| June | 50,000 | 350 | 50 |
| July | 50,000 | 350 | 50 |
| August | 50,000 | 350 | 50 |
| September | 50,000 | 350 | 50 |
| October | 50,000 | 350 | 50 |
| November | 50,000 | 350 | 50 |
| December | 50,000 | 350 | 50 |

Appendix B—Public Involvement Information

Ecology proposes to reissue a permit to SunOpta Healthy Fruit Snacks (SunOpta). The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology will place a Public Notice of Draft on September 23, 2020 in the Omak Okanogan County Chronicle 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.

NOTICE: ANNOUNCEMENT OF AVAILABILITY OF DRAFT PERMIT

PERMIT NO.: ST0009253

APPLICANT: SunOpta Grains and Foods, Inc.

FACILITY: SunOpta Healthy Fruit Snacks

SunOpta Grains and Foods, Inc. has applied for a State Waste Discharge permit in accordance with the provisions of Chapter 90.48 Revised Code of Washington (RCW) and Chapter 173-216 Washington Administrative Code (WAC).

Following evaluation of the application and other available information, a draft permit has been developed which would allow the discharge of process wastewater to the City of Omak POTW from its facility located at 1124 5th Ave. East, Omak, WA. All discharges to be in compliance with the Department of Ecology's Water Quality Standards for a permit to be issued.

A tentative determination has been made on the effluent limitations and special permit conditions that will prevent and control pollution. A final determination will not be made until all timely comments received in response to this notice have been evaluated.

PUBLIC COMMENT AND INFORMATION

The draft permit and fact sheet may be viewed at the Department of Ecology (Department) website:

<https://apps.ecology.wa.gov/paris/DocumentSearch.aspx?PermitNumber=ST0009253&FacilityName=&City=&County=&Region=0&PermitType=0&DocumentType=0> . The application, fact sheet, proposed permit, and other related documents are also available at the Department's Central Regional Office for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m., weekdays. To obtain a copy or to arrange to view copies at the Central Regional Office, please e-mail publicrecordsofficer@ecy.wa.gov or write to Public Records Officer, Department of Ecology, PO Box 47600, Olympia, WA 98504.

Interested persons are invited to submit written comments regarding the proposed permit. All comments must be submitted within 30 days after publication of this notice to be considered for the final determination.

Submit comments online at <http://wq.ecology.commentinput.com/?id=f4bjc>. Written comments should be sent to: cynthia.huwe@ecy.wa.gov or Cynthia Huwe, WQ Permit Coordinator, Department of Ecology, Central Regional Office, 1250 West Alder Street, Union Gap, WA 98903-0009.

Any interested party may request a public hearing on the proposed permit within 30 days of the publication date of this notice. The request for a hearing shall state the interest of the party and the reasons why a hearing is necessary. The request should be sent to the above address. The Department will hold a hearing if it determines that there is significant public interest. If a hearing is to be held, public notice will be published at least 30 days in advance of the hearing date. Any party responding to this notice with comments will be mailed a copy of a hearing public notice.

Please bring this public notice to the attention of persons who you know would be interested in this matter. The Department is an equal opportunity agency. If you need this publication in an alternate format, please contact us at (509) 575-2490 or TTY (for the speech and hearing impaired) at 711 or 1-800-833-6388.

Publication date of this Notice is September 23, 2020.

Ecology has published a document entitled *Frequently Asked Questions about Effective Public Commenting*, which is available on our website at <https://fortress.wa.gov/ecy/publications/SummaryPages/0307023.html>.

Fact Sheet for State Permit ST0009253
January 1, 2021
SunOpta
Page 29 of 40

You may obtain further information from Ecology by telephone, 509/457-7105, or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
1250 West Alder Street
Union Gap, WA 98903

The primary author of this permit and fact sheet is Traci Gefre.

Appendix C—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 |
|--|---|
| Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 | Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 |
| Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501 | Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903 |

Appendix D—Glossary

1-DMax or 1-day maximum temperature -- The highest water temperature reached on any given day. This measure can be obtained using calibrated maximum/minimum thermometers or continuous monitoring probes having sampling intervals of thirty minutes or less.

7-DADMax or 7-day average of the daily maximum temperatures -- The arithmetic average of seven consecutive measures of daily maximum temperatures. The 7-DADMax for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.

Acute toxicity --The lethal effect of a compound on an organism that occurs in a short time period, usually 48 to 96 hours.

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).

Alternate point of compliance -- An alternative location in the groundwater from the point of compliance where compliance with the groundwater standards is measured. It may be established in the groundwater at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An “early warning value” must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Ambient water quality -- The existing environmental condition of the water in a receiving water body.

Ammonia -- Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Annual average design flow (AADF -- average of the daily flow volumes anticipated to occur over a calendar year.

Average monthly (intermittent) discharge limit-- The average of the measured values obtained over a calendar months' time taking into account zero discharge days.

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

Background water quality -- The concentrations of chemical, physical, biological or radiological constituents or other characteristics in or of groundwater at a particular point in time upgradient of an activity that has not been affected by that activity, [WAC 173-200-020(3)]. Background water quality for any parameter is statistically defined as the 95% upper tolerance interval with a 95% confidence based on at least eight hydraulically upgradient water quality samples. The eight samples are collected over a period of at least one year, with no more than one sample collected during any month in a single calendar year.

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.

Chlorine -- A chemical used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic toxicity -- The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

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.

Critical condition -- The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

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.

Dilution factor (DF) -- A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction, for example, a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Distribution uniformity -- The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Early warning value -- The concentration of a pollutant set in accordance with WAC 173-200-070 that is a percentage of an enforcement limit. It may be established in the effluent, groundwater, surface water, the vadose zone or within the treatment process. This value acts as a trigger to detect and respond to increasing contaminant concentrations prior to the degradation of a beneficial use.

Enforcement limit -- The concentration assigned to a contaminant in the groundwater at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a groundwater criterion will not be exceeded and that background water quality will be protected.

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.

Fecal coliform bacteria -- Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

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.

Maximum day design flow (MDDF) -- The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum month design flow (MMDF) -- The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum week design flow (MWDF) -- The largest volume of flow anticipated to occur during a continuous 7-day period, expressed as a daily average.

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.

Mixing zone -- An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The permit specifies the area of the authorized mixing zone that Ecology defines following procedures outlined in state regulations (chapter 173-201A WAC).

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.

Peak hour design flow (PHDF) -- The largest volume of flow anticipated to occur during a one-hour period, expressed as a daily or hourly average.

Peak instantaneous design flow (PIDF) -- The maximum anticipated instantaneous flow.

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.

Potential significant industrial user (PSIU) -- A potential significant industrial user is defined as an Industrial User that does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).
Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

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.

Soil scientist -- An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3,or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

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 coliform bacteria--A microbiological test, which detects and enumerates the total coliform group of bacteria in water samples.

Total dissolved solids--That portion of total solids in water or wastewater that passes through a specific filter.

Total maximum daily load (TMDL) --A determination of the amount of pollutant that a water body can receive and still meet water quality standards.

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.

Water quality-based effluent limit -- A limit imposed on the concentration of an effluent parameter to prevent the concentration of that parameter from exceeding its water quality criterion after discharge into receiving waters.

Appendix F—Response to Comments

No comments were received by the Department of Ecology.