

# Fact Sheet for State Waste Discharge Permit ST0009261

## SunRype Products (USA), Inc.

August 28, 2019

### 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 SunRype Products, (USA) Inc. (SunRype) that will allow discharge of wastewater to the City of Selah Publically-Owned Treatment Works (POTW).

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 SunRype, State Waste Discharge permit ST0009261, are available for public review and comment from July 17, 2019 until the close of business August 19, 2019. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

SunRype 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

This fruit juice processing facility, currently owned by SunRype Products (USA), Inc. (SunRype), has existed at the site on South Railroad Avenue in Selah, Washington for more than 30 years. SunRype purchased the facility from Yakama Juice Inc. which transferred its discharge permit to SunRype on October 1, 2010. SunRype produces apple juice blends from fresh apples, assorted juice drinks, teas, and isotonic sport drinks from fruit juice.

SunRype is a Significant Industrial User of the City of Selah Publicly Owned Treatment Works (Selah POTW), based on flow and BOD loadings. SunRype pretreats its wastewater by screening and sedimentation prior to discharge to the Selah POTW.

The facility is not subject to specific federal categorical effluent limitations. SunRype's discharge is subject to allocations established by a contract negotiated between the facility and the City of Selah POTW. The effluent allocations in the contract constitute the enforceable limits of this permit. Those limits are contained in Appendix A of the Operations and Maintenance (O&M) Manual. This permit anticipates that the facility and the City of Selah POTW will renegotiate the user contract during the course of this permit.

The proposed permit requires the facility to continuously monitor flow and monitor BOD, TSS and pH twice a week. The City of Selah collects samples for SunRype at its monitoring station located on the facility's grounds. The City of Selah conducts all analysis in its lab located at the City of Selah publicly-owned treatment works (POTW).

For the 2019-2024 permit cycle SunRype and Selah POTW entered into a new Industrial User Contract allowing for increased flow, BOD<sub>5</sub>, and TSS limits. The increased limits should not impact the City of Selah POTW.

## Table of Contents

	<b>Purpose of this Fact Sheet .....</b>	<b>1</b>
	<b>Summary .....</b>	<b>1</b>
<b>I.</b>	<b><i>Introduction.....</i></b>	<b>5</b>
<b>II.</b>	<b><i>Background Information .....</i></b>	<b>6</b>
<b>A.</b>	<b>Facility description .....</b>	<b>8</b>
	History .....	8
	Industrial process(s).....	8
	Wastewater pretreatment.....	9
	Solid wastes.....	10
<b>B.</b>	<b>Discharge location to the City of Selah POTW.....</b>	<b>10</b>
<b>C.</b>	<b>Wastewater characterization .....</b>	<b>11</b>
<b>D.</b>	<b>Summary of compliance with previous permit issued .....</b>	<b>11</b>
<b>E.</b>	<b>State environmental policy act (SEPA) compliance .....</b>	<b>15</b>
<b>III.</b>	<b><i>Proposed Permit Limits.....</i></b>	<b>15</b>
<b>A.</b>	<b>Design criteria.....</b>	<b>16</b>
<b>B.</b>	<b>Technology-based effluent limits .....</b>	<b>16</b>
<b>C.</b>	<b>Selah POTW Limits .....</b>	<b>17</b>
<b>IV.</b>	<b><i>Monitoring Requirements .....</i></b>	<b>18</b>
<b>A.</b>	<b>Lab accreditation .....</b>	<b>18</b>
<b>B.</b>	<b>Wastewater monitoring .....</b>	<b>18</b>
<b>V.</b>	<b><i>Other Permit Conditions .....</i></b>	<b>19</b>
<b>A.</b>	<b>Reporting and recordkeeping.....</b>	<b>19</b>
<b>B.</b>	<b>Operations and maintenance.....</b>	<b>19</b>
<b>C.</b>	<b>Prohibited discharges .....</b>	<b>19</b>
<b>D.</b>	<b>Dilution prohibited .....</b>	<b>19</b>
<b>E.</b>	<b>Solid waste control plan.....</b>	<b>19</b>
<b>G.</b>	<b>Spill Plan and Slug Discharge Plan.....</b>	<b>20</b>
<b>H.</b>	<b>Compliance schedule for meeting pretreatment standards.....</b>	<b>20</b>
<b>I.</b>	<b>General conditions .....</b>	<b>20</b>

<b>VI.</b>	<b><i>Public Notification of Noncompliance .....</i></b>	<b><i>21</i></b>
<b>VII.</b>	<b><i>Permit Issuance Procedures.....</i></b>	<b><i>21</i></b>
<b>A.</b>	<b><i>Permit modifications .....</i></b>	<b><i>21</i></b>
<b>B.</b>	<b><i>Proposed permit issuance .....</i></b>	<b><i>21</i></b>
<b>VIII.</b>	<b><i>References for Text and Appendices.....</i></b>	<b><i>21</i></b>
	<b><i>Appendix A—Public Involvement Information.....</i></b>	<b><i>22</i></b>
	<b><i>Appendix B—Your Right to Appeal .....</i></b>	<b><i>24</i></b>
	<b><i>Appendix C—Glossary .....</i></b>	<b><i>25</i></b>
	<b><i>Appendix D—Technical Calculations.....</i></b>	<b><i>33</i></b>
	<b><i>Appendix E—Response to Comments.....</i></b>	<b><i>35</i></b>

## List of Tables

Table 1 - General Facility Information .....	6
Table 2 - Wastewater Characterization .....	11
Table 3 - Violations/Permit Triggers .....	13
Table 4 - Submittals .....	15
Table 5 - Effluent limits from Industrial User Contract dated 02/12/2019 .....	17
Table 6 - Accredited Parameters.....	18

## List of Figures

Figure 1 - Location Map A .....	7
Figure 2 - Location Map B .....	7
Figure 3 - Wastewater Flow .....	10
Figure 4 - Average Monthly BOD5 lbs/day discharged to the POTW from 09/2013-07/2018 .....	12
Figure 5 - Average Monthly TSS lbs/day discharged to the POTW from 09/2013-07/2018 .....	13

## I. Introduction

The Legislature defined Ecology's authority and obligations for the wastewater discharge permit program in the Revised Code of Washington, Title 90, Chapter 48 (RCW 90.48). Ecology adopted rules describing how it exercises its authority under Washington Administrative Code, Title 173 (WAC 173):

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

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 E**.

## II. Background Information

**Table 1 - General Facility Information**

Applicant	SunRype Products (USA), Inc.
Facility Name and Address	SunRype Products 1 Railroad Avenue, Selah, WA 98942
Contact at Facility	Name: Shaun Terrill, Plant Manager Telephone #: (509) 388-3815
Responsible Official	Name: Jason Leithead Title: VP Operations Address: PO Box 940, Selah, WA 98942 Telephone #: (250) 470-6522 FAX #: 509-697-7995
Industry Type	Fruit Processing for Concentrate and Bottling Juices
Type of Treatment by Industry	Mechanical separation and settling
SIC Codes	2033
NAIC Codes	311421
Facility Location (NAD83/WGS84 reference datum)	Latitude: 46.6519 Longitude: -120.5246
Treatment Plant Receiving Discharge	Selah POTW
Discharge Location (NAD83/WGS84 reference datum)	Latitude: 46.6523 Longitude: -120.5242
<b>Permit Status</b>	
Issuance Date of Previous Permit	05/02/2012
Application for Permit Renewal Submittal Date	10/19/2016
Date of Ecology Acceptance of Application	07/24/2017
<b>Inspection Status</b>	
Date of Last Non-sampling Inspection Date	06/25/2019

A satellite map showing the location of Sun-Rype Products USA Inc. in Selah, WA. The map includes labels for 'Selah', 'Sun-Rype Products USA Inc.' (marked with a red pin), 'Yakima Elks Golf Country Club', and the 'Yakima River'. Road markers for SR 923, SR 97, and SR 82 are visible. The map shows a mix of industrial, residential, and natural areas.

This aerial map shows an industrial area in St. Louis, Missouri. Key features include:

- Streets:** E Naches Ave, S Rasmussen Rd, S Rushmore Rd, and S Roubidoux Rd.
- Industrial Sites:** Sun-Rype Products USA Inc. (marked with a red pin) and Graham Packaging Company (marked with a blue pin).
- Infrastructure:** A large rectangular pond in the lower right, several large industrial buildings, and numerous parking lots.
- Landmarks:** A large green-roofed building and a circular structure near the pond.

**October 1, 2019**

SunRype Products

Page 8 of 35

## **A. Facility description**

### *History*

This fruit juice processing facility, located on Railroad Avenue in Selah, Washington for more than 35 years, is currently owned by SunRype Products (USA), Inc. (SunRype). SunRype purchased the facility from Yakama Juice Inc. and transferred its discharge permit to SunRype on October 1, 2010.

Prior to 2006, Yakama Juice operated under a National Pollutant Discharge Elimination System (NPDES) permit number WA0052264. Yakama Juice stated, in a letter to Ecology on January 1, 2006, that it had ceased all discharges of wastewater to surface waters of the State (Selah Ditch) and all wastewater effluent is being sent to the City of Selah POTW. As such, it was determined that a State Wastewater Discharge Permit was required instead of a NPDES permit. Ecology cancelled the NPDES permit on February 28, 2007 and issued a State Wastewater Discharge Permit on March 1, 2007.

SunRype installed a new magnetic flow meter to monitor flows to the City's pretreatment lagoon in 2011. SunRype also permanently capped a pipe in the boiler room, which allowed access to the City's stormwater system, for discharge of noncontact cooling water. Noncontact cooling water is now discharged to the City of Selah POTW.

### *Industrial process(s)*

SunRype produces apple juice blends from fresh apples, cranberry and blueberry juice drinks, teas, and isotonic sport drinks from fruit juice.

The industrial process consists of four main operations and multiple waste streams:

1. Apple Processing-Pomice
  - a) Fruit Crush Receiving Area
  - b) Tank Cleaning
  - c) Boiler Blowdown
2. Bottling-Contact Cooling Water
3. Juice Concentration-Condensed Evaporator Overflow

SunRype processes the apples using the following steps:

1. Grind the apples



2. Treat the mixture with starch and pectin degrading enzymes
3. Recovers the juice using industrial centrifuges
4. Collect the or pomace for livestock feed
5. Finish the with an ultra-filter, reverse osmosis
6. Dispose of the filtered solids and pomace

SunRype pasteurizes, bottles, and cools the bottles with a water spray. The contact cooling water is routed through the facility's pretreatment apparatus, (described below), prior to pumping to the City of Selah POTW.

The juice concentration process reduces the volume to 1/8 of its original volume in three evaporators. Juice enters the first evaporator at 195°F, where it is heated and evaporated at 212°F. The juice is then transferred to the second vessel where it is evaporated under vacuum at 180°F. The third evaporation step is under vacuum at 165°F. Condensed evaporated water is reused within the facility. SunRype discharges any remaining condensed evaporator water, along with all process water, to the City of Selah POTW.

#### *Wastewater pretreatment*

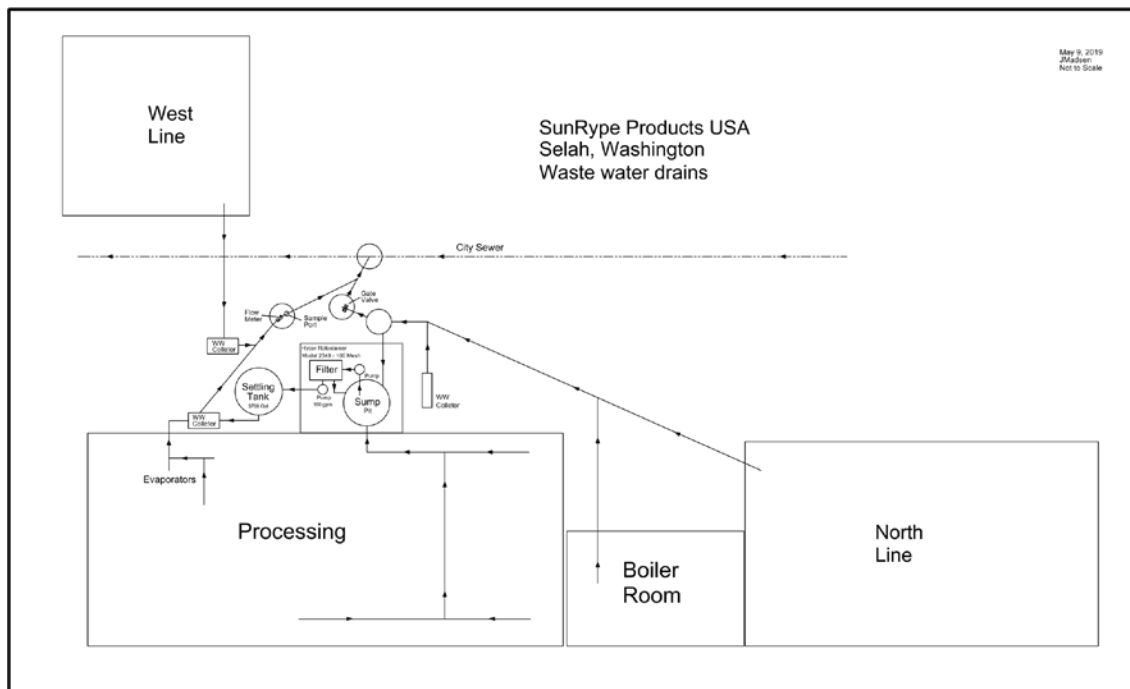
The facility is a Significant Industrial User of the City of Selah's Wastewater Treatment Facility. However, the facility is not subject to specific federal categorical effluent limitations.

SunRype pretreats its wastewater by screening and sedimentation.

Process wastewater from (1) the fruit crush receiving area, (2) tank cleaning and other cleanup, (3) boiler blowdown, and (4) excess water condensed from evaporation processes flows to a central sump in the "blue room". Wastewater pumped from the central sump flows into a rotary mechanical screen that separates waste solids from the wastewater.

The screened wastewater is then pumped into a settling tank to allow solids to separate from the liquid effluent stream. A fraction of the wastewater is re-circulated through this tank. The wastewater is not pH neutralized. All solids containing wastewater is pumped into one sedimentation tank prior to discharge to the City's pretreatment lagoon. Contact cooling wastewater is routed through SunRype Juice's wastewater pretreatment tanks.

**Figure 3 - Wastewater Flow**



### *Solid wastes*

The facility generates the following solid wastes:

- Fruit Waste (Pomace) – Approximately 10,000 tons per year
- Miscellaneous Trash – Approximately 3,600 yards per year
- Recyclable Materials – Approximately 3,800 yards per year
- Carbon used in filtering and tank bottoms – Approximately 112,000 lbs per year
- DE from Velo filter – Approximately 1750 lbs per year

SunRype submitted a solid waste plan to Ecology on December 7, 2018. The permit requires SunRype to review the plan annually and to submit any modifications to the plan to Ecology and the City of Selah.

### **B. Discharge location to the City of Selah POTW**

SunRype discharges process wastewater to the City's industrial pretreatment lagoon. The physical address of the City of Selah POTW is 1402 Commercial Street, Selah, Washington. The Selah POTW discharges to the Selah Ditch, a

tributary of the Yakima River. The City of Selah samples wastewater at a monitoring station on SunRype property at a location just prior to entry into the sanitary sewer.

### **C. Wastewater characterization**

SunRype reported the concentration of pollutants in the permit application and in discharge monitoring reports. The tabulated data represents the quality of the effluent discharged from 03/01/2013-01/01/2018. The effluent is characterized as follows:

**Table 2 - Wastewater Characterization**

Parameter	Units	# of Samples	Average Value	Maximum Value
Biochemical Oxygen Demand (BOD <sub>5</sub> )	lbs/day	59	2,096	3,737
Total Suspended Solids (TSS)	lbs/day	59	726	1,819
Flow	mgd	1,797	0.221	0.523
Parameter	Units	# of Samples	Minimum Value	Maximum Value
pH	standard	668	5	10.6

### **D. Summary of compliance with previous permit issued**

The previous permit placed effluent limits on Flow, BOD<sub>5</sub>, TSS, and pH.

SunRype has not consistently complied with the effluent limits and permit conditions throughout the duration of the permit issued on May 02, 2012. Ecology assessed compliance based on its review of the facility's discharge monitoring reports (DMRs) and on inspections conducted by Ecology.

Figure 4 below shows the Average Monthly BOD<sub>5</sub> lbs/day discharged to the POTW from 09/2013-07/2018. The Schedule A limit of 2,400 lbs/day BOD<sub>5</sub> was exceeded 15 times.

SunRype and the City of Selah have developed a new Industrial Wastewater User Contract (IUC) and Scheduler A that will be incorporated into the new permit as Appendix B. The updated IUC increases BOD<sub>5</sub> limits to 2800 lbs/day and TSS limits to 1400 lbs/day. The increased limits will not affect the ability of

Selah POTW to treat the discharge and should reduce the number of exceedances in the future.

**Figure 4 - Average Monthly BOD5 lbs/day discharged to the POTW from 09/2013-07/2018**

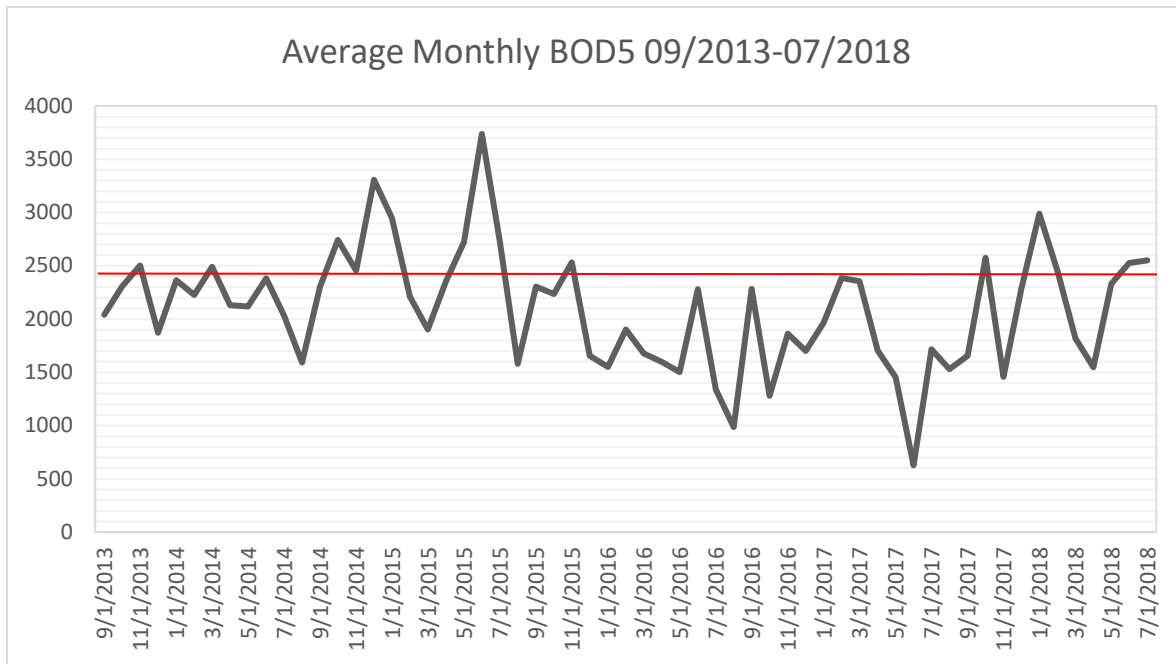
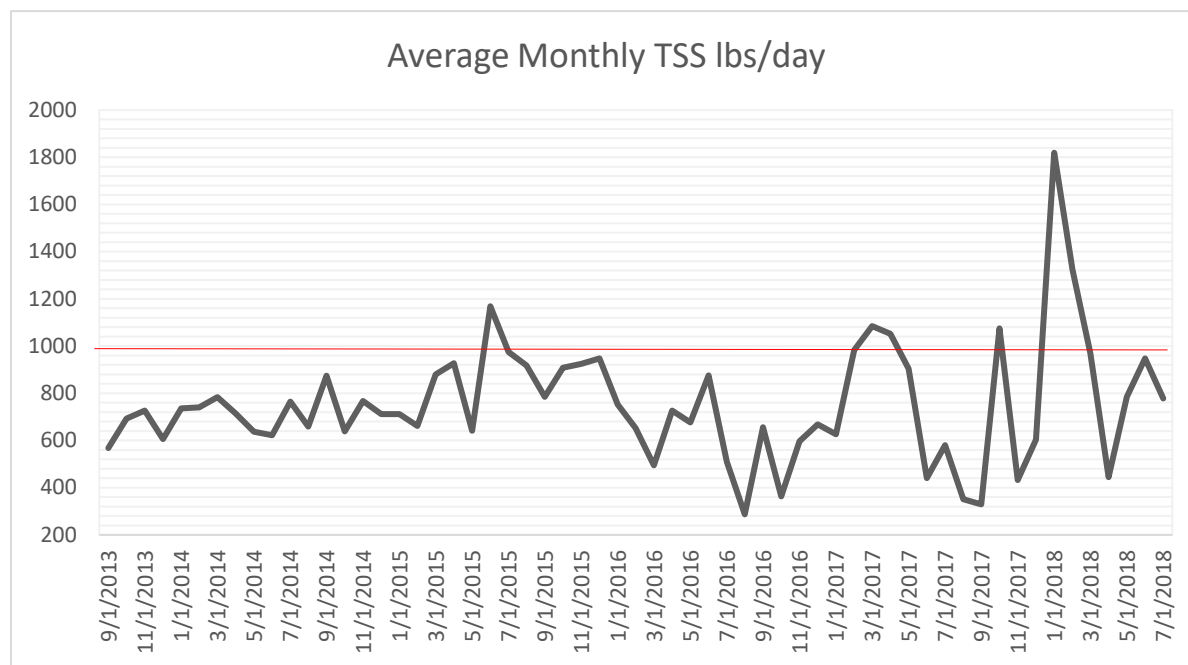


Figure 5 below shows the Average Monthly TSS lbs/day discharged to the POTW from 09/2013-07/2018. The Schedule A limit of 1000 lbs/day TSS was exceeded six times.

**Figure 5 - Average Monthly TSS lbs/day discharged to the POTW from 09/2013-07/2018**



The following table summarizes the violations that occurred during the permit term.

**Table 3 - Violations/Permit Triggers**

Begin Date	Parameter	Statistical Base	Units	Measurement Value	Limit Min/Max	Violation
11/1/2013	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2501	2400	Numeric effluent violation
3/1/2014	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2490	2400	Numeric effluent violation
10/1/2014	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2742	2400	Numeric effluent violation
11/1/2014	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2454	2400	Numeric effluent violation
12/1/2014	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	3308	2400	Numeric effluent violation
1/1/2015	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2948	2400	Numeric effluent violation

Begin Date	Parameter	Statistical Base	Units	Measurement Value	Limit Min/Max	Violation
5/1/2015	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2722	2400	Numeric effluent violation
6/1/2015	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	3737	2400	Numeric effluent violation
6/1/2015	Solids (Residue)	Average Monthly	Lbs/Day	1169	1000	Numeric effluent violation
7/1/2015	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2732	2400	Numeric effluent violation
11/1/2015	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2533	2400	Numeric effluent violation
3/1/2017	Solids (Residue)	Average Monthly	Lbs/Day	1084	1000	Numeric effluent violation
4/1/2017	Solids (Residue)	Average Monthly	Lbs/Day	1052	1000	Numeric effluent violation
10/1/2017	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2574	2400	Numeric effluent violation
10/1/2017	Flow	Average Monthly	MGD	0.341	0.3	Numeric effluent violation
10/1/2017	Solids (Residue)	Average Monthly	Lbs/Day	1075	1000	Numeric effluent violation
1/1/2018	Solids (Residue)	Average Monthly	Lbs/Day	1819	1000	Numeric effluent violation
1/1/2018	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2989.71	2400	Numeric effluent violation
2/1/2018	Solids (Residue)	Average Monthly	Lbs/Day	1325.08	1000	Numeric effluent violation
2/1/2018	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2447.77	2400	Numeric effluent violation
6/1/2018	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2527.08	2400	Numeric effluent violation
7/1/2018	Biochemical Oxygen Demand (BOD5)	Average Monthly	Lbs/Day	2550.31	2400	Numeric effluent violation

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

**Table 4 - Submittals**

Name	Status	Due	Rcvd	Approved
Signatory Requirements	Received		07/12/2012	N
Signatory Requirements	Received		04/16/2014	N
O&M - Operation And Maintenance Manual (Update)	Received	09/1/2013	06/07/2019	N
Solid Waste Control Plan	Received	09/1/2013	06/07/2019	N
Spill and Slug Discharge Control Plan	Received	09/1/2013	06/07/2019	N
Application For Permit Renewal	Accepted	08/31/2016	10/19/2016	Y

**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.

**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 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. Design criteria**

According to WAC 173-216-110 (4), neither flows nor waste loadings may exceed approved design criteria.

In the event there are 3 consecutive months where the discharge limits are exceeded, the Permittee must complete the following tasks:

- Complete design of wastewater pretreatment facilities upgrades and submit engineering report to Ecology for approval.
- Notify Ecology of pretreatment plant facility upgrade completion and operational status.

#### **B. 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 limits for this facility in *Subpart F—Canned and Preserved Fruits Subcategory 40CFR 407.64 Pretreatment standards for existing sources*.

Federal regulation, 40 CFR 403.5b(2) prohibits the discharge of pollutants which will cause corrosive structural damage to the POTW: discharges with pH lower than 5.0 are prohibited unless the collection and treatment system is designed to accommodate such discharges.



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).

### **C. Selah POTW Limits**

To protect the City of Selah's 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 these limits on local limits established the City of Selah POTW and codified in ordinance. Ecology's pretreatment program delegation agreement with EPA includes language in which Ecology agrees to enforce limits adopted by non-delegated programs (local limits). The Industrial User Contract (IUC) dated 02/12/2019 is included in Appendix B of the permit. Contracted limits are subject to change during the permit term.

Applicable effluent limits for this discharge include the following:

**Table 5 - Effluent limits from Industrial User Contract dated 02/12/2019**

<b>Parameter</b>	<b>Average Monthly</b>	
Flow	310,000 gpd	
BOD <sub>5</sub>	2,800 lbs/day	
TSS	1,400 lbs/day	
<b>Parameter</b>	<b>Daily minimum</b>	<b>Daily Maximum</b>
pH	5.0 standard units	11.0 standard units

Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW such as interference, pass-through or hazardous exposure conditions to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge/biosolids.

## **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 WAC 173-50, Accreditation of Environmental Laboratories, to prepare all monitoring data (with the exception of certain parameters). Ecology accredited Selah POTW for:

**Table 6 - Accredited Parameters**

<b>Parameter Name</b>	<b>Category</b>	<b>Method Name</b>	<b>Matrix Description</b>
Solids, Total Suspended	General Chemistry	SM 2540 D-2011	Non-Potable Water
pH	General Chemistry	SM 4500-H+ B-2011	Non-Potable Water
Ammonia	General Chemistry	SM 4500-NH3 F-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. 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.

## **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 submit an update 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. The O&M Manual on file with the department is dated 05/19/2019. The proposed permit requires submission of an updated O&M manual that meets all of the applicable requirements in WAC 173-240-150.

### **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 (WAC 173-216) and the discharge of designated dangerous wastes not authorized by this permit (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**

SunRype could cause pollution of the waters of the state through inappropriate disposal of solid waste or through the release of leachate from solid waste.

If solid waste generation rates or disposal methods change, this proposed permit requires this facility to update the approved solid waste control plan (file copy

dated 05/25/2019) designed to prevent solid waste from causing pollution of waters of the state. SunRype must submit the updated plan to Ecology for approval (RCW 90.48.080).

**G. Spill Plan and Slug Discharge Plan**

This facility has a combined Spill and Slug Discharge Prevention and Control Plan (file copy dated 05/01/2019). 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].

SunRype 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 proposed permit requires the facility to update this plan and submit it to Ecology.

Ecology determined that SunRype 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)].

**H. Compliance schedule for meeting pretreatment standards**

In the event there are 3 consecutive months where the discharge limits are exceeded, the Permittee must complete the following tasks:

	Tasks	Date Due
A.	Complete design of wastewater pretreatment facilities upgrades and submit engineering report to Ecology for approval.	within 12 months of 3 <sup>rd</sup> consecutive non-compliance
B.	Notify Ecology of pretreatment plant facility upgrade completion and operational status	within 36 months of 3 <sup>rd</sup> consecutive non-compliance

**I. 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 5 years.

## **VIII. References for Text and Appendices**

Washington State Department of Ecology.

Laws and Regulations

( <http://www.ecy.wa.gov/laws-rules/index.html> )

Permit and Wastewater Related Information

(<http://www.ecy.wa.gov/programs/wq/permits/guidance.html> )

December 2011. *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. <http://www.ecy.wa.gov/pubs/0710024.pdf>

## **Appendix A—Public Involvement Information**

Ecology proposes to issue a permit to SunRype. 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 July 17, 2019 in Yakima 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.

### **NOTICE: ANNOUNCEMENT OF AVAILABILITY OF DRAFT PERMIT**

PERMIT NO.: ST0009261

APPLICANT: SunRype Products

FACILITY: 1 Railroad Avenue  
Selah, WA 98942

SunRype Products has applied for renewal of 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 fruit processing wastewater to the City of Selah collection system from its facility located at 1 Railroad Avenue, Selah, 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**

**October 1, 2019**

SunRype Products

Page 23 of 35

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=ST0009261&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 call Jackie Cameron at (509) 575-2027, e-mail [jackie.cameron@ecy.wa.gov](mailto:jackie.cameron@ecy.wa.gov), or write to the address below.

Interested persons are invited to submit written comments regarding the proposed permit. All comments must be submitted by August 17, 2019 to be considered for the final determination. Comments should be sent to: Cynthia Huwe, WQ Permit Coordinator, Department of Ecology, Central Regional Office, 1250 West Alder Street, Union Gap, WA 98903-0009.

Submit comments online at <http://ws.ecology.commentinput.com/?id=rUEkt>.

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 July 17, 2019.

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>.

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  
1250 West Alder Street  
Union Gap, WA 98903-0009

The primary author of this permit and fact sheet is Keith Primm.

**October 1, 2019**

SunRype Products

Page 24 of 35

## **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 RCW 43.21B and WAC 371-08. “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 RCW 43.21B and WAC 371-08.

### **ADDRESS AND LOCATION INFORMATION**

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



## Appendix C—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 month time taking into account zero discharge days.

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

**BOD<sub>5</sub>** -- 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 BOD<sub>5</sub> 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 BOD<sub>5</sub> 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)].

**October 1, 2019**

SunRype Products

Page 28 of 35

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.

**October 1, 2019**

SunRype Products

Page 29 of 35

**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 calculated as the average measurement of the pollutant over the 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 (WAC 173-201A).

**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

October 1, 2019

SunRype Products

Page 30 of 35

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 BOD<sub>5</sub>** -- 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 BOD<sub>5</sub> 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 BOD<sub>5</sub> 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 D—Technical Calculations

Parameter	Flow	pH	pH	TSS	TSS	TSS	Total BOD5	Total BOD5	Total BOD5
Units	MGD	Standard Units	Standard Units	Lbs/Day	Milligrams/L (mg/L)	Milligrams/L (mg/L)	Lbs/Day	Milligrams/L (mg/L)	Milligrams/L (mg/L)
Statistical Base	Average Monthly	Maximum	Minimum	Average Monthly	Average	Maximum	Average Monthly	Average	Maximum
Limits	- / 0.3	- / 11	5 / -	- / 1000	- / -	- / -	- / 2400	- / -	- / -
Benchmarks	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Design Limit									
Date	Value	Value	Value	Value	Value	Value	Value	Value	Value
1/1/2013	0.223	9.6	6.3	384	207	516	1916	1032	1772
2/1/2013	0.213	10.1	6.6	451	254	544	1985	1118	2322
3/1/2013	0.206	8.7	6.2	462	269	468	1737	1012	2130
4/1/2013	0.21	9.7	6.3	472	269	716	1672	954	2010
5/1/2013	0.236	10.6	6.3	355	181	456	2002	1019	2898
6/1/2013	0.214	9.8	5.3	320	179	516	1605	901	2610
7/1/2013	0.206	9.7	6.3	342	199	472	1586	924	1883
8/1/2013	0.169	9.8	6.5	390	277	768	1014	721	1884
9/1/2013	0.242	10.2	6.4	568	281	720	2039	1010	2352
10/1/2013	0.274161	10.6	5.9	692	302.429	548	2308	1009.29	1656
11/1/2013	0.228233	10.2	6.5	726.38	381.667	928	2501	1314.17	2394
12/1/2013	0.187871	9.6	6.2	605.615	272	644	1872.15	862.462	1602
1/1/2014	0.238	10.4	6.7	736	371	704	2363	1191	2016
2/1/2014	0.232	10	6.5	740	383	992	2227	1151	2610
3/1/2014	0.219	9.3	6.1	784	430	705	2490	1365	3000
4/1/2014	0.251	9.6	5.8	715	341	580	2129	1015	2118
5/1/2014	0.225	8.5	6.1	637	340	564	2119	1129	2016
6/1/2014	0.229	9.4	6.1	622	327	560	2383	1251	2916
7/1/2014	0.228	9.6	6	765	403	676	2031	1070	2240
8/1/2014	0.169	9.1	5.4	659	468	1100	1591	1130	3876
9/1/2014	0.239	9.7	6.8	874	439	1292	2302	1156	2892
10/1/2014	0.281	9.6	6.3	638	272	548	2742	1169	2105
11/1/2014	0.218	9.9	5.8	767	422	776	2454	1350	2388
12/1/2014	0.209	9.7	6.5	712	409	552	3308	1899	3216

# Fact Sheet for State Permit ST0009261

**October 1, 2019**

SunRype Products

Page 34 of 35

4/1/2015	0.254	10	5.9	927	438	756	2356	1112	2832
5/1/2015	0.213	10.3	5.2	641	361	655	2722	1533	3336
6/1/2015	0.255	9.3	6.1	1169	550	920	3737	1758	3654
7/1/2015	0.295	10.3	5.2	975	396	720	2732	1110	2262
8/1/2015	0.192	9.8	6.2	918	574	1004	1580	989	2460
9/1/2015	0.219	9	5.1	785	431	732	2305	2164	2388
10/1/2015	0.227	10.4	5.9	908	479	956	2234	1178	1817
11/1/2015	0.183	10.1	6.2	925	605	1720	2533	1658	2568
12/1/2015	0.171	9.2	6.3	948	666	1060	1654	1163	3048
1/1/2016	0.184	8.6	6.3	752	490	1268	1549	1009	2850
2/1/2016	0.197	9.3	6.3	652	396	716	1901	1154	2274
3/1/2016	0.187	8.2	5.5	495	317	892	1676	1072	2388
4/1/2016	0.196	8.3	5.7	726	444	888	1598	976	1840
5/1/2016	0.183	8.3	5.4	677	443	892	1501	983	2328
6/1/2016	0.217	8.9	5.2	875	484	908	2279	1260	3222
7/1/2016	0.133	9.6	6.3	509	460	740	1340	1211	3012
8/1/2016	0.124	8.7	6.7	287	277	608	987	951	1550
9/1/2016	0.263	9.1	5.5	656	300	528	2283	1043	2280
10/1/2016	0.236	8.6	6	363	185	684	1279	651	1481
11/1/2016	0.234433	7	5.1	597	305.143	650	1864	953.143	1674
12/1/2016	0.189742	10	5.7	668	422.154	784	1700	1074.31	2802
1/1/2017	0.22	8.9	6.2	626	340	704	1966	1069	1956
2/1/2017	0.255393	7	6.1	983	461.273	790	2386	1120.09	2022
3/1/2017	0.263	9.3	6	1084	494	1144	2354	1073	2928
4/1/2017	0.187	7	5.1	1052	676	1884	1702	1093	2490
5/1/2017	0.187	7.7	6	904	580	1148	1453	934	1716
6/1/2017	0.181	7.9	6	441	293	960	627	416	743
7/1/2017	0.208	7.2	5	580	334	784	1715	986	2454
8/1/2017	0.203	8.1	5.4	351	207	688	1530	902	3624
9/1/2017	0.298	10.3	5.5	330	133	364	1655	666	1628
10/1/2017	0.341	10.4	5.1	1075	378	724	2574	906	1652
11/1/2017	0.273	10	5.7	432	190	764	1456	639	1755
12/1/2017	0.234	10	5	603	309	580	2287	1170	2760
1/1/2018	0.256613	8.2	5.6	1819	642.571	1820	2989.71	1043.5	2142

2/1/2018	0.201393	10.6	5	1325.08	657.538	1628	2447.77	1100.69	1648
3/1/2018	0.199871	8.3	5.1	969.417	580.333	1616	1816.17	1121.58	2610
4/1/2018	0.204533	7.2	5	445.154	334.769	896	1548.38	1073.85	3318
5/1/2018	0.217129	10.5	5	784.571	384.714	1000	2332.36	1184.86	2772
6/1/2018	0.2852	8.2	5	948	346	648	2527.08	907.667	1796
7/1/2018	0.242677	8.4	5.6	777.923	291.077	712	2550.31	1133.54	2034
8/1/2018	0.218129	9	5.3	492.857	238.429	644	1528.14	684.429	1485
Min	0.124	7	5	287	133	364	627	416	743
Max	0.341	10.6	6.8	1819	676	1884	3737	2164	3876
Average	0.22124085	9.2529412	5.852941176	708.0146618	379.1631912	825.8970588	2039.57456	1099.876191	2358
Median	0.2185645	9.5	6	684.5	374.5	722	2016.5	1073.425	2325
95th Percentile	0.28373	10.565	6.565	1080.85	629.42115	1623.8	2875.9	1646.45	3468.6

## **Appendix E—Response to Comments**

No comments were received by the Department of Ecology.