

# Fact Sheet for State Waste Discharge Permit ST0009190

## Baker Commodities December 10, 2018

### 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 Baker Commodities (Baker) that will authorize discharge of wastewater to City of Grandview 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 Baker, State Waste Discharge Permit ST0009190, are available for public review and comment from October 24, 2018 until the close of business November 26, 2018. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

Baker 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 D - 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

Baker is part of a nationwide company, headquartered in Los Angeles, which renders fats and oils. The facility receives used restaurant grease and oils, farm animal carcasses, including offal, fat, and bone. It is located in Grandview, Washington, just south of the Yakima River and adjacent to the City of Grandview POTW. The facility site is leased from the City of Grandview.

The company has two rendering plants in Washington State, one in Spokane and the other located in Tukwila. The carcasses, as well as the spent restaurant oil and grease undergo initial processing at the receiving station, prior to being shipped to one of the Baker Commodities rendering plants.

The proposed permit retains the effluent limits in the existing permit. The City of Grandview's Wastewater Treatment Facilities, Industrial User Contract, Schedule A upon which the permit limits are based, has not changed.

The proposed permit requires that an updated Operations and Maintenance Manual (O&M Manual) be prepared and submitted to the Department.

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## 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)

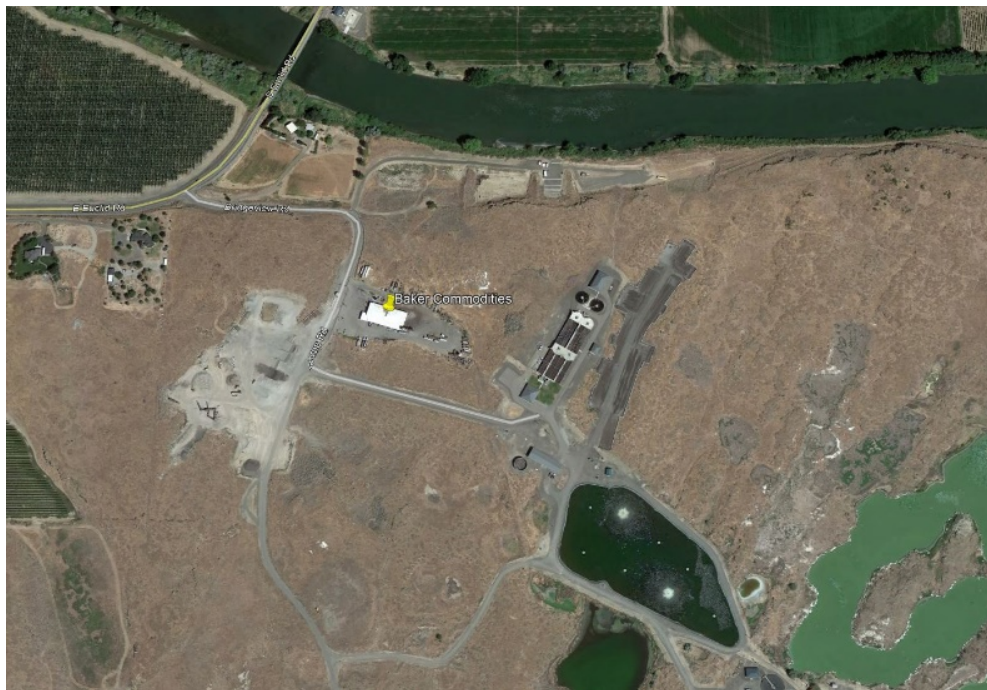
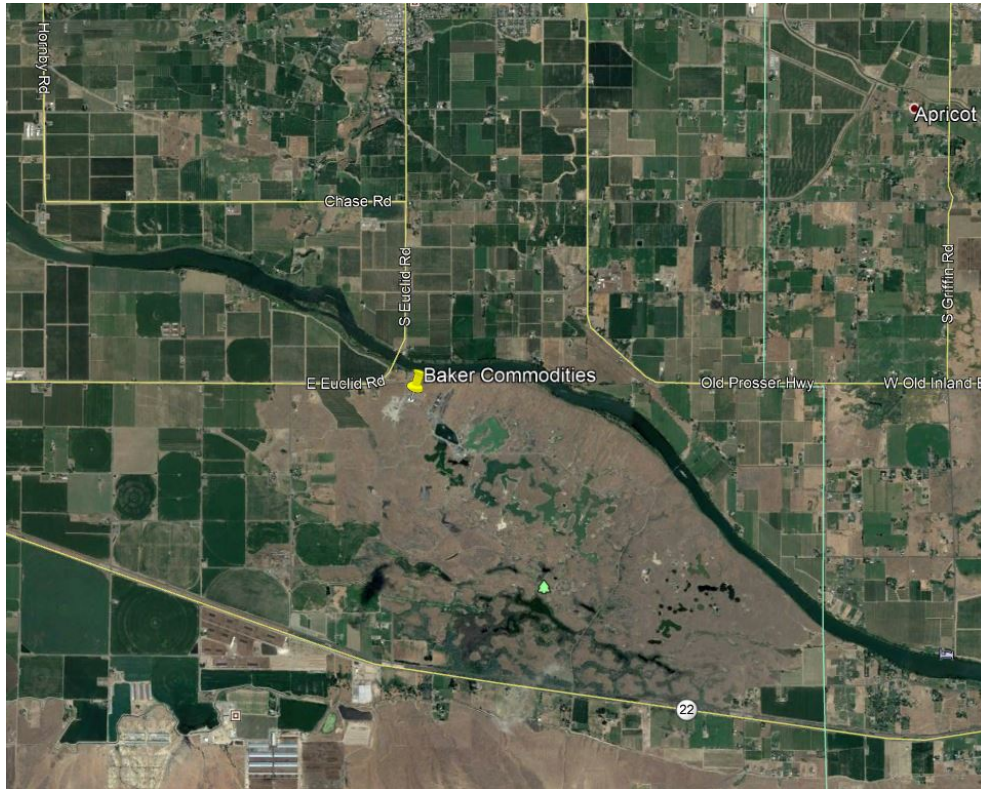
These rules require any industrial facility owner/operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters 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 D**.

## II. Background Information

**Table 1 General Facility Information**

Applicant	Baker Commodities, Inc.
Facility Name and Address	Baker Commodities 150 Bridgeview Road Grandview, WA 98930
Contact at Facility	Name: Chuck Curtiss Telephone #: 509-837-8686
Responsible Official	Name: M.A. Ebright Title: Vice President Address: PO Box 359, Sunnyside, WA 989944 Telephone #: 509-837-8686 FAX #: 509-894-4546
Industrial User Type	Categorical Pretreatment
Industry Type	Animal and Marine Fats and Oils Production
Type of Treatment by Industry	NA
SIC Codes	2077 2011
NAIC Codes	311613 311611
Facility Location (NAD83/WGS84 reference datum)	Latitude: 46.21330 Longitude: -119.91533
Treatment Plant Receiving Discharge	City of Grandview POTW
Discharge Location (NAD83/WGS84 reference datum)	Latitude: 46.21347 Longitude: -119.91512
<b>Permit Status</b>	
Renewal Date of Previous Permit	12/01/2010
Application for Permit Renewal Submittal Date	11/24/2014
Date of Ecology Acceptance of Application	01/22/2015
<b>Inspection Status</b>	
Date of Last Non-sampling Inspection Date	01/31/2018



**Figure 1 Facility Location Map**





**Figure 2 Facility Site**

**A. Facility description**

*History*

The company has operated on the site since 1978. The physical plant consists of one large building approximately 180 feet long by 60 feet wide and is situated on a five acre site leased from the City of Grandview. The building houses an office area and all the process units. Trucks containing raw material are off-loaded outside, on the east end of the building on a concrete apron. Several tanks are utilized to store product.

The site's topography is a shallow basin with thin soil overlaying basalt bedrock.

Grandview's POTW sewer force main intersects the property. The force main at this location was installed on top of the basalt bedrock and covered with soil. It therefore acts as a dike across the site, creating two separate shallow basins. Surface water in the south basin, where the facility's buildings are located, is collected in a stormwater retention tank installed in 2004. The stormwater tank

has a volume of approximately 4,000 gallons and is located at the east end of the south basin.

Baker Commodities had a history of excess solid wastes, debris, process water, and storm water accumulating in various areas around the site prior to 2004. These wastes included miscellaneous trash, excess animal meal deposited onsite, used 55-gallon drums, and lime. Wash-down water and stormwater commingled with the solid waste, posing a hazard to ground water quality.

A truck fueling station on the south side of the facility had also experienced some spills.

A March 27, 2003 letter from the City of Grandview's Public Works director addressed to Baker Commodities, served as a warning that these problems at the facility were a violation of its lease agreement with the City.

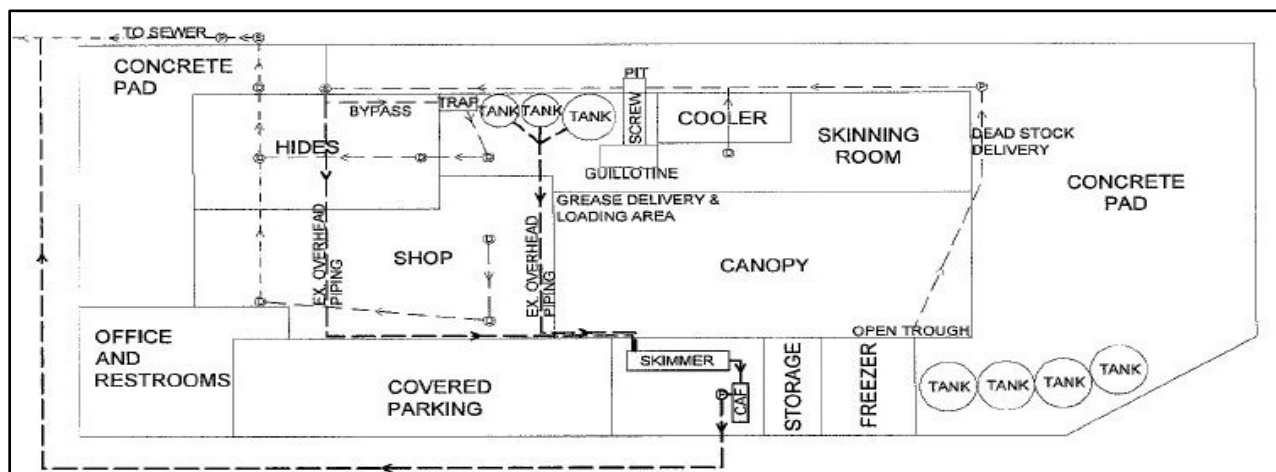
Since March of 2003, Baker Commodities has implemented and maintained good housekeeping practices. Used cooking oil drums are now crushed for recycling. The oil refueling station has been removed. The company installed a stormwater retention tank at the east edge of the property to collect seasonal runoff and incidental process wash-down water. When filled, this tank is batch pumped through the East wastewater sump located in the building. The East Wastewater sump is routed to the Grandview POTW.

#### *Industrial process(s)*

The plant acts as a receiving station for dead stock, raw material including offal, fat, bone, and used restaurant oil. Dead stock are skinned to recover hides for resale and chopped to reduce the size of carcasses for further offsite processing. Grease/oil from restaurants, raw materials and by-products from the initial processing are treated by removing water and sludge.

Water utilized for processing operations and office uses arrives via the City of Grandview's drinking water conveyance system. This water is metered to determine the water charge. Since a minimal volume of drinking water is used for domestic purposes, the amount of water entering the facility is assumed to be equal to the amount of effluent produced. The process water is routed into a 6,000 gallon tank. From this tank the water is pumped to a water softener, and then routed to the process boiler through a boiler feed tank, pressure washer, and sent to the office for domestic use.





**Figure 3 Processing Workflow**

#### *Wastewater pretreatment*

Wash down and by-product water from the major processes flows into the nearby floor drains, including the open trough, and is then screened through the grease trap prior to flowing into the sewer line. Sump pumps in the northeast corner transport flows from the open trough to the pit. Floor drains in the shop area and hide room collect normal wash down water and connect to the restroom discharge prior to flowing directly to the effluent sewer line. Effluent is then pumped to City of Grandview main sewer line located to the northeast that leads directly to the Grandview POTW. Wastewater from the three tanks located next to the grease trap are disposed individually and are a part of a separate process.

Trucks are washed outside on a concrete pad behind the processing building. Wastewater is treated in the oil skimmer, then conveyed to the wastewater sampling sump.

Collected spent restaurant grease and oil are pumped into upright tanks and heated to allow the oil and grease to separate from the associated wastewater. The separated water, oil and grease are decanted through a drain valve at the bottom of the tanks in succession. Collected grease trap material is passed through a tumbler machine to remove solids (largely vegetable matter and bones), prior to being heated in an upright tank to allow the oil and grease to separate from the associated wastewater.

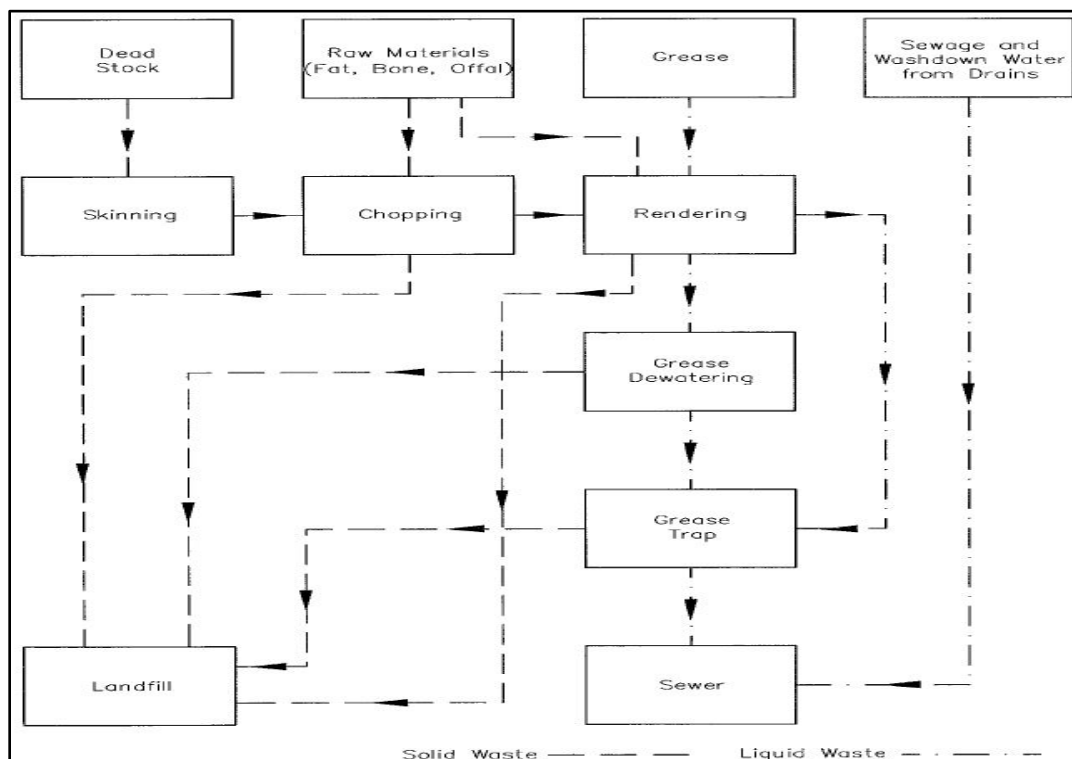
Both streams of wastewater from heated tanks are conveyed to a pH neutralization tank. After neutralization, the water is pumped to the cooling pit. After cooling, the wastewater is pumped first to the oil skimmer, and then pumped to the wastewater sampling sump. The wastewater is gravity fed to an

adjacent sump which has a float activated pump that routes the wastewater to the nearby sewer force main through a check valve. Decanted oils are trucked to one of the company's rendering plants.

## Solid wastes

The facility Solid Waste Control Plan (SWCP) is dated 10/10/2006. Per the SWCP, all animal matter is transported to other Baker Commodities, Inc. facilities for processing and hauled under rendering License #2096.

Refuse is removed by Yakima Waste Systems. Scrap metal is removed by Pacific Recycling. Plastic and wood debris is hauled to SW Regional Landfill, Roosevelt, WA.



### Figure 4 Waste Flow Schematic

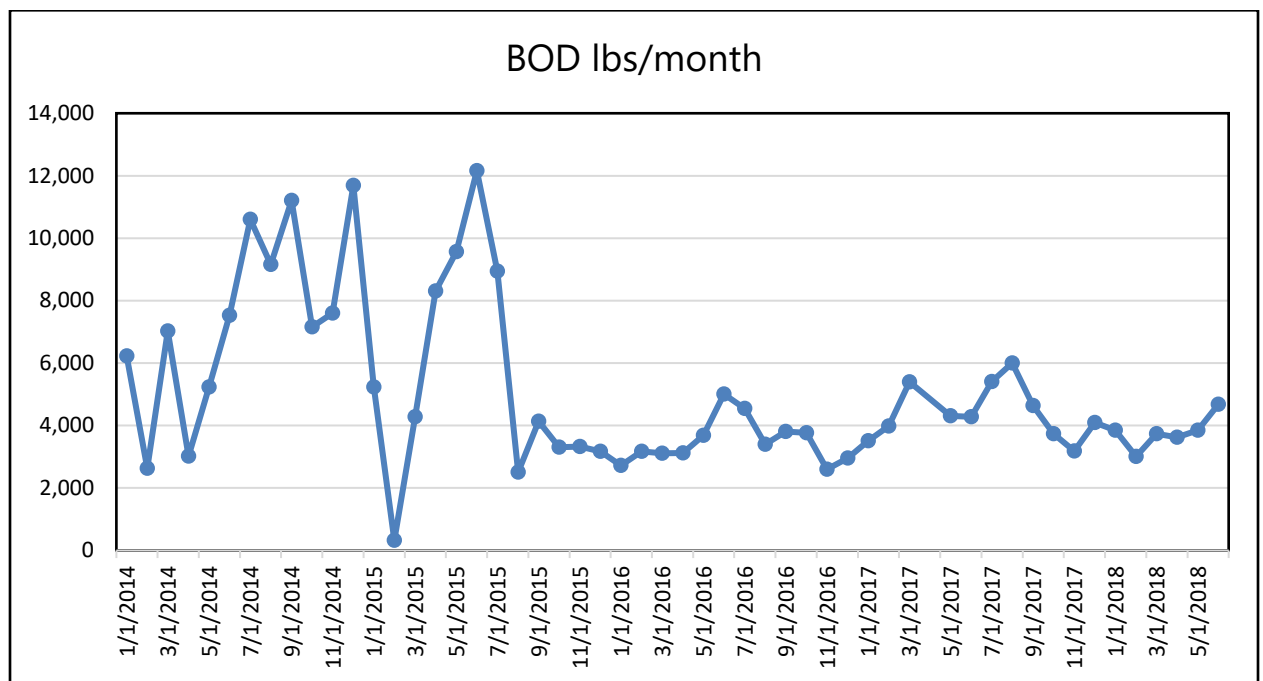
**B. Discharge location to the City of Grandview POTW**

Baker discharges all of its wastewater directly to the City of Grandview POTW located at 850 Bridgeway Road, Grandview, Washington. The Grandview plant discharges to the Yakima River.

### C. Wastewater characterization

Baker submitted a Wastewater Pre-Treatment Equipment Analysis report, December 2014, detailing the performance of a newly installed top and bottom skimmer and a Cavitation Air Flotation unit. The Engineering Report was approved by Ecology 02/06/2015 under the following conditions: Submit a notification of construction completion, Update and submit the O&M Manual to incorporate new equipment and procedures, evaluate the performance of the system for a 12 month period from the date of construction completion, submit a performance report prepared by a registered PE. All conditions have been met.

The following diagram represents the improvement to the effluent quality as a result of the newly installed equipment.



Baker 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 11/01/2012-09/30/2017. The effluent is characterized as follows:

**Table 2 Baker Effluent**

Parameter	Units	Average Value	Maximum Value
Biochemical Oxygen Demand (BOD <sub>5</sub> ) Total	mg/L	7,927	37,980
Total Suspended Solids (TSS)	mg/L	4,639	192,050
Total Dissolved Solids (TDS)	mg/L	24,048	248,000
Flow	gpd	3,496	8,700
Chemical Oxygen Demand	mg/L	11,100	--
Ortho-phosphate	ug/L	41.0	--
Total phosphorous	ug/L	50.9	--
Sodium	ug/L	2,500	--
Parameter	Units	Minimum Value	Maximum Value
pH	standard	4.22	9.34

Testing conducted 07/10/2014 in accordance with previous permit requirement S.9- Additional Chemical Analysis of Effluent are detailed below.

**Table 3 Pit Effluent Test Results**

Laboratory Number: 14-E012473				Date Received: 6/ 5/14		
Sample Identification: Pit Effluent				Date Sampled: 6/ 5/14		
Test Requested	Results	Units	RL	Method	Date Analyzed	Flags
Sodium	2500	mg/l	3.5	EPA 200.7	6/16/14	
Total Dissolved Solids	7590	mg/l	7	SM 2540-C	6/12/14	
Total Phosphorus	50.9	mg/L	0.07	SM4500-P E	7/ 8/14	
Kjeldahl Total Nitrogen	414.	mg/L	0.30	SM 4500N-C	6/10/14	
Chemical Oxygen Demand	11100	mg/L	5	SM 5220-D	6/27/14	
Hexane Extract. Material	236.	mg/L	1.4	EPA 1664B	6/24/14	
Total Metals Digest Water	Metals Digest				6/12/14	
Chloride	4150	mg/L	10	EPA 300.0	6/ 5/14	
Ortho phosphate	41.0	mg/l	7	EPA 300.0	6/ 5/14	

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

The previous permit placed effluent limits the following: BOD<sub>5</sub>, TSS, TDS, Flow, and pH.

Ecology assessed compliance based on its review of the facility's information in the Ecology Permitting and Reporting Information System (PARIS), discharge monitoring reports (DMRs) and on inspections conducted by Ecology.

Baker had late DMR submittals 08/2013, 06/2014, 04/2016, numerous flow exceedances, sporadic low pH, and TSS exceedances.

Permit violation letters were issued from the department were issued to Baker 07/18/2011-pH<5, 08/17/2011-Missed Quarterly TDS sampling, 02/21/2012-Late DMR, 03/23/2016-pH<5.

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

**Table 4 Violations**

Begin Date	Parameter	Units	Statistical Base	Sample Date	Measurement Value	Limit Min/Max	Violations
10/1/2013	pH Daily Min	Standard Units	Minimum	-	4.41	5	Numeric effluent
11/1/2014	pH Daily Min	Standard Units	Minimum	-	4.22	5	Numeric effluent
1/1/2016	pH Daily Min	Standard Units	Single Sample	1/5/2016	4.89	5	Numeric effluent
4/1/2013	TSS	Lbs/Month	Maximum	-	28,237	12,000	Numeric effluent
5/1/2014	TSS	Lbs/Month	Maximum	-	18,282	12,000	Numeric effluent
12/1/2014	TSS	Lbs/Month	Maximum	-	17,925	12,000	Numeric effluent
3/1/2015	TSS	Lbs/Month	Maximum	-	12,619	12,000	Numeric effluent
4/1/2015	TSS	Lbs/Month	Maximum	-	13,205	12,000	Numeric effluent
5/1/2015	TSS	Lbs/Month	Maximum	-	15,349	12,000	Numeric effluent
1/1/2015	Flow	gpd	Single Sample	1/6/2015	5800	4000	Numeric effluent
1/1/2015	Flow	gpd	Single Sample	1/13/2015	5400	4000	Numeric effluent
1/1/2015	Flow	gpd	Single Sample	1/27/2015	5000	4000	Numeric effluent
2/1/2015	Flow	gpd	Single Sample	2/5/2015	5300	4000	Numeric effluent
2/1/2015	Flow	gpd	Single Sample	2/10/2015	5200	4000	Numeric effluent
2/1/2015	Flow	gpd	Single Sample	2/17/2015	4600	4000	Numeric effluent
2/1/2015	Flow	gpd	Single Sample	2/18/2015	5700	4000	Numeric effluent
2/1/2015	Flow	gpd	Single Sample	2/24/2015	4600	4000	Numeric effluent
3/1/2015	Flow	gpd	Single Sample	3/3/2015	5500	4000	Numeric effluent
3/1/2015	Flow	gpd	Single Sample	3/4/2015	8700	4000	Numeric effluent
3/1/2015	Flow	gpd	Single Sample	3/10/2015	4600	4000	Numeric effluent

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Begin Date	Parameter	Units	Statistical Base	Sample Date	Measurement Value	Limit Min/Max	Violations
3/1/2015	Flow	gpd	Single Sample	3/24/2015	5800	4000	Numeric effluent
3/1/2015	Flow	gpd	Single Sample	3/31/2015	4100	4000	Numeric effluent
4/1/2015	Flow	gpd	Single Sample	4/7/2015	4500	4000	Numeric effluent
4/1/2015	Flow	gpd	Single Sample	4/14/2015	4400	4000	Numeric effluent
4/1/2015	Flow	gpd	Single Sample	4/21/2015	4500	4000	Numeric effluent
4/1/2015	Flow	gpd	Single Sample	4/28/2015	4600	4000	Numeric effluent
5/1/2015	Flow	gpd	Single Sample	5/5/2015	4800	4000	Numeric effluent
5/1/2015	Flow	gpd	Single Sample	5/26/2015	4100	4000	Numeric effluent
6/1/2015	Flow	gpd	Single Sample	6/16/2015	4200	4000	Numeric effluent
7/1/2015	Flow	gpd	Single Sample	7/21/2015	6100	4000	Numeric effluent
7/1/2015	Flow	gpd	Single Sample	7/28/2015	4300	4000	Numeric effluent
8/1/2015	Flow	gpd	Single Sample	8/4/2015	5100	4000	Numeric effluent
8/1/2015	Flow	gpd	Single Sample	8/11/2015	4800	4000	Numeric effluent
8/1/2015	Flow	gpd	Single Sample	8/18/2015	4900	4000	Numeric effluent
9/1/2015	Flow	gpd	Single Sample	9/8/2015	4700	4000	Numeric effluent
10/1/2015	Flow	gpd	Single Sample	10/6/2015	5000	4000	Numeric effluent
10/1/2015	Flow	gpd	Single Sample	10/13/2015	5400	4000	Numeric effluent
10/1/2015	Flow	gpd	Single Sample	10/20/2015	5400	4000	Numeric effluent
10/1/2015	Flow	gpd	Single Sample	10/27/2015	4600	4000	Numeric effluent
11/1/2015	Flow	gpd	Single Sample	11/17/2015	5300	4000	Numeric effluent
11/1/2015	Flow	gpd	Single Sample	11/24/2015	4800	4000	Numeric effluent
12/1/2015	Flow	gpd	Single Sample	12/1/2015	4700	4000	Numeric effluent
12/1/2015	Flow	gpd	Single Sample	12/2/2015	4100	4000	Numeric effluent
12/1/2015	Flow	gpd	Single Sample	12/8/2015	5700	4000	Numeric effluent
12/1/2015	Flow	gpd	Single Sample	12/14/2015	4200	4000	Numeric effluent
1/1/2016	Flow	gpd	Single Sample	1/5/2016	4300	4000	Numeric effluent
1/1/2016	Flow	gpd	Single Sample	1/6/2016	4800	4000	Numeric effluent
1/1/2016	Flow	gpd	Single Sample	1/20/2016	4700	4000	Numeric effluent
2/1/2016	Flow	gpd	Single Sample	2/11/2016	5300	4000	Numeric effluent
2/1/2016	Flow	gpd	Single Sample	2/23/2016	6000	4000	Numeric effluent



Begin Date	Parameter	Units	Statistical Base	Sample Date	Measurement Value	Limit Min/Max	Violations
6/1/2016	Flow	gpd	Average	-	5600	4800	Numeric effluent
7/1/2016	Flow	gpd	Average	-	5000	4800	Numeric effluent
9/1/2016	Flow	gpd	Average	-	5110	4800	Numeric effluent
10/1/2016	Flow	gpd	Average	-	5600	4800	Numeric effluent

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

**Table 5 Permit Submittals**

Name	Status	Due	Rcvd	Approved
Solid Waste Control Plan - Updates				
Engineering - Declaration Of Construction WAC 173	Received		8/18/2015	
Operation And Maintenance Manual (Update)		3/1/2007		
O&M - Operation And Maintenance Manual (Update)				
Application For Permit Renewal		12/31/2003		
Application For Permit Renewal	Received	8/31/2009	8/18/2009	8/18/2009
Signatory Requirements - G1		8/31/2010		
Signatory Requirements	Received		5/13/2010	
Application For Permit Renewal	Accepted	11/30/2014	11/24/2014	1/22/2015
Reporting Permit Violations - Written Report				
Chemical Analysis Of Effluent Submit Results	Received	11/30/2014	7/14/2014	
Solid Waste Control Plan		10/1/1999		
Reporting Permit Violations - Phone Call				
Chemical Analysis Of Effluent		8/31/2009		
Operation And Maintenance Manual (Update)		11/1/2000		
Wastewater Pretreatment Equipment Analysis Report	Received		12/24/2014	
Solid Waste Control Plan	Received	3/1/2006	10/11/2006	
Operation And Maintenance Manual	Received	3/1/2006	4/28/2006	
Operation And Maintenance Manual	Received	11/1/1999	3/26/2003	
Solid Waste Control Plan - Updates				
Engineering - Declaration Of Construction WAC 173	Received		8/18/2015	
Operation And Maintenance Manual (Update)		3/1/2007		

**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**

Under WAC 173-216-110 (4), neither flows nor waste loadings may exceed approved design criteria. Ecology obtained design criteria for this facility's pre-treatment equipment from the engineering report dated December 2014 prepared by Theodore Pooler, HLA, Inc. The subject document was conditionally approved in 2014. All conditions were met as follows:

- Update the Operations & Maintenance manual and submit to Ecology. (Submitted 08/13/2015).
- Evaluate the performance of the system for a 12-month period from the date of construction completion (Wastewater Pre-Treatment Equipment Performance Report submitted 09/16/2016).

- Submit a performance report due by the 15<sup>th</sup> day of the following month after the 12-month period. It shall be prepared by a registered professional engineer experienced in sanitary engineering. At a minimum, it should compare actual vs. estimated performance values presented in the Wastewater Pretreatment Engineering Report (Wastewater Pre-Treatment Equipment Performance Report submitted 09/16/2016).

**Table 6 Design Criteria**

Parameter	Design Quantity
Maximum Month Design Flow (MMDF)	0.006 MGD
BOD5 Loading for Maximum Month	350 lb/day
TSS Loading for Maximum Month	20 lb/day

**Table 7 Wastewater Pre-Treatment Equipment Performance Report**

Table 1: Baker Commodities - Grandview Effluent Data					
	Max Month (gallons/day)	Average Effluent BOD (mg/l)	Average Effluent TSS (mg/l)	Max Month BOD (lbs/day)	Max Month TSS (lbs/day)
Grandview Contracted Discharge Limits	4,000	N/A	N/A	500	400
Effluent Discharges Prior to Improvements	4,520	10,000	7,750	570	960
Estimated Effluent Discharges Post Improvements	N/A	N/A	N/A	350	20
Actual Effluent Discharges Post Improvements	3,789	4,900	234	164	15

## 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).

Federal effluent guidelines for this industry are given in 40 CFR 432 - Meat and Poultry Products Point Source Category. These federal limits are a type of technology-based effluent limits. However, the effluent guideline limits are applicable only to point source dischargers (discharges to surface water) and do not apply to industries discharging to POTWs (pretreatment industries).

The facility must comply with the General Pretreatment Regulations contained in 40 CFR Part 403. The Part 403 pretreatment limits apply to all industries

discharging wastewater to POTWs, whether they are categorical industry or not a categorical industry. The proposed permit will include local limits for Flow, BOD, TSS, and pH.

The state waste discharge permit regulations include restrictions and prohibitions to protect publicly-owned sewerage systems. A facility may not discharge any wastewater having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel unless the:

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

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

### C. Local POTW Limits

To protect Grandview 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 by Grandview POTW and codified in ordinance (Grandview Municipal Code 13.12.030.F). 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 effluent limits for this discharge include the following:

**Table 8 Local Limits**

Maximum Monthly Allocation												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Flow MGD	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
BOD lbs/day	500	500	500	500	500	500	500	500	500	500	500	500
TSS lbs/day	400	400	400	400	400	400	400	400	400	400	400	400

Effluent Limits		
Parameter	Daily minimum	Daily Maximum
pH	5.0 standard units	11.0 standard units

**D. Comparison of effluent limits with the previous permit issued**

The Grandview POTW has not modified the Schedule A for this facility.

**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 the laboratory at this facility for:

**Table 9 Grandview POTW Accredited Parameters**

Parameter Name	Category	Method Name	Matrix Description
Specific Conductance	General Chemistry	SM 2510 B-97	Non-Potable Water
Solids, Total Dissolved	General Chemistry	SM 2540 C-97	Non-Potable Water
Solids, Total Suspended	General Chemistry	SM 2540 D-97	Non-Potable Water
Chlorine (Residual), Total	General Chemistry	SM 4500-Cl G-00	Non-Potable Water
pH	General Chemistry	SM 4500-H+ B-00	Non-Potable Water
Ammonia	General Chemistry	SM 4500-NH3 D-97	Non-Potable Water
Dissolved Oxygen	General Chemistry	SM 4500-O G-01	Non-Potable Water
Biochemical Oxygen Demand (BOD)	General Chemistry	SM 5210 B-01	Non-Potable Water
Fecal coliform-count	General Chemistry	SM 9222 D (m-FC)-97	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 prepare and submit an updated operation and maintenance (O&M) manual (file copy dated March 2003) as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). Implementation of the procedures in the operation and maintenance manual ensures the facility's compliance with the terms and limits in the permit.

The proposed permit requires submission of an updated O&M manual for the entire wastewater system. This document must be reviewed annually and updated as necessary to ensure accuracy. Please document review dates, changes, and revision dates.

**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**

In 2003, the facility was scrutinized for its poor solid waste handling practices. Excess solid wastes, debris, process water, and storm water were observed accumulating in various areas around the site. Wastes included miscellaneous trash, excess animal meal deposited onsite, used 55-gallon drums, and lime. Wash-down water and stormwater co-mingled with the aforementioned solid wastes posing a hazard to ground water quality.

A truck fueling station on the south side of the facility had also experienced some spills. A March 27, 2003 letter from the City of Grandview's Public Works director served as a warning that these problems at the Baker Commodities facility were a violation of its lease agreement with the City.

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

This proposed permit requires this facility to update the approved solid waste control plan (file copy dated 10/10/2006) designed to prevent solid waste from causing pollution of waters of the state. Baker must submit the updated plan to Ecology for approval (RCW 90.48.080).

The updated plan should address current handling of drums, scrap metal, concrete, pallets, spill debris used oil, oil/water separator cleanout debris, and any other wastes managed, stored, speculatively accumulated or deposited at the site.

**F. Non routine and unanticipated wastewater**

Occasionally, this facility may generate wastewater not characterized in the permit application because it is not a routine discharge and the facility did not anticipate it at the time of application. These wastes typically consist of waters used to pressure-test storage tanks or fire water systems or of leaks from drinking water systems.

The proposed permit authorizes the discharge of non-routine and unanticipated wastewater under certain conditions. The facility must characterize these waste waters for pollutants and examine the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and on any opportunities for reuse, Ecology may:

- Authorize the facility to discharge the water.
- Require the facility to treat the wastewater.
- Require the facility to reuse the wastewater.

#### **G. Spill plan**

The facility has a fueling station with evidence of multiple past spills, a 400 gallon used oil tank, as well as bulk materials which include hydraulic oil, gear oil, grease, and sodium hydroxide.

The solid waste and chemicals on-site 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].

Baker 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 current permit application indicates the permittee has developed a Spill Prevention Countermeasure and Control Plan (40 CFR 112) and a runoff, spillage, or leak control plan (WAC 173-216-110(f)). Ecology does not currently have file copies of these documents. The proposed permit requires the facility to update this plan and submit it to Ecology.

#### **H. Slug discharge plan**

Baker has indicated they developed a Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v)) in their permit application. The department does not currently have a file copy of this document. This document should be reviewed annually and updated as necessary to ensure accuracy. Please document review dates, changes, and revision dates. Please submit this document so that our facility records may be complete.

If Baker has the potential for a batch discharge or a spill that could adversely affect the treatment plant, the proposed permit requires a slug discharge control plan [(40 CFR 403.8 (f)(l)(iii)(B)(6) and (f)(2)(vi)].

**I. Additional Chemical Analysis of Effluent**

Once per permit cycle, the Permittee must conduct a chemical analysis on a composited effluent sample collected from the wastewater sump located immediately upstream from the sump that is pumped to the City of Grandview's POTW sewer. Sampling for this requirement is detailed in Permit Section S11.

**J. 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

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

Permit and Wastewater Related Information (<https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-quality-permits/Water-Quality-individual-permits>)

December 2011. *Permit Writer's Manual*, Publication Number 92-109

(<https://partnerweb.ecy.wa.gov/sites/WQ/pwg/pwm/manual/permitWritersManual-January2015.pdf>)

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/documents/0710024.pdf>

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

Ecology proposes to reissue a permit to Baker Commodities, Inc. 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 October 24, 2018 in the Grandview 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.: ST0009190

APPLICANT: Baker Commodities, Inc.  
PO Box 359  
Sunnyside, WA 98944

FACILITY: Grandview POTW

Baker Commodities, 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 wastewater to the City of Grandview POTW from its facility located at 150 Bridgeview Rd., Grandview, 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://fortress.wa.gov/ecy/paris/PermitDocumentSearch.aspx?PermitNumber=ST0009190&FacilityName=&City=&County=&Region=0&PermitType=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 within 30 days after publication of this notice 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=Gufmh>:

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 October 24, 2018.

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.



## **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.

<b>ADDRESS AND LOCATION INFORMATION</b>	
<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 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.

**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)].

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 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



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—Response to Comments**

No comments were received by the Department of Ecology about the draft Baker Commodities permit or fact sheet during the public review period.