

Pristine Valley Farms, LLC
Waste Discharge
Operation and Maintenance
Manual
Permit # ST0501288

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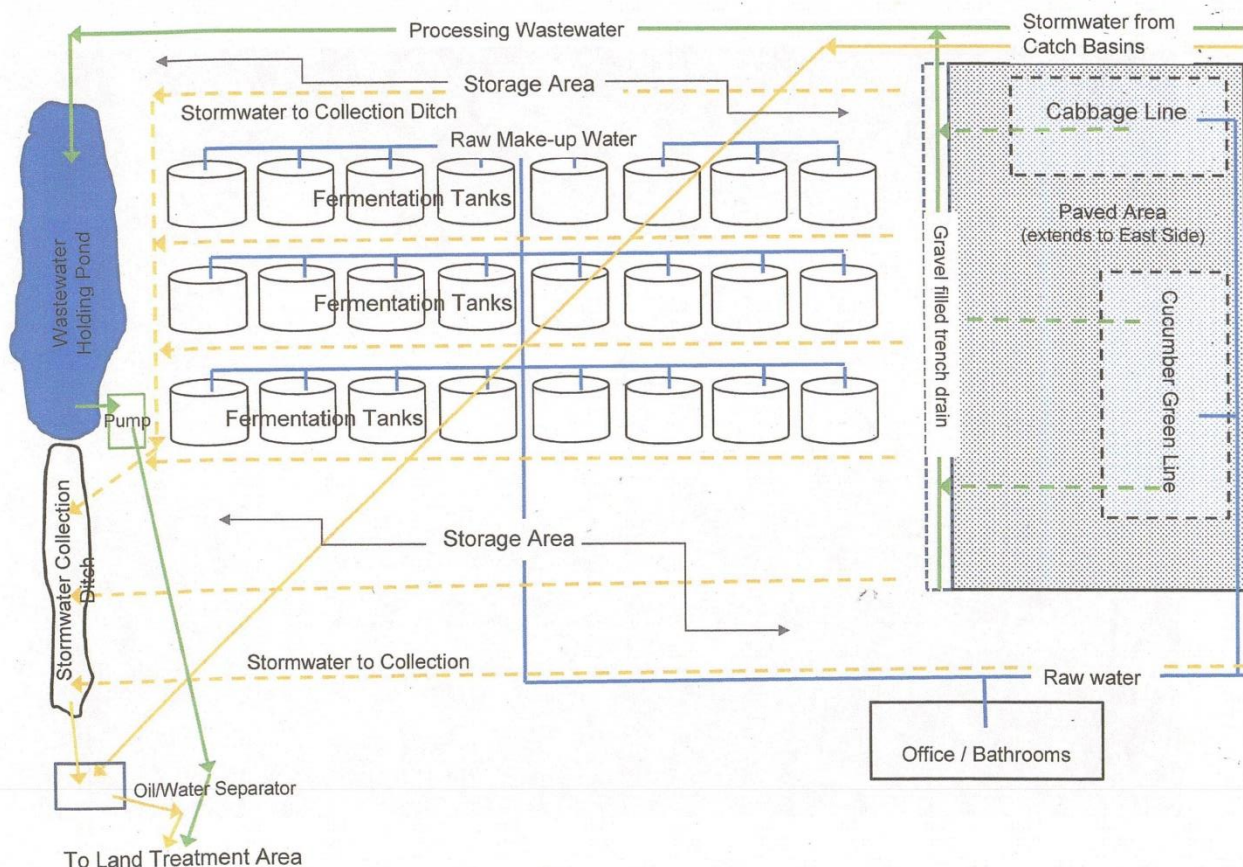
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1. INTRODUCTION AND BACKGROUND

Treatment consists of storage in a lagoon and land treatment of wastewater generated on-site and stormwater from the processing areas.

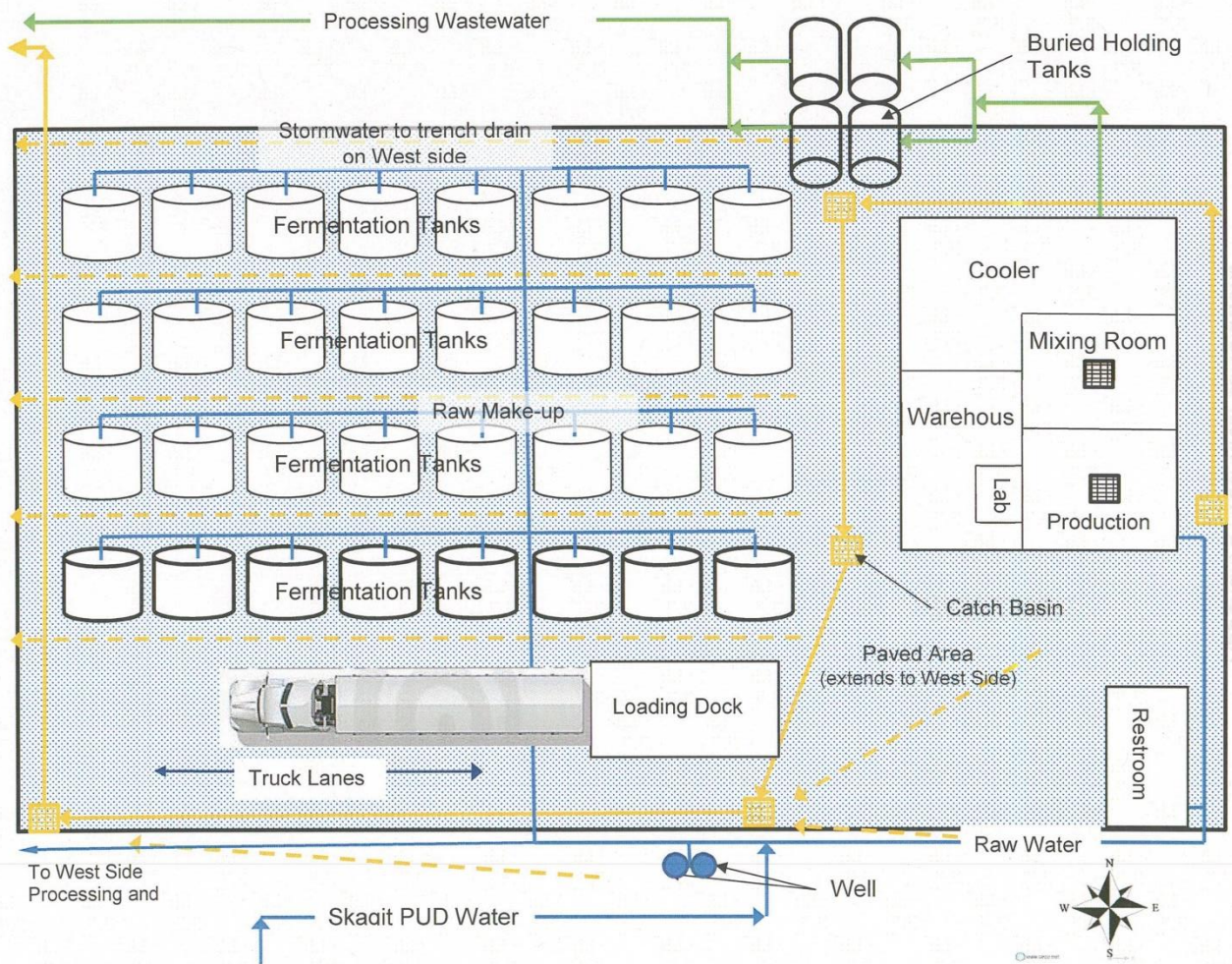
Irrigate the sprinkler field with the stormwater and process wastewater in such a manner that protects the existing and future beneficial uses of both groundwater and surface water. And that does not alter existing infiltration capacity of the soils in the sprinkler field or violate groundwater and surface water standards.

West Tank Farm Area and stormwater and wastewater holding ponds.



Processing Building Not In Use

East Tank Farm Area and Future Processing Building



Application Site

Processing Effluent: Shown by **Green** →

Stormwater: Shown by **Turquoise** →

Ditches: Shown by **Blue** Line

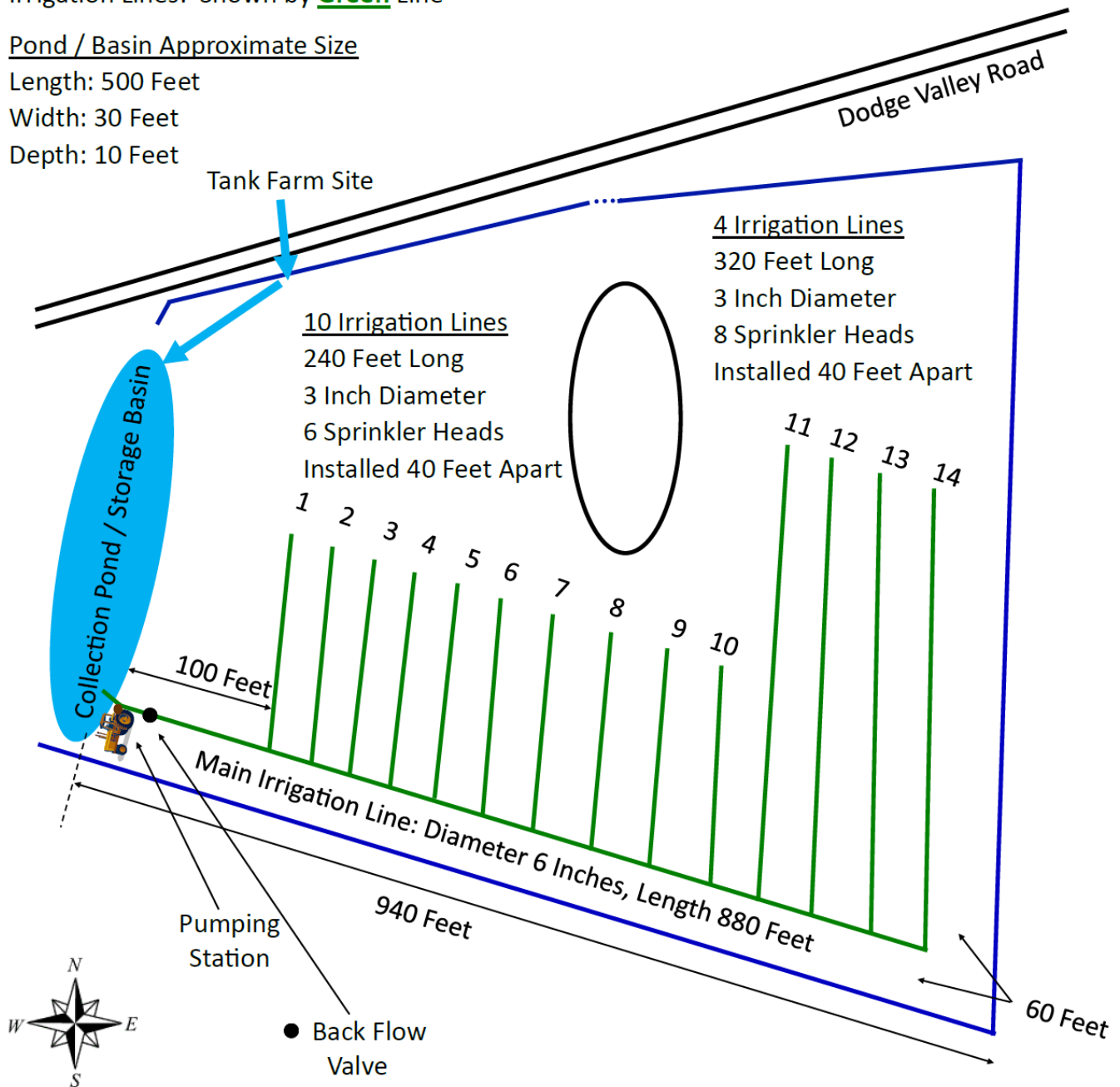
Irrigation Lines: Shown by **Green** Line

Pond / Basin Approximate Size

Length: 500 Feet

Width: 30 Feet

Depth: 10 Feet



Waste Discharge Permit Requirements

Table 1. Effluent Limits for Outfall #001

Latitude: 48.371774 Longitude: -122.455888			
Parameter	Units	Average Monthly ^b	Maximum Daily ^c
Flow ^d	gallons per day	16,000	25,000
Biochemical Oxygen Demand ^e (BOD ₅)	mg/L ^f	69	109
Chloride ^g	mg/L	250	250
Total Suspended Solids ^h (TSS)	mg/L	143	197
Total Dissolved Solids ^g (TDS)	mg/L	500	500
Parameter	Units	Daily Minimum	Daily Maximum
pH	Standard Units	5.5	9.0
^a	Outfall #001 is discharge end of the pump to the spray field header main, and contains both stormwater and process water.		
^b	Average monthly effluent limit is defined as the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.		

Table 2. Monitoring Parameters for Process Wastewater (Outfall #001)

Parameter ^a	Units & Speciation	Sampling Frequency	Sample Type
Flow ^b	gallons/day (gpd)	Continuous	Metered
Cucumbers processed	Pounds per day	Monthly	Measured ^c
Cabbage processed	Pounds per day	Monthly	Measured
Peppers processed	Pounds per day	Monthly	Measured
Biological Oxygen Demand (BOD ₅)	mg/L	Monthly	Grab ^d
TDS	mg/L	Monthly	Grab
TSS	mg/L	Monthly	Grab
Chloride	mg/L	Monthly	Grab
Total Sodium	mg/L	Monthly	Grab
Ammonia	mg/L as N	Monthly	Grab
Total Kjeldahl Nitrogen	mg/L as N	Monthly	Grab
Nitrite + Nitrate – Nitrogen	mg/L as N	Monthly	Grab
Total Nitrogen	mg/L as N	Monthly	Grab
Conductivity	micromhos/cm	Monthly	Field ^e
pH ^f	S.U.	Monthly	Field
Turbidity	mg/L	Monthly	Field
Application Loading Rate	in/day	Monthly	Calculated ^g
BOD ₅	lbs/day	Monthly	Calculated
Total Nitrogen	lbs/day as N	Monthly	Calculated
Total Organic Carbon (TOC)	mg/L	Monthly / Quarterly ^{h, i}	Grab
Total Phosphorous	mg/L	Monthly / Quarterly	Grab
Sulfate	mg/L	Monthly / Quarterly	Grab
Alkalinity ^j	mg/L as CaCO ₃	Semi-Annually / Annually ^{k, l}	Grab
Hardness ^j	mg/L	Semi-Annually / Annually	Grab
Total Calcium ^j	mg/L	Semi-Annually / Annually	Grab
Total Iron ^j	mg/L	Semi-Annually / Annually	Grab
Total Magnesium ^j	mg/L	Semi-Annually / Annually	Grab
Total Manganese ^j	mg/L	Semi-Annually / Annually	Grab
Total Potassium ^j	mg/L	Semi-Annually / Annually	Grab
Total Zinc ^j	mg/L	Semi-Annually / Annually	Grab

Table 3. Monitoring Parameters for Groundwater – Monitoring Wells (MW-1, MW-2, and MW-3)

Parameter ^a	Units & Speciation	Sampling Frequency	Sample Type
Measured Depth to Groundwater	Feet (nearest 0.01 ft)	Monthly ^b	Field Measurement ^c
Dissolved Oxygen	mg/L	Monthly	Field Measurement
Conductivity	µmhos/cm	Monthly	Field Measurement
pH	S.U.	Monthly	Field Measurement
Oxidation-Reduction Potential	milliVolts	Monthly	Field Measurement
Temperature	Degrees C	Monthly	Field Measurement
Turbidity	NTU	Monthly	Field Measurement
BOD ₅	mg/L	Monthly / Quarterly ^{d, e}	Grab ^f
TDS	mg/L	Monthly / Quarterly	Grab
Total Organic Carbon	mg/L	Monthly / Quarterly	Grab
Chloride	mg/L	Monthly / Quarterly	Grab

Parameter ^a	Units & Speciation	Sampling Frequency	Sample Type
Ammonia - Nitrogen	mg/L as N	Monthly / Quarterly	Grab
TKN	mg/L as N	Monthly / Quarterly	Grab
Nitrate + Nitrite – Nitrogen	mg/L as N	Monthly / Quarterly	Grab
Total Phosphorous	mg/L	Monthly / Quarterly	Grab
Sulfate	mg/L	Monthly / Quarterly	Grab
Total Sodium	mg/L	Monthly / Quarterly	Grab
Bicarbonate Alkalinity	mg/L as CaCO ₃	Quarterly / Semi-Annually ^{g, h}	Grab
Carbonate Alkalinity	mg/L as CaCO ₃	Quarterly / Semi-Annually	Grab
Hardness	mg/L	Quarterly / Semi-Annually	Grab
Total Calcium	mg/L	Quarterly / Semi-Annually	Grab
Total Iron	mg/L	Quarterly / Semi-Annually	Grab
Total Magnesium	mg/L	Quarterly / Semi-Annually	Grab
Total Manganese	mg/L	Quarterly / Semi-Annually	Grab
Total Potassium	mg/L	Quarterly / Semi-Annually	Grab

Table 4. Parameters for Soil Monitoring (monitoring point #003)

Parameter	Units & Speciation	Sample Point	Depth Increments
Ferrous Iron ^a	Presence or absence	Each field	0 – 0.5 ft
Exchangeable Sodium Percentage	percent	Each field	1 - 4
Sodium Absorption Ratio	ratio	Each field	1 - 4
Moisture Content	percent	Each field	1 - 4
Organic Matter	percent	Each field	1 - 4
Cation Exchange Capacity	meq/100g	Each field	1 - 4
Conductivity	decimhos/cm	Each field	1 - 4
pH	Standard Units	Each field	1 - 4
Ammonia	mg/Kg as N	Each field	1 - 4
Total Kjeldahl Nitrogen (TKN)	mg/Kg as N	Each field	1 - 4
Nitrate + Nitrite	mg/Kg as N	Each field	1 - 4
Total Nitrogen	mg/Kg	Each field	1 - 4
Total Nitrogen	lbs/acre	Each field	1 - 4

Parameter	Units & Speciation	Sample Point	Depth Increments
Chloride	mg/Kg	Each field	1 - 4
Sulfate	mg/Kg	Each field	1 - 4
Total Iron	mg/Kg	Each field	1 - 4
Total Manganese	mg/Kg	Each field	1 - 4
Total Sodium	mg/Kg	Each field	1 - 4
Total Calcium	mg/Kg	Each field	1 - 4
Total Magnesium	mg/Kg	Each field	1 - 4
Total Potassium	mg/Kg	Each field	1 - 4
Depth increment (ft.) vs. Depth (inches) for composite samples: ^b			DMR Monitoring Designation
Increment 1	0 - 12 inches	1-foot	S1
Increment 2	12 - 24 inches	2-feet	S2
Increment 3	24 - 36 inches	3-feet	S3
Increment 4	36 - 48 inches	4-feet	S4
Increment 5	48 - 60 inches	5-feet	S5
Increment 6	60 - 72 inches	6 feet	S6

Table 5. Monitoring Parameters for Crops (monitoring point #004)

Parameter	Units	Measurement Basis
Crop Production	dry tons/acre	Once per harvest / cutting
Moisture Content	percent	Once per harvest / cutting
Nitrate + Nitrite – Nitrogen	mg/Kg as N (dry weight)	Once per harvest / cutting
Total Nitrogen	mg/Kg as N (dry weight)	Once per harvest / cutting

2. UNIT PROCESSES

Operation	Frequency	Description of Operation
Sprinkler Field		
Turn on Irrigation Pump	Each Use	Turn the switch to the on position. Observe pump to confirm it is pumping water from the pond into the irrigation pipes.
Observe sprinkler heads to confirm in operation	Each Use	Confirm all irrigation heads are in operation. That the irrigation is spraying out of the sprinkler heads. Maintain a 60-foot buffer between the nearest line and the edge of the sprinkler field.
Irrigate the field from 2 to 6 Hours	Each Use	Irrigation system sprinkles water onto the field.
Turn Off Irrigation Pump	Each Use	Turn the switch to the off position. Observe pump to confirm it has stopped pumping water from the pond into the irrigation pipes.
Irrigation of the sprinkler field takes place on an as needed basis. The pond and the field are observed by the farm manager 6 to 7 days per week. The water level in the pond and the weather, the condition of the soil in the field are observed. Then a decision is made when to irrigate the field to maintain crop and soil health and not cause ponding or runoff from the sprinkler field.		
Tank Farm		
Irrigation Pond		
Irrigation Pump Not in Use	N/A	N/A
The cutting room is not in operation. There are no operations in connection with the cutting room or its processes.		

3. LABORATORY CONTROL

Laboratory Sprinkler Field Water Tests: The tests are ordered from a DOE accredited lab, the lab prepares the labeled sample bottles and a cooler for transport.

Water samples from the Sprinkler Field Irrigation Pond are obtained by submersing the bottles into the water near the pump.

Water Samples are capped, put into the cooler and delivered to lab for testing

Test results are entered into DOE portal for DMRs.

Lab results are retained.

DMRs are printed and retained.

Meter Sprinkler Field Water Tests: Water samples from the Sprinkler Field Irrigation Pond are obtained by submersing the bottles into the water near the pump.

Water Samples are capped, and tested. The testing devices are calibrated before each use.

Test results are entered into DOE portal for DMRs.

Results are retained.

DMRs are printed and retained.

Crop Sampling: Crop samples containers are labeled for location, crops are sampled by hand, then put into the labeled containers, then the containers are sealed

Sealed containers are delivered to a lab for testing.

Test results are entered into DOE portal for DMRs.

Lab results are retained.

DMRs are printed and retained.

Soil Sampling: Soil sample containers are labeled for location and depth, soil is dug up with a shovel, then put into the labeled containers, then containers are sealed.

Sealed containers are delivered to the lab for testing.

Lab results are retained.

Test results are reported to the DOE.

Laboratory Groundwater Network Tests: The water tests are ordered from a DOE accredited lab, the lab prepares the labeled sample bottles and a cooler for transport.

Water samples from the groundwater network are obtained by submersing the bottles into the water in the monitoring wells.

Water Samples are capped, put into the cooler and delivered to lab for testing

Test results are entered into DOE portal for DMRs.

Lab results are retained.

DMRs are printed and retained.

Meter Groundwater Network Tests: Water samples from the Groundwater Network are obtained by submersing the bottles into the water in the wells.

Water Samples are capped and tested. The testing devices are calibrated before each use.

Test results are entered into DOE portal for DMRs.

Results are retained.

DMRs are printed and retained.

4. PREVENTIVE MAINTENANCE

Maintenance	Frequency	Description of Maintenance
Sprinkler Field Irrigation System Maintenance		
Sprinkler Field Irrigation Pipe		
Replace Pipe or Nozzels	As Needed	Remove section of pipe or individual nozzle and replace it with a new part.
Sprinkler Field Irrigation Pump		
Change the Oil	Every 200 Hours of Use	Spread plastic under the pump. Catch the oil in a plastic bucket. Pour in new oil.
Tank Farm Irrigation System Maintenance		
Tank Farm Irrigation Pump		
Not in Use	N/A	N/A
Tank Farm Catch Basins		
Check the catch basins for sediment	Annually	Remove the grate. Look inside. If sediment is present, clean it out.
Clean the catch basins	As Needed	Remove the grate. Scoop out the contents and put it into a plastic bag. Close the Bag and deposit it in the dumpster.
Oil/water separator between the tank farm irrigation pond and the sprinkler field.		
Check the oil / water separator for oil and sediment	Annually	Remove the lid and look for oil residue. Take a pole and put it into the separator basin to check for sediment. If needed make an appointment with a vacuum truck service to pump the separator.
Pumped and taken away by vacuum truck service.	As Needed	Pumped and taken away by vacuum truck service.

The cutting room is not in operation. There is no maintenance in connection with the cutting room or its processes.

5. GENERAL

Personnel: Minimum staffing adequate to operation and maintain the treatment processes and carry out compliance monitoring

Sprinkler Field - One staff member to begin the irrigation period and one management staff member to do the wastewater sampling once per month and deliver samples to the appropriate lab.

Tank Farm - One staff member to begin the irrigation pump and confirm is operation and one management staff member to observe wastewater system each day of operation.

One admin staff member to enter data into DOE portal once per month

Record Keeping Samples:

Metered Test Record

Department of Ecology

Pristine Valley Farms

Waste Discharge Permit # ST0501288

S2.A. Irrigation wastewater monitoring

Table 2. Monitoring Parameters for Process Wastewater (Outfall #001)

Date	Parameter	Units & Speciation	Sampling Frequency	Sample Type	Test Result	Calibration Y/N	Personnel
	Conductivity	micromhos/cm ()	Monthly	Field			
	pH	S.U. (Standard Unit)	Monthly	Field			
	Turbidity	mg/L	Monthly	Field			

Lab Report



Burlington, WA Corporate Laboratory (a)
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
Bellingham, WA Microbiology (b)
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR Microbiology/Chemistry (c)
9725 SW Commerce Cr Ste A2 - Wilsonville, OR 97070 - 503.682.7802
Corvallis, OR Microbiology/Chemistry (d)
1100 NE Circle Blvd, Ste 130 - Corvallis, OR 97330 - 541.753.4946
Bend, OR Microbiology (e)
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8435



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Data Report

Client Name: Pristine Valley Farms
P.O. Box 207
La Conner, WA 98257

Reference Number: **22-05636**
Project: Sprinkler Field

Report Date: 3/7/22

Date Received: 2/17/22

Approved by: anp,bj,crc,ljh,tjb

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: At the Pump							Matrix DW		Sample Date: 2/17/22 10:00 am			
Lab Number: 11119		Sample Comment:					Collected By: Craig Staffanson					
CAS ID#	Parameter	Result	PQL	MDL	Units	DF	Method	Lab	Analyzed	Analyst	Batch	Comment
NA	*TOTAL NITROGEN	16.4	0.20		mg/L	1.0	<SUM>	a	2/28/22	BCM	TN_220228	
7440-23-5	SODIUM	429	5	0.05	mg/L	10.0	200.7	a	2/25/22	BJ	200.7_220225A	
16887-00-6	CHLORIDE	677.9	1	0.7	mg/L	10.0	300.0	a	2/23/22	BCM	IC06_220223A	
14808-79-8	*SULFATE	37.3	0.2	0.025	mg/L	1.0	300.0	a	2/18/22	BCM	IC05_220217A	
7664-41-7	*AMMONIA-N	12.3	0.250	0.2115	mg/L	25.0	350.1	a	2/21/22	BCM	350.1_220221	
E-10264	*TOTAL KJELDAHL NITROGEN	16.4	2	0.585	mg/L	10.0	351.2	a	2/24/22	BCM	351.2_220224	
E-10162	*TOTAL SUSPENDED SOLIDS	28	16		mg/L	8.0	I-3765-85	a	2/18/22	CRC	TSS_220218	
E-10173	TOTAL DISSOLVED SOLIDS (TDS)	1560	20		mg/L	2.0	SM2540 C	a	2/21/22	CRC	TDS_220221	
E-10128	*TOTAL NITRATE+NITRITE as N	0.03	0.010	0.00553	mg/L	1.0	SM4500-NO3 F	a	2/21/22	TJB	NO3NO2_220221	
7723-14-0	*TOTAL PHOSPHORUS	1.51	0.100	0.021	mg/L	10.0	SM4500-P F/SM4500-P B(5)	a	2/22/22	TJB	TPHOS_220222	
E-10106	*5-Day BOD Test	41	1.0		mg/L	1.0	SM5210 B	a	2/23/22	CRC	BOD_220218	
E-10195	TOTAL ORGANIC CARBON	62.15	0.15	0.045	mg/L	1.0	SM5310 B	a	2/18/22	BJ	TOC_220218A	

Notes:

ND = Not detected above the listed practical quantitation limit (PQL) or not above the Method Detection Limit (MDL), if requested.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. = Dilution Factor

An * in front of the parameter name indicates it is not NELAP accredited but it is accredited through WSDOH or USEPA Region 10.

These test results meet all the requirements of NELAP, unless otherwise stated in writing, and relate only to these samples. Estimates of uncertainty are not included in this report. If this information is required please contact us at the phone number listed in the report header.

If you have any questions concerning this report contact us at the above phone number.

Form: cRslt_2.rpt

Sample of printed DMR attached, see the next 11 pages:



Permit Number: ST0501288

Permittee: Pristine Valley Farms Pickle

Facility County: Skagit

Receiving Waterbody:

Monitoring Period: 03/01/2022 - 03/31/2022

Outfall: 001 - Agricultural Field

Version: 1

Week	Monitoring Point	Flow Gallons/Day (gpd) Monthly Waters/Recorded	Total BOD5 Total Milligrams/L (mg/L) Monthly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Monthly Grab	Chloride Total Milligrams/L (mg/L) Monthly Grab	Sodium Total Milligrams/L (mg/L) Monthly Grab	Nitrate + Nitrite Total Milligrams/L (mg/L) Monthly Grab	Solids (Residue) Total Dissolved Solids (TDS) Milligrams/L (mg/L) Monthly Grab	Ammonia Total Milligrams/L (mg/L) Monthly Grab	TKN Total Milligrams/L (mg/L) Monthly Grab	Nitrogen (calculation) Total Inorganic (NH3 + NO3 + NO2) Milligrams/L (mg/L) Monthly Calculated	Conductivity (Specific Conductance) Micromhos/cm Monthly Measurement
1-T	3/1/22											
1-W	3/2/22											
1-Th	3/3/22											
1-F	3/4/22											
1-Sa	3/5/22											
2-Su	3/6/22											
2-M	3/7/22											
2-T	3/8/22											
2-W	3/9/22											
2-Th	3/10/22											
2-F	3/11/22											
2-Sa	3/12/22											
3-Su	3/13/22											
3-M	3/14/22											
3-T	3/15/22											
3-W	3/16/22											
3-Th	3/17/22											
3-F	3/18/22											
3-Sa	3/19/22											
4-Su	3/20/22											
4-M	3/21/22											
4-T	3/22/22											
4-W	3/23/22											
4-Th	3/24/22											
4-F	3/25/22											
4-Sa	3/26/22											
5-Su	3/27/22											
5-M	3/28/22											
5-T	3/29/22											
5-W	3/30/22											
5-Th	3/31/22	E*	74	30	429	351	.01	1344	5.96	13.4	13.4	2855
Daily Minimum												
Average	E*	74	30	429	351	.01	1344				13.4	
	<= 16000	Report Only	Report Only	Report Only	Report Only	<= 10	<= 500				Report Only	
Maximum												
Daily Maximum	E*	74	30	429	351	.01	1344	5.96	13.4	13.4	2855	
	<= 240000 (RO)	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only

Reporting Codes Used: E - Analysis Not Complete/ Not Conducted/Not Reported, M - Monitoring Is Conditional/Not Req This MP



Week	Monitoring Point	pH Standard Units Monthly Grab	Application/Loading Rate Inches/Day Monthly Calculated	Nitrogen (calculation) Total (TKN + NO3 + NO2) Lbs/Day Monthly Calculated	Turbidity (NTU) Measured NTU Monthly Measurement	Organic Carbon (TOC) Total Milligrams/L (mg/L) Monthly Grab	Total BOD5 Total Lbs/Day Monthly Calculated	Total Phosphorus Total Milligrams/L (mg/L) Monthly Grab	Solids (Residue) Total suspended (TSS) Lbs/Day Monthly Calculated	Sulfate Total Milligrams/L (mg/L) Monthly Grab	Production Tons Per Acre Once per defined event Composite sample (Manual)	Moisture content Percent Once per defined event Composite sample (Manual)
		001	001	001	001	001	001	001	001	001	004	004
1-T	3/1/22											
1-W	3/2/22											
1-Th	3/3/22											
1-F	3/4/22											
1-Sa	3/5/22											
2-Su	3/6/22											
2-M	3/7/22											
2-T	3/8/22											
2-W	3/9/22											
2-Th	3/10/22											
2-F	3/11/22											
2-Sa	3/12/22											
3-Su	3/13/22											
3-M	3/14/22											
3-T	3/15/22											
3-W	3/16/22											
3-Th	3/17/22											
3-F	3/18/22											
3-Sa	3/19/22											
4-Su	3/20/22											
4-M	3/21/22											
4-T	3/22/22											
4-W	3/23/22											
4-Th	3/24/22											
4-F	3/25/22											
4-Sa	3/26/22											
5-Su	3/27/22											
5-M	3/28/22											
5-T	3/29/22											
5-W	3/30/22											
5-Th	3/31/22	6.48	E*	E*	6.45	57.5	E*	.894	E*	53.5		
Daily Minimum		6.48										
		>= 5.5 (RO)										
Average			E*	E*			E*		E*			
			Report Only	Report Only			<= 0.92		<= 1.91			
Maximum				E*		57.5		.894		53.5		
				Report Only		Report Only		Report Only		Report Only	Report Only	Report Only
Daily Maximum		6.48			6.45		E*		E*			
		<= 9.0 (RO)			Report Only		<= 1.45 (RO)		<= 2.63 (RO)			



Week	Monitoring Point	Nitrate + Nitrite Total Mg/Kg Once per defined event Composite sample (Manual)	Nitrogen (calculation) Total (TKN + NO3 + NO2) Milligrams/Kilogram Once per defined event Composite sample (Manual)	Raw Materials Processed Lbs/Day Monthly Measurement	Raw Materials Processed Lbs/Day Monthly Measurement	Raw Materials Processed Lbs/Day Monthly Measurement
		004	004	CABB	PEPP	CUCB
1-T	3/1/22					
1-W	3/2/22					
1-Th	3/3/22					
1-F	3/4/22					
1-Sa	3/5/22					
2-Su	3/6/22					
2-M	3/7/22					
2-T	3/8/22					
2-W	3/9/22					
2-Th	3/10/22					
2-F	3/11/22					
2-Sa	3/12/22					
3-Su	3/13/22					
3-M	3/14/22					
3-T	3/15/22					
3-W	3/16/22					
3-Th	3/17/22					
3-F	3/18/22					
3-Sa	3/19/22					
4-Su	3/20/22					
4-M	3/21/22					
4-T	3/22/22					
4-W	3/23/22					
4-Th	3/24/22					
4-F	3/25/22					
4-Sa	3/26/22					
5-Su	3/27/22					
5-M	3/28/22					
5-T	3/29/22					
5-W	3/30/22					
5-Th	3/31/22					
Daily Minimum						
Average						
Maximum						
	Report Only	Report Only				
Daily Maximum						
			Report Only	Report Only	Report Only	



Outfall: 001 - Agricultural Field

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
001	Flow Gallons/Day (gpd)	Average	E	Waiting on Equipment Installation
001	Flow Gallons/Day (gpd)	Daily Maximum	E	Waiting on Equipment Installation
001	Flow Gallons/Day (gpd)	3/31/2022	E	Waiting on Equipment Installation
001	Application/Loading Rate Inches/Day	Average	E	Waiting on Equipment Installation
001	Application/Loading Rate Inches/Day	3/31/2022	E	Waiting on Equipment Installation
001	Nitrogen (calculation) Total (TKN + NO3 + NO2) Lbs/Day	Average	E	Waiting on Equipment Installation
001	Nitrogen (calculation) Total (TKN + NO3 + NO2) Lbs/Day	Maximum	E	Waiting on Equipment Installation
001	Nitrogen (calculation) Total (TKN + NO3 + NO2) Lbs/Day	3/31/2022	E	Waiting on Equipment Installation
001	Biochemical Oxygen Demand (BOD5) Total Lbs/Day	Average	E	Waiting on Equipment Installation
001	Biochemical Oxygen Demand (BOD5) Total Lbs/Day	Daily Maximum	E	Waiting on Equipment Installation
001	Biochemical Oxygen Demand (BOD5) Total Lbs/Day	3/31/2022	E	Waiting on Equipment Installation
001	Solids (Residue) Total suspended (TSS) Lbs/Day	Average	E	Waiting on Equipment Installation
001	Solids (Residue) Total suspended (TSS) Lbs/Day	Daily Maximum	E	Waiting on Equipment Installation
001	Solids (Residue) Total suspended (TSS) Lbs/Day	3/31/2022	E	Waiting on Equipment Installation
004	All Parameters		M	
CABB	All Parameters		M	
PEPP	All Parameters		M	
CUCB	All Parameters		M	



Permit Number: ST0501288

Permittee: Pristine Valley Farms Pickle

Facility County: Skagit

Receiving Waterbody:

Monitoring Period: 03/01/2022 - 03/31/2022

Outfall: 002 - Monitoring Wells

Version: 1

Week	Monitoring Point	Depth to GW (0.01ft) Feet Monthly Watered/Recorded	Dissolved Oxygen Milligrams/L (mg/L) Monthly Measurement	Conductivity (Specific Conductance) Micromhos/cm Monthly Measurement	pH Standard Units Monthly Measurement	ORP (Redox) Millivolts Monthly Measurement	Temperature Measured Degrees C Monthly Measurement	Turbidity (NTU) Measured NTU Monthly Measurement	Total BOD5 Total Milligrams/L (mg/L) Monthly Grab	Solids (Residue) Total Dissolved Solids (TDS) Milligrams/L (mg/L) Monthly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Monthly Grab	Organic Carbon (TOC) Total Milligrams/L (mg/L) Monthly Grab
1-T	3/1/22											
1-W	3/2/22											
1-Th	3/3/22											
1-F	3/4/22											
1-Sa	3/5/22											
2-Su	3/6/22											
2-M	3/7/22											
2-T	3/8/22											
2-W	3/9/22											
2-Th	3/10/22											
2-F	3/11/22											
2-Sa	3/12/22											
3-Su	3/13/22											
3-M	3/14/22											
3-T	3/15/22											
3-W	3/16/22											
3-Th	3/17/22											
3-F	3/18/22											
3-Sa	3/19/22											
4-Su	3/20/22											
4-M	3/21/22											
4-T	3/22/22											
4-W	3/23/22											
4-Th	3/24/22											
4-F	3/25/22											
4-Sa	3/26/22											
5-Su	3/27/22											
5-M	3/28/22											
5-T	3/29/22											
5-W	3/30/22											
5-Th	3/31/22											
Minimum					Report Only							
Maximum		Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only

Reporting Codes Used: E - Analysis Not Complete/ Not Conducted/Not Reported, M - Monitoring Is Conditional/Not Req This MP

Outfall: 002 - Monitoring Wells

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
MW1	All Parameters		M	
MW2	All Parameters		M	

[illegible]

[illegible]

[illegible]

[illegible]



Week	Monitoring Point	Total Phosphorus Total Milligrams/L (mg/L) Monthly Grab	Sulfate Total Milligrams/L (mg/L) Monthly Grab	Iron Total Milligrams/L (mg/L) Monthly Grab	Manganese Total Milligrams/L (mg/L) Monthly Grab	Sodium Total Milligrams/L (mg/L) Monthly Grab
		MW3	MW3	MW3	MW3	MW3
1-T	3/1/22					
1-W	3/2/22					
1-Th	3/3/22					
1-F	3/4/22					
1-Sa	3/5/22					
2-Su	3/6/22					
2-M	3/7/22					
2-T	3/8/22					
2-W	3/9/22					
2-Th	3/10/22					
2-F	3/11/22					
2-Sa	3/12/22					
3-Su	3/13/22					
3-M	3/14/22					
3-T	3/15/22					
3-W	3/16/22					
3-Th	3/17/22					
3-F	3/18/22					
3-Sa	3/19/22					
4-Su	3/20/22					
4-M	3/21/22					
4-T	3/22/22					
4-W	3/23/22					
4-Th	3/24/22					
4-F	3/25/22					
4-Sa	3/26/22					
5-Su	3/27/22					
5-M	3/28/22					
5-T	3/29/22					
5-W	3/30/22					
5-Th	3/31/22					
Minimum						
Maximum						
	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only



MW3	All Parameters		M	
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I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

jocelyn staffanson

Signature

4/29/2022 5:45:19 PM

Date

Issuance Date: December 1, 2021
Effective Date: January 1, 2022
Expiration Date: December 30, 2026

State Waste Discharge Permit Number ST0501288

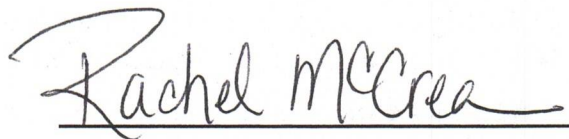
State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

In compliance with the provisions of the
State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington, as amended,

Pristine Valley Farms Pickle, LLC
P.O. Box 207
La Conner, WA 98257

is authorized to discharge wastewater in accordance
with the special and general conditions which follow.

<u>Facility Location:</u> 13381 Dodge Valley Road Mount Vernon, WA 98273	<u>Discharge Location:</u> Agricultural Field
<u>Treatment Type:</u> Land Application	<u>Legal Description:</u> Section 8, T33N – R3E, 48.372332, -122.456703
<u>Industry Type:</u> Food Processing	<u>SIC Code:</u> 2035
	<u>NAICS Code:</u> 311999



Rachel McCrea
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

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Summary of Permit Report Submittals

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.7	Discharge Monitoring Report	Monthly	February 28, 2022
S3.A.7	Discharge Monitoring Report	Quarterly	April 28, 2022
S3.A.7	Discharge Monitoring Report	Semi-Annually	July 28, 2022
S3.E	Reporting Permit Violations	As necessary	
S3.F	Other Reporting	As necessary	
S4.A	Operations and Maintenance Manual	1/permit cycle	April 1, 2022
S4.B	Reporting Bypasses	As necessary	
S5.C	Solid Waste Control Plan	1/permit cycle	March 1, 2022
S6	Application for Permit Renewal	1/permit cycle	September 30, 2026
S7	Groundwater Quality Evaluation Study Report	1/permit cycle	July 1, 2022
S9	Irrigation and Crop Management Plan	1/year	March 31, 2023
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G8	Payment of Fees	As assessed	
G10	Duty to Provide Information	As necessary	

Special Conditions

S1. Discharge limits

S1.A. Effluent limits

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit. The discharge of any of the following flow volumes or pollutants more frequently than, or at a concentration in excess of, that authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit, the Permittee is authorized to apply stormwater and process wastewater to the designated land treatment site via spray irrigation not to exceed the agronomic rates for nitrogen and water, and at rates for any other wastewater constituents to protect background groundwater quality.

The Permittee is authorized to apply stormwater and wastewater for final treatment on the following designated land treatment site:

Approximately 9 acres located approximately 3 miles southeast of the city of La Conner, on Dodge Valley Road, and includes the SE¼, SW¼ of section 5 T. 33N, R. 3E WM.

Total nitrogen, biochemical oxygen demand, and water applied to the land treatment site must not exceed the crop requirements as determined by the Permittee's Irrigation and Crop Management Plan, Special Condition S10.

The Permittee must operate the spray field in such a manner as to:

1. Protect the existing and future beneficial uses of both groundwater and surface water.
2. Not cause a violation of the groundwater standards (chapter 173-200 WAC) or the surface water quality standards (chapter 173-201A WAC).
3. Alter the existing infiltration capacity of the soils within the infiltration site.

Discharges are subject to the following limits:

Table 1. Effluent Limits for Outfall #001

Latitude: 48.371774 Longitude: -122.455888			
Parameter	Units	Average Monthly ^b	Maximum Daily ^c
Flow ^d	gallons per day	16,000	25,000
Biochemical Oxygen Demand ^e (BOD ₅)	mg/L ^f	69	109
Chloride ^g	mg/L	250	250
Total Suspended Solids ^h (TSS)	mg/L	143	197
Total Dissolved Solids ^g (TDS)	mg/L	500	500
Parameter	Units	Daily Minimum	Daily Maximum
pH	Standard Units	5.5	9.0
^a	Outfall #001 is discharge end of the pump to the spray field header main, and contains both stormwater and process water.		
^b	Average monthly effluent limit is defined as the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.		

c	Maximum daily effluent limit is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.
d	Ecology uses the flow data submitted in the application to set permit fees. The Permittee must report to Ecology when actual flows exceed the values reported on the permit application.
e	Effluent limit from 40 CFR 407.62(a). Based on a production rate of 10,000 pounds per day and a maximum flow rate of 16,000 gallons per day.
f	mg/L = milligrams per liter.
g	Effluent limit is the groundwater quality standard (from WAC 173-200-040).
h	Effluent limit from 40 CFR 407.62(b). Based on a production rate of 10,000 pounds per day and a maximum flow rate of 16,000 gallons per day.

S1.B. Additional discharge prohibitions

The Permittee must comply with the following to prevent pollution to waters of the State:

1. **Do not** commingle process wastewater streams with sanitary (domestic) sewage.
2. **Do not** discharge in excess of the hydraulic capacity of the spray field to avoid the creation of ponding or overland flow conditions.
3. **Do not** apply wastewater during periods of high groundwater or when the ground is frozen.
4. **Do not** discharge priority pollutants (listed in 40 CFR 423, Appendix A), dangerous wastes (as defined by WAC 173-303), or toxics (as defined in WAC 173-221A) in toxic amounts.
5. **Do not** apply wastewater to the irrigation lands in quantities that would:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Cause long-term anaerobic conditions in the soil.
 - c. Cause ponding of wastewater and produce objectionable odors or support insects or other vectors.
 - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter groundwater quality in amounts that would affect current and future beneficial uses.
6. Allow sufficient time between applications for the soil column to dry out and aerate to avoid the creation of anaerobic conditions beneath the infiltration field.

S2. Monitoring requirements

S2.A. Irrigation wastewater monitoring

The Permittee must sample at a location that best represents the discharge pumped and applied to the spray field. The sampling point for the irrigated wastewater is at the irrigation pump located adjacent to the collection pond/storage basin. An alternate collection point would be from a sprinkler head during times of application. The Permittee must report results in monthly Discharge Monitoring Reports (DMRs) (See

Section S3.A.). Results must also be summarized in the annual Irrigation and Crop Management Plan; Section S11.

The Permittee must monitor and report in discharge monitoring reports in accordance with the following schedule and the requirements specified in Appendix A.

Table 2. Monitoring Parameters for Process Wastewater (Outfall #001)

Parameter ^a	Units & Speciation	Sampling Frequency	Sample Type
Flow ^b	gallons/day (gpd)	Continuous	Metered
Cucumbers processed	Pounds per day	Monthly	Measured ^c
Cabbage processed	Pounds per day	Monthly	Measured
Peppers processed	Pounds per day	Monthly	Measured
Biological Oxygen Demand (BOD ₅)	mg/L	Monthly	Grab ^d
TDS	mg/L	Monthly	Grab
TSS	mg/L	Monthly	Grab
Chloride	mg/L	Monthly	Grab
Total Sodium	mg/L	Monthly	Grab
Ammonia	mg/L as N	Monthly	Grab
Total Kjeldahl Nitrogen	mg/L as N	Monthly	Grab
Nitrite + Nitrate – Nitrogen	mg/L as N	Monthly	Grab
Total Nitrogen	mg/L as N	Monthly	Grab
Conductivity	micromhos/cm	Monthly	Field ^e
pH ^f	S.U.	Monthly	Field
Turbidity	mg/L	Monthly	Field
Application Loading Rate	in/day	Monthly	Calculated ^g
BOD ₅	lbs/day	Monthly	Calculated
Total Nitrogen	lbs/day as N	Monthly	Calculated
Total Organic Carbon (TOC)	mg/L	Monthly / Quarterly ^{h, i}	Grab
Total Phosphorous	mg/L	Monthly / Quarterly	Grab
Sulfate	mg/L	Monthly / Quarterly	Grab
Alkalinity ^j	mg/L as CaCO ₃	Semi-Annually / Annually ^{k, l}	Grab
Hardness ^j	mg/L	Semi-Annually / Annually	Grab
Total Calcium ^j	mg/L	Semi-Annually / Annually	Grab
Total Iron ^j	mg/L	Semi-Annually / Annually	Grab
Total Magnesium ^j	mg/L	Semi-Annually / Annually	Grab
Total Manganese ^j	mg/L	Semi-Annually / Annually	Grab
Total Potassium ^j	mg/L	Semi-Annually / Annually	Grab
Total Zinc ^j	mg/L	Semi-Annually / Annually	Grab

- ^a See Appendix A for the required detection (DL) or quantitation (QL) levels.
 Report single analytical values below detection as “less than (detection level)” where (detection level) is the numeric value specified in attachment A.
 Report single analytical values between the agency-required detection and quantitation levels with qualifier code of J following the value.
 To calculate the average value (monthly average):
- Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
 - For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period.

	<ul style="list-style-type: none"> For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period. <p>If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.</p>
b	Ecology uses the flow data submitted in the application to set permit fees. The Permittee must report to Ecology when actual flows exceed the values reported on the permit application.
c	Measured is defined as the value that has been measured on a calibrated scale or estimated from the known weight of a standard container filled to a specified level.
d	Grab is defined as an individual sample collected over a fifteen (15) minute, or less, period.
e	Field is defined as a reading taken with a calibrated device in the field at the time of sample collection.
f	The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.
g	Calculated is defined as the reported value is calculated from other information collected.
h	Sampling for first two (2) permit years will be monthly to establish a baseline. Sampling for permit years three through five may be reduced to quarterly.
i	Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must begin quarterly monitoring for the quarter beginning on 1/1/2022 (4/1/2022, 7/1/2022, and 10/1/2022) and submit results by 4/28/2022 (7/28/2022, 10/28/2022, and 1/28/2023).
j	These parameters only need sampling if the hydrogeologic study installs monitoring wells.
k	Sampling for first two (2) permit years will be two time per year (semi-annually) to establish a baseline. Sampling for permit years three through five will be reduced to once per year (annually).
l	Semi-annually is twice a year, preferably sometime in the middle month of a quarter during the third and fourth calendar quarters.

S2.B. Groundwater monitoring

The Permittee must monitor groundwater samples collected as part of the hydrogeologic evaluation specified in Special Condition S9, in accordance with the following schedule and the requirements specified in Appendix A. The Permittee must report results as detailed in Section S3.A.

If monitoring wells are installed as a result of the hydrogeologic evaluation, they are to be sampled at the frequency listed in the table below. Results must also be summarized annually and can be reported in the annual Irrigation and Crop Management Plan specified in Section S10 or in a separate groundwater monitoring report.

Table 3. Monitoring Parameters for Groundwater – Monitoring Wells (MW-1, MW-2, and MW-3)

Parameter ^a	Units & Speciation	Sampling Frequency	Sample Type
Measured Depth to Groundwater	Feet (nearest 0.01 ft)	Monthly ^b	Field Measurement ^c
Dissolved Oxygen	mg/L	Monthly	Field Measurement
Conductivity	µmhos/cm	Monthly	Field Measurement
pH	S.U.	Monthly	Field Measurement
Oxidation-Reduction Potential	milliVolts	Monthly	Field Measurement
Temperature	Degrees C	Monthly	Field Measurement
Turbidity	NTU	Monthly	Field Measurement
BOD ₅	mg/L	Monthly / Quarterly ^{d, e}	Grab ^f
TDS	mg/L	Monthly / Quarterly	Grab
Total Organic Carbon	mg/L	Monthly / Quarterly	Grab
Chloride	mg/L	Monthly / Quarterly	Grab

Parameter ^a	Units & Speciation	Sampling Frequency	Sample Type
Ammonia - Nitrogen	mg/L as N	Monthly / Quarterly	Grab
TKN	mg/L as N	Monthly / Quarterly	Grab
Nitrate + Nitrite – Nitrogen	mg/L as N	Monthly / Quarterly	Grab
Total Phosphorous	mg/L	Monthly / Quarterly	Grab
Sulfate	mg/L	Monthly / Quarterly	Grab
Total Sodium	mg/L	Monthly / Quarterly	Grab
Bicarbonate Alkalinity	mg/L as CaCO ₃	Quarterly / Semi-Annually ^{g, h}	Grab
Carbonate Alkalinity	mg/L as CaCO ₃	Quarterly / Semi-Annually	Grab
Hardness	mg/L	Quarterly / Semi-Annually	Grab
Total Calcium	mg/L	Quarterly / Semi-Annually	Grab
Total Iron	mg/L	Quarterly / Semi-Annually	Grab
Total Magnesium	mg/L	Quarterly / Semi-Annually	Grab
Total Manganese	mg/L	Quarterly / Semi-Annually	Grab
Total Potassium	mg/L	Quarterly / Semi-Annually	Grab
^a	All results are reported as the maximum value measured/detected.		
^b	Reduction in frequency will be determined after completion of the first year of monthly sampling.		
^c	Field Measurement = parameter is measured in the field or on site at the point of discharge with an appropriate field instrument.		
^d	Sampling for first two (2) permit years will be monthly to establish a baseline. Sampling for permit years three through five may be reduced to quarterly.		
^e	Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must begin quarterly monitoring for the quarter beginning on 1/1/2022 (4/1/2022, 7/1/2022, and 10/1/2022) and submit results by 4/28/2022 (7/28/2022, 10/28/2022, and 1/28/2023).		
^f	Grab = an individual sample collected in less than 15 minutes time, which more or less represents instantaneous conditions.		
^g	Sampling for first two (2) permit years will be quarterly to establish a baseline. Sampling for permit years three through five will be reduced to semi-annually.		
^h	Semi-annually is twice a year, preferably sometime in the middle month of a quarter during the second and fourth calendar quarters.		

S2.C. Soil monitoring

The Permittee must monitor soils at the processing area and at the land treatment site as follows. The Permittee must:

1. Monitor once per year.
2. Collect samples at a time that best represents soil conditions at the end (September/October) of the crop-growing season.
3. During the first year of the permit two (2) additional soil samples shall be collected from the processing area to establish baseline conditions. One sample location shall be from within the unpaved area containing the processing vats. The other sample location shall be on the east side of the small wastewater holding pond, between the processing vats and the pond itself.

For permit years two through five, only the location between the vats and the stormwater pond need be sampled. This sampling is being done to monitor BMP implementation and effectiveness.

4. Locate sampling sites so they represent each irrigation site as identified in the crop management plan detailed in Section S11. Sampling sites should include one sampling site in the center of the spray field for each type of crop (if multiple crops are grown on the same spray field).
5. Submit a schematic drawing showing the locations where sampling occurred with locations appropriately labeled.
6. Collect soil samples from five locations within the spray field. Sampling sites will include one-site in the center of the spray field and four randomly selected locations.
7. Locate sampling sites in the same vicinity each year if possible.
8. Test soil at each sampling site on one-foot soil increments.
9. Submit results annually with the Irrigation and Crop Management Plan.
10. Composite a minimum of five (5) core samples at the depth increments defined in the table below (or until auger refusal).
11. Assemble composite samples for the spray field to yield one sample set for the spray field consisting of four samples (one for each depth):
 - One composite sample consisting of the five core samples collected at the 0" - 12" depth.
 - One composite sample consisting of the five core samples collected at the 12" - 24" depth.
 - One composite sample consisting of the five core samples collected at the 24" - 36" depth.
 - One composite sample consisting of the five core samples collected at the 36" - 48" depth.

Based on the results of the first year of soil sampling, Ecology may require sampling of additional depths.

The Permittee must monitor the soils in the spray field for the following parameters and depth intervals:

Table 4. Parameters for Soil Monitoring (monitoring point #003)

Parameter	Units & Speciation	Sample Point	Depth Increments
Ferrous Iron ^a	Presence or absence	Each field	0 – 0.5 ft
Exchangeable Sodium Percentage	percent	Each field	1 - 4
Sodium Absorption Ratio	ratio	Each field	1 - 4
Moisture Content	percent	Each field	1 - 4
Organic Matter	percent	Each field	1 - 4
Cation Exchange Capacity	meq/100g	Each field	1 - 4
Conductivity	decimhos/cm	Each field	1 - 4
pH	Standard Units	Each field	1 - 4
Ammonia	mg/Kg as N	Each field	1 - 4
Total Kjeldahl Nitrogen (TKN)	mg/Kg as N	Each field	1 - 4
Nitrate + Nitrite	mg/Kg as N	Each field	1 - 4
Total Nitrogen	mg/Kg	Each field	1 - 4
Total Nitrogen	lbs/acre	Each field	1 - 4

Parameter	Units & Speciation	Sample Point	Depth Increments
Chloride	mg/Kg	Each field	1 - 4
Sulfate	mg/Kg	Each field	1 - 4
Total Iron	mg/Kg	Each field	1 - 4
Total Manganese	mg/Kg	Each field	1 - 4
Total Sodium	mg/Kg	Each field	1 - 4
Total Calcium	mg/Kg	Each field	1 - 4
Total Magnesium	mg/Kg	Each field	1 - 4
Total Potassium	mg/Kg	Each field	1 - 4
Depth increment (ft.) vs. Depth (inches) for composite samples: ^b			DMR Monitoring Designation
Increment 1	0 - 12 inches	1-foot	S1
Increment 2	12 - 24 inches	2-feet	S2
Increment 3	24 - 36 inches	3-feet	S3
Increment 4	36 - 48 inches	4-feet	S4
Increment 5	48 - 60 inches	5-feet	S5
Increment 6	60 - 72 inches	6 feet	S6

Footnotes for Table 4

- a The Permittee must test surficial soils for the presence or absence of ferrous iron using the 1000 mg/liter 2-2' dipyrldyl indicator solution, (*Field Techniques for Measuring Wetland Soil Parameters*, Faulkner, et. al., May-June, 1989).
- b Depth (inches) vs. Depth increment (ft.) for composite samples:
 0 - 12" (1ft); 12 - 24" (2ft); 24 - 36" (3ft); 36 - 48" (4ft); 48 - 60" (5ft); 60 - 72" (6ft)

S2.D. Crop monitoring

The Permittee must:

1. Monitor the crops for the parameters listed below on each field once per harvest.
2. Comprise composite samples of at least ten (10) random samples collected from each field.
3. Submit results annually with the Irrigation and Crop Management Plan detailed in Special Condition S9.

Table 5. Monitoring Parameters for Crops (monitoring point #004)

Parameter	Units	Measurement Basis
Crop Production	dry tons/acre	Once per harvest / cutting
Moisture Content	percent	Once per harvest / cutting
Nitrate + Nitrite – Nitrogen	mg/Kg as N (dry weight)	Once per harvest / cutting
Total Nitrogen	mg/Kg as N (dry weight)	Once per harvest / cutting

S2.E. Sampling and analytical procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Groundwater sampling must conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 2005).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit must conform to the latest revision of the following rules and documents unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology).

- Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.
- Standard Methods for the Examination of Water and Wastewater (APHA).

The Permittee must conduct and report all soil analysis in accordance with the Western States Laboratory Plant, Soil and Water Analysis Manual, [Soil, Plant and Water Reference Methods for the Western Region](#), 3rd Edition, 2005.

S2.F. Field measurement and flow measurement devices

The Permittee must:

1. Select and use appropriate flow measurement devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
4. Calibrate these devices at the frequency recommended by the manufacturer.
5. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
6. Maintain calibration records for at least three years.

S2.G. Laboratory accreditation

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, conductivity, pH, and internal process control parameters are exempt from this requirement.

Crops and soils data are process control parameters, which do not require preparation by an accredited laboratory. However, the Permittee must obtain this data from a reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

S.2.H. Request for reduction in monitoring

The Permittee may request a reduction of the sampling frequency after twenty-four (24) months of monitoring. Ecology will review each request and at its discretion grant the request when it reissues the permit or by a permit modification.

The Permittee must:

1. Provide a written request.
2. Clearly state the parameters for which it is requesting reduced monitoring.

3. Clearly state the justification for the reduction.

S3. Reporting and recording requirements

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

S3.A. Discharge monitoring reporting

The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic Discharge Monitoring Report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Special Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

To find out more information and to sign up for WQWebDMR go to:
[WQWebDMRPortal](#).

2. If the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period then enter the "No Discharge" reporting code. The "No Discharge" reporting code can be used for an entire DMR, specific monitoring point, or specific parameter as appropriate.
3. Report single analytical values below detection as "less than the detection level (DL)" by entering "<" followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
4. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in Section S2.F and Appendix A.
5. Calculate average values (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
 - b. The detection value for values reported below detection.
6. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
7. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below.

The Permittee must:

- a. Submit **monthly DMRs** by the 28th day of the following month. The first DMR is due on February 28, 2022. Parameters with a monitoring frequency of **Once per Defined Event** (e.g., Once per Harvest) are also reported on the monthly DMR.

- b. Submit **quarterly DMRs**, by the 28th day of the month following the monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must submit the first quarterly DMR on April 28, 2022 for the quarter beginning on January 1, 2022.
- c. Submit **semi-annual DMRs**, unless otherwise specified in the permit, by July 28 and January 28 of each year. Semiannual sampling periods are January through June, and July through December.

S3.B. Records retention

The Permittee must retain records of all monitoring information for a minimum of three (3) years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

The Permittee must retain all records pertaining to the monitoring of sludge for a minimum of five years.

S3.C. Recording of results

For each measurement or sample taken, the Permittee must record the following information:

1. The date, exact place, method, and time of sampling or measurement.
2. The individual who performed the sampling or measurement.
3. The dates the analyses were performed.
4. The individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

S3.D. Additional monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S2 of this permit for any reason, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR.

S3.E. Reporting permit violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
2. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.

a. Immediate reporting

The Permittee must immediately notify the division of emergency management or the Ecology emergency response line at (206) 594-0000.

- Any spills of oil or hazardous substances to waters of the state (Refer to RCW 90.56.280).

The Permittee must immediately notify all local authorities in accordance with the local emergency plan and report to Ecology (at number above).

- Any spills of dangerous waste or hazardous substances onto the ground or into groundwater or surface water, regardless of the quantity of dangerous waste or hazardous substance. This applies when the spilled material threatens human health or the environment (Refer to WAC 173-303-145).

b. Twenty-four-hour reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone number listed above, within 24 hours from the time the Permittee becomes aware of any of the following circumstances. The Permittee must report:

1. Any noncompliance that may endanger human health or the environment, unless previously reported under immediate reporting requirements.
2. Any unanticipated bypass that causes an exceedance of an effluent limit in the permit (See Part S4.B., "Bypass Procedures").
3. Any upset that causes an exceedance of an effluent limit in the permit. Upset means 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, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
4. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
5. Any overflow prior to the treatment works, whether or not such overflow endangers human health or the environment or exceeds any effluent limit in the permit.
6. Any leak or failure of the wastewater transmission pipeline or irrigation pipeline distribution system.

c. Report within five days

The Permittee must also submit a written report within five days of the time that the Permittee becomes aware of any reportable event under subparts a or b, above. The report must contain:

1. A description of the noncompliance and its cause.

2. Maps, drawings, aerial photographs, or pictures to show the location and cause(s) of the non-compliance.
3. The period of noncompliance, including exact dates and times.
4. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
5. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
6. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

d. Waiver of written reports

Ecology may waive the written report required in subpart c, above, on a case-by-case basis upon request if the Permittee has submitted a timely oral report.

e. All other permit violation reporting

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in subpart c, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

f. Report submittal

The Permittee must submit reports through the Water Quality Web Portal. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, data monitoring report, or in any report to Ecology, it must submit such facts or information promptly.

S3.F. Other reporting

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of RCW 90.56.280. You can obtain further instructions at the following website: [Report A Spill](#).

S3.G. Maintaining a copy of this permit

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors

S4. Operation and maintenance

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee when the operation is necessary to achieve compliance with the conditions of this permit.

S4.A. Operations and maintenance (O&M) manual

a. O&M manual submittal and requirements

The Permittee must:

1. Prepare an O&M Manual that meets the general requirements of 173-240-150 WAC and submit it to Ecology for review by April 1, 2022. The Permittee must submit a paper copy and an electronic copy (preferably in a portable document format (PDF)).
2. Submit to Ecology for review substantial changes or updates to the O&M Manual whenever the Permittee incorporates them into the manual. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
3. Keep the most current approved O&M Manual at the permitted facility.
4. Follow the instructions and procedures of this manual.

b. O&M manual components

In addition to the applicable requirements of WAC 173-240-080 (1) through (5), the O&M Manual must follow the general outline in Table G1-3 in the Criteria for Sewage Works Design (Ecology, 2008). The O&M Manual must include:

1. Emergency procedures for facility shutdown and cleanup in the event of a wastewater system upset or failure including pipeline leaks.
2. Irrigation system operational controls and procedures.
3. Wastewater system maintenance procedures that contribute to the generation of wastewater.
4. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
5. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
6. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
7. Protocols and procedures for crop and soil sampling and testing and sampling of the groundwater network, once installed.

S4.B. Bypass procedures

This permit prohibits a bypass, which is the intentional diversion of waste streams from any portion of a treatment facility.

Ecology may take enforcement action against a Permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass is unavoidable, unanticipated, and results in noncompliance of this permit.

This permit authorizes such a bypass only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

- b. No feasible alternatives to the bypass exist, such as:

- The use of auxiliary treatment facilities.
- Retention of untreated wastes.
- Stopping production.
- Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
- Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.

- c. The Permittee has properly notified Ecology of the bypass as required in Special Condition S3.E of this permit.

3. If bypass is anticipated and has the potential to result in noncompliance of this permit.

- a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- A description of the bypass and its cause.
- An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
- A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
- The minimum and maximum duration of bypass under each alternative.
- A recommendation as to the preferred alternative for conducting the bypass.

- The projected date of bypass initiation.
 - A statement of compliance with SEPA.
 - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
 - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
 - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
 - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

S4.C. Irrigation land application best management practices

The Permittee must:

1. Operate the spray-field system to protect the existing and future beneficial uses of the groundwater, and not cause a violation of the groundwater standards.
2. **Not** apply wastewater if the groundwater level is within five feet (5 ft.) of the ground surface.
3. **Not** allow spray irrigation practices to result in runoff of wastewater to any surface waters of the state or to any land not owned by or under control of the Permittee.

4. **Discontinue** application during periods of heavy or prolonged rainfall to prevent ground saturation and runoff.
5. **Not** apply wastewater spray application to snow covered or frozen fields.
6. **Not** load BOD₅ to the fields in excess of 100 lbs/acre/day.
7. Use recognized good practices, and all available and reasonable procedures to control odors from the land application system.
8. Implement measures to reduce odors to a reasonable minimum when notified by Ecology.
9. **Not** apply wastewater to the land treatment site in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Would cause long-term anaerobic conditions in the soil.
 - c. Would cause ponding of wastewater and produce objectionable odors or support insects or other vectors.
 - d. Would cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter groundwater quality in amounts that would affect current and future beneficial uses.
 - e. Would cause severe damage or death to the field cover crop.
10. Maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation.
11. Immediately inform Ecology in writing of any proposed changes to existing irrigation agreements.
12. Maintain a viable and healthy cover crop on all fields that receive wastewater.
13. Use fresh supplemental water or precipitation to meet the leaching requirement to control soil salinity.
14. Adjust irrigation plans during high precipitation events to minimize percolate losses.

S4.D. Additional Best management practices

The Permittee shall follow the best management practices (BMPs) listed below:

1. Whenever and wherever possible, the Permittee shall implement irrigation BMPs as described in "*Irrigation Management Practices to Protect Ground Water and Surface Water Quality, State of Washington*," (Ecology, 1995).
2. All cull raw materials; leaves, stems, dirt, and other solids from sorting and washing operations, and any material screened from the waste stream before being discharged to the spray field, must be collected and disposed of so as not to enter surface waters of the State.

3. All screens, hoppers, conveyors, pumps, and other equipment provided for wastewater conveyance and solids separation shall be continuously maintained to ensure effective operation.
4. Operation of the wastewater treatment and application system shall be performed in such a way as to minimize noxious odors off-site.
5. All sanitary wastes shall be discharged to an on-site system approved by the local Health Department.

S5. Solid wastes

S5.A. Solid waste handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water. Solid waste includes; off-specification/spoiled raw materials (cucumbers, peppers, and cabbage), product (pickles, pickled pepper, and sauerkraut), solids from the settling tank, and material removed from the stormwater oil-water separator

S5.B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

S5.C. Solid waste control plan

a. Submittal requirements

The Permittee must:

1. Submit a solid waste control plan to Ecology by March 1, 2022.
2. Submit to Ecology any proposed revision or modification of the solid waste control plan for review at least 30 days prior to implementation. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
3. Comply with the plan and any modifications once submitted.
4. Keep the most current approved solid waste control plan at the permitted facility.

b. Solid waste control plan content

The solid waste control plan must:

1. Follow Ecology's guidance for preparing a solid waste control plan (Developing a Solid Waste Control Plan) and address all solid wastes generated by the Permittee.
2. Include at a minimum a description, source, generation rate, and disposal methods of these solid wastes.
3. Not conflict with local or state solid waste regulations.

S6. Application for permit renewal or modification for facility changes

The Permittee must submit an application for renewal of this permit by September 30, 2026.
The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

The Permittee must also submit a new application or supplement at least sixty (60) days prior to commencement of discharges, resulting from the activities listed below, which may result in permit violations. These activities include any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

S7. Groundwater quality evaluation (hydrogeologic study)

Ecology has determined that the Permittee must evaluate the impacts of its activities on groundwater quality.

1. By July 1, 2022, the Permittee must submit a scope of work to Ecology for approval for a groundwater quality evaluation study at the wastewater application site, in accordance with WAC 173-200-080. The scope of work must conform to [Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems](#), Ecology 1993.
2. Upon approval of the scope of work by Ecology, the Permittee must conduct the study to determine site-specific hydrogeologic conditions, potential well siting, quality control protocols, a sampling plan and sampling protocols. The Permittee must submit a report of the results within one-hundred twenty (120) days of approval of the scope of work. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
3. Within ninety (90) days after review and approval of the final report by Ecology, the Permittee must begin construction of the recommended groundwater monitoring network. The Permittee must construct wells in accordance with Chapter 173-160 WAC.
4. If the final approved hydrogeologic report recommends a minimal impact to groundwater of land application of the Permittees wastewater and that no groundwater monitoring is needed, then Ecology will issue a permit modification to remove the requirements for groundwater monitoring.
5. Report to Ecology the tag numbers, latitude and longitude (NAD83/WGS84 datum), and top-of-casing elevations (NAVD88 datum) of each monitoring well.
6. After completion of the installation of the groundwater monitoring network, the permittee must notify Ecology and begin monitoring according to S2.B.

S8. Groundwater monitoring wells

If, after the first year of soil monitoring and completion of the hydrogeologic study, Ecology determines that the Permittee must conduct groundwater monitoring, the Permittee must:

1. Install monitoring wells in accordance with the approved hydrogeologic study.
2. Meet the requirements of Chapters 173-160 and 173-162 WAC during well construction.
3. Report to Ecology the tag numbers, latitude and longitude (NAD83/WGS84 datum), and top-of-casing elevations (NAVD88 datum) of each monitoring well.

4. Complete well installation and commence sampling within ninety (90) days of approval of the above final hydrogeologic study from Ecology of the need for groundwater monitoring.

S9. Irrigation and crop management plan

The Permittee must submit an irrigation and crop management plan annually by March 31st of each year for Ecology review. The first plan is due March 31, 2023. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF). The plan must be prepared by a soil scientist and must generally conform to the *Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*, Ecology 1993.

The irrigation and crop management plan must include an annual summary of operations for the previous year and a cropping and irrigation schedule for the upcoming year as described in the sections below.

S9.A. Annual summary of operations for previous year

The annual summary must include:

1. A summary of the total amount of cucumbers, cabbage, and peppers processed each month and for the calendar year.
2. A summary of the total amount of pickles, sauerkraut, and pickled peppers produced each month and for the calendar year.
3. A listing of the current status of each vat at the end of the calendar year.
4. For each crop grown using process wastewater, the total acreage and quantity harvested.
5. Calculated balances for total nitrogen, chloride, and TDS. The calculations must include crop consumptive use, wastewater loadings of analyzed parameters, contributions from commercial fertilizers applied, and supplemental (e.g., stormwater storage basin) water applied.
6. A water balance including the following calculations:
 - a. Irrigation system efficiency and application uniformity.
 - b. The quantity of supplemental irrigation water and wastewater applied.
 - c. Crop consumptive water use.
 - d. Water stored in the soil profile outside the normal growing season.
 - e. Salt leaching requirements.
 - f. The leaching fraction for each field.
7. A comparison of the actual total net nitrogen, water, total dissolved solids, chloride, sodium, and BOD₅ loads, and the leaching fractions for each field to the estimated values presented in the previous year's irrigation and crop management plan.
8. A discussion of solids removal and disposal. This includes solids from screening and processing operations, and solids removed from any containment structure like a lagoon or settling tank.
9. A sketch map of the soil sampling locations.

10. A summary and evaluation of the soil testing results, see monitoring requirements in S2.C.
11. A summary and evaluation of the crop testing results, see monitoring requirements in S2.D.
12. A detailed description of changes or improvements in the management of the land treatments practices to comply with agronomic rates and leaching requirements.

S9.B. Cropping and irrigation schedule for upcoming year

This schedule must include:

1. Crop management information including:
 - a. The proposed acreage for each crop.
 - b. Cultivation and harvesting requirements.
 - c. Expected crop yields.
 - d. Methods for establishing a crop.
 - e. Proposed schedule for herbicide, pesticide, and fertilizer application.
2. Irrigation management information including:
 - a. The frequency and timing of wastewater and supplemental irrigation water application (including harvest and non-harvest periods).
 - b. Recommended rest cycles for wastewater application.
 - c. An estimation of the leaching requirement for each field and the plan to meet the requirement.
3. The estimated annual total net nitrogen and water load capacity, and the total dissolved solids, chloride, sodium, and BOD₅ load to each field based on the estimated wastewater discharge and planned crop rotation.

General Conditions

G1. Signatory requirements

All applications, reports, or information submitted to Ecology must be signed as follows:

1. All permit applications must be signed by either a principal executive officer or ranking elected official.
2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by the person described above and is submitted to Ecology at the time of authorization, and
 - b. The authorization specifies either a named individual or any individual occupying a named position.

3. Changes to authorization. If an authorization under paragraph G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section must make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G2. Right of entry

Representatives of Ecology have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times include normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology suspects a violation requiring immediate inspection. Representatives of Ecology must be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3. Permit actions

This permit is subject to modification, suspension, or termination, in whole or in part by Ecology for any of the following causes:

1. Violation of any permit term or condition;
2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
3. A material change in quantity or type of waste disposal;
4. A material change in the condition of the waters of the state; or
5. Nonpayment of fees assessed pursuant to RCW 90.48.465.

Ecology may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

G4. Reporting a cause for modification

The Permittee must submit a new application at least one hundred eighty 180 days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. The Permittee should use the State Waste Discharge Permit application, and submit required plans at the same time. Required plans include an Engineering Report, Plans and Specifications, and an Operations and Maintenance manual, (see Chapter 173-240 WAC). Ecology may waive these plan requirements for small changes, so contact Ecology if they do not

appear necessary. The Permittee must obtain the written concurrence of the receiving POTW on the application before submitting it to Ecology. The Permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with Pretreatment or Dangerous Waste rules) triggers this requirement as well.

G5. Plan review required

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities must be constructed and operated in accordance with the approved plans.

G6. Compliance with other laws and statutes

Nothing in the permit excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. Transfer of this permit

This permit is automatically transferred to a new owner or operator if:

1. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to Ecology;
2. A copy of the permit is provided to the new owner; and
3. Ecology does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to Section 1, above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by Ecology.

G8. Payment of fees

The Permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G9. Penalties for violating permit conditions

Any person who is found guilty of willfully violating the terms and conditions of this permit is guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit incurs, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is a separate and distinct violation.

G10. Duty to provide information

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this

permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G11. Duty to comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 90.48 RCW and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

Appendix A - List of Pollutants With Analytical Methods, Detection Limits And Quantitation Levels

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table for permit and application required monitoring unless:

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- The method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136.

If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.

When the permit requires the Permittee to measure the base neutral compounds in the list of priority pollutants, it must measure all of the base neutral pollutants listed in the table below. The list includes EPA required base neutral priority pollutants and several additional polynuclear aromatic hydrocarbons (PAHs). The Water Quality Program added several PAHs to the list of base neutrals below from Ecology's Persistent Bioaccumulative Toxics (PBT) List. It only added those PBT parameters of interest to Appendix A that did not increase the overall cost of analysis unreasonably.

Ecology added this appendix to the permit in order to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost.

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122.), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and non-conventional. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit Appendix A list does not include those parameters.

CONVENTIONAL POLLUTANTS

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H ⁺ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
Calcium, Total		EPA 200.7	1 mg/L	
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
Flow		Calibrated device		
Hardness, Total		SM2340B		200 as CaCO ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ -B/C/D/EF/G/H		300
Potassium, Total		258.1	1	
Sodium, Total		200.7	3	
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L

Temperature (max. 7-day avg.)		Analog recorder or Use micro-recording devices known as thermistors	0.2° C
Total Organic Carbon		SM5310-B/C/D	1 mg/L
Total Dissolved Solids		SM2540 C	20 mg/L

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. 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).