

Issuance Date: April 14, 2009
Effective Date: May 1, 2009
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STATE WASTE DISCHARGE PERMIT NUMBER ST 5328

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Eastern Regional Office

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

ConAgra Foods – Lamb Weston (Connell Facility)
P.O. Box 799
Connell, WA 99326

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

Facility Location: SW corner of the city of
Connell (Franklin Co.)

Discharge Location: 1200 acres located: S. of
state highway 260, E. of Warehouse Rd., W. of
Moon Rd., in Sec. 33 and 34, T. 14N, R. 31
EWM; and, N. of state highway 260, along
Moon Rd, E ½ Sec. 10, W ½ Sec. 11, NW ¼
Sec. 14, T. 14N, R. 31 EWM.

Latitude: 46° 39' 22" N
Longitude: 118° 55' 13" W

Industry Type: Potato Processing

Latitude: 46° 42' 52" N
Longitude: 118° 53' 52" W

SIC Code: 2037

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Water Quality Section Manager
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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.	Discharge Monitoring Report	Monthly	June 15, 2009
S3.E	Noncompliance Notification	As necessary	
S4.A.	Operations and Maintenance Manual - Update	1/permit cycle	Conditional
S4.B	Reporting Bypasses	As necessary	
S4.E	Storage Pond Leak Detection – Visual Inspection	Annually	April 15, 2010
S4.E	Storage Pond Leak Detection – Comprehensive Test	1/permit cycle	December 1, 2011
S5.	Solid Waste Control Plan - Update	1/permit cycle	September 1, 2009
S6.	Application for Permit Renewal	1/permit cycle	November 1, 2012
S8.	Mud Settling Ponds Sampling and Monitoring	1/permit cycle	September 1, 2009
S9.	Ground Water Data Interpretive Review Report	1/permit cycle	November 1, 2009
S10.	Irrigation and Crop Management Plan	1/year	April 15, 2010
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	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

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 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 and lasting through the expiration date of this permit, the Permittee is authorized to apply process wastewater to the designated irrigation lands via spray irrigation not to exceed the agronomic rates for nitrogen and water, and at rates for any other wastewater constituents to protect background water quality.

The Permittee is authorized to apply process wastewater for final treatment on the following designated irrigation lands:

Approximately 1200 acres located in Section 33 and 34, T. 14N, R. 31 EWM; E ½ Section 10, W ½ Section 11, NW ¼ Section 14, T. 14N, R. 31 EWM.

Total net nitrogen and water applied to the irrigation lands must not exceed the crop requirements as determined by the Permittee's Irrigation and Crop Management Plan, Condition S10.

The Permittee must operate the sprayfields to protect the existing and future beneficial uses of the ground water and not cause a violation of the ground water standards (chapter 173-200 WAC).

Discharges from the processing facility are subject to the following limits:

	EFFLUENT LIMITS
Parameter	Average Monthly ^a
Flow	1.84
^a	Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

S2. MONITORING REQUIREMENTS

A. Process Wastewater Monitoring

The Permittee must monitor the process wastewater at the clarifier effluent according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
Flow	MGD	Continuous ¹	Meter
¹ Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken hourly when continuous monitoring is not possible.			

B. Irrigation Wastewater Monitoring

The Permittee must monitor the irrigated wastewater according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
Flow	MGD	Continuous	metered
pH	Standard units	Daily	Grab
TKN (as N)	mg/L	1/ month	24hr Composite
NH ₃ (as N)	mg/L	1/ month	24hr Composite
NO ₃ + NO ₂ (as N)	mg/L	1/ month	24hr Composite
COD	mg/L	1/ month	24hr Composite
Conductivity	umhos/cm	1/ month	24hr Composite
Fixed Dissolved Solids	mg/L	1/ month	24hr Composite
Sodium	mg/L	2/ year ¹	24hr Composite
Calcium	mg/L	2/ year ¹	24hr Composite
Potassium	mg/L	2/ year ¹	24hr Composite
Magnesium	mg/L	2/ year ¹	24hr Composite
Sulfate	mg/L	2/ year ¹	24hr Composite
Chloride	mg/L	2/ year ¹	24hr Composite

Parameter	Units	Sampling Frequency	Sample Type
Bicarbonate	mg/L	2/ year ¹	24hr Composite
Total Phosphorus (as P)	mg/L	2/ year ¹	24hr Composite
¹ May and October			

C. Supplemental Irrigation Water Monitoring

The Permittee must identify a sampling point for the supplemental irrigation water that represents the water applied directly to the sprayfields.

The Permittee must monitor the supplemental irrigation water according to the following schedule and report the results in the annual Irrigation and Crop Plan; Section S.10

Parameter	Units	Sampling Frequency	Sample Type
TKN (as N)	mg/L	1/ year ¹	Grab
NO ₃ + NO ₂ (as N)	mg/L	1/ year ¹	Grab
TN (as N) ²	mg/L	1/ year ¹	Calculated
Fixed Dissolved Solids	mg/L	1/ year ¹	Grab
¹ 1/year means August			
² TN = TKN + NO ₃ + NO ₂			

D. Ground Water Monitoring

The Permittee must monitor the ground water at monitoring wells MW-12, -15, -16, -18, and -19 according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
NO ₃ (as N)	mg/L	1/ month	Grab
Conductivity	umhos/cm	1/ month	Grab
Total dissolved solids	mg/L	1/ month	Grab
Chloride	mg/L	1/ month	Grab

Parameter	Units	Sampling Frequency	Sample Type
pH	Standard units	1/ month	Field Measurement
Static Water Elevation	Feet (nearest 0.01 ft relative to mean sea level)	1/ month	Field Measurement
Temperature	Degrees F	1/ month	Field Measurement
Bicarbonate	mg/L	2/ year ¹	Grab
Chloride	mg/L	2/ year ¹	Grab
Sulfate	mg/L	2/ year ¹	Grab
Calcium	mg/L	2/ year ¹	Grab
Magnesium	mg/L	2/ year ¹	Grab
Potassium	mg/L	2/ year ¹	Grab
Sodium	mg/L	2/ year ¹	Grab
¹ May and October			

E. Farm Drain Monitoring

The Permittee must monitor the Farm Drain exit located near the southern edge of center pivot field C-6 according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
TKN (as N)	mg/L	4/ year ¹	Grab
NH ₃ (as N)	mg/L	4/ year ¹	Grab
NO ₃ + NO ₂ (as N)	mg/L	4/ year ¹	Grab
Total dissolved solids	mg/L	4/ year ¹	Grab
Chloride	mg/L	4/ year ¹	Grab
pH	Standard units	4/ year ¹	Field Measurement
¹ January, April, August, and November			

F. Soil Monitoring

The Permittee must monitor the soil on the Permittee's and Paradise irrigation lands as follows and report the results in the annual irrigation and crop plan; S10.

1. Monitor twice per year; spring and fall.
2. Locate sampling sites so they represent each irrigation site or as identified in the crop management plan.
3. If possible, locate sampling sites in the same vicinity each year.
4. Test soil at each sampling site on one foot soil increments.
5. Submit results annually with the Irrigation and Crop Management Plan.
6. Composite a minimum of five (5) core samples at the five depth increments as defined in the table below (or until auger refusal).
7. Collect Samples at a time that best represents soil conditions at the beginning and the end of the crop growing season.

The Permittee must monitor the soils in the sprayfields according to the following schedule:

Parameter	Units	Sample Point	Depth Increments ^a			
			Fall	Spring	Monthly	Once/permit cycle ^c
Nitrate (as N)	mg/Kg	Each field	1,2,3,4,5	1,2,3,4,5		
Ammonium (as N)	mg/Kg	Each field	1,2,3,4,5	1,2,3,4,5		
Soluble Salts (EC _e)	mmhos/cm	Each field	1,2,3,4,5	1,2,3,4,5		
Soil Moisture ^b	inches	Each field	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	
Available P (as P)	mg/Kg	Each field	1			1,2,3,4,5
Sulfate (as S)	mg/Kg	Each field	1			1,2,3,4,5
Exchangeable Sodium Percentage	%	Each field	1			1,2,3,4,5
pH	Standard units	Each field	1			1,2,3,4,5
Exchangeable sodium	meq/100g	Each field	1			1,2,3,4,5
Exchangeable magnesium	meq/100g	Each field	1			1,2,3,4,5
Exchangeable potassium	mg/Kg	Each field	1			1,2,3,4,5
Organic matter	%	Each field	1			1
TKN	mg/Kg	Each field				1

^a Depth increment (ft.) vs. Depth (inches) for composite samples:

Parameter	Units	Sample Point	Depth Increments ^a			
			Fall	Spring	Monthly	Once/permit cycle ^c
Increment 1			0 -12 inches			
Increment 2			12-24 inches			
Increment 3			24-36 inches			
Increment 4			36-48 inches			
Increment 5			48-60 inches			
^b Soil moisture monitoring shall be done approximately monthly using the in-place soil moisture monitoring system						
^c Fall 2013						

G. Crop Monitoring

The Permittee must:

1. Monitor the crops for the parameters listed below on each field once per harvest and report the results in the annual irrigation and crop plan; S10.
2. Comprise composite samples of at least ten (10) random samples collected from each field.

Parameter	Units
Crop production	dry tons/ac
Moisture content	%
Total Kjeldahl Nitrogen	%
NO ₃ (as N)	mg/Kg (dry wt)
Total-P (as P)	mg/Kg (dry wt)
Ash Weight	mg/Kg (dry wt)

H. Mud Settling Ponds Monitoring

The Permittee must sample the influent water and sediments in the mud settling ponds according to the protocols submitted to Ecology as per Section S8 of this permit.

The Permittee must test the influent and sediments in the mud settling ponds for the following parameters. See Section S3 for reporting requirements.

Parameter	Units	Sampling Frequency	Sample Location	Sample Type
Fixed Dissolved Solids	mg/L	2/ year ¹	influent	Grab
Total Solids	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Total Volatile Solids	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Total Volatile Dissolved Solids	mg/L	2/ year ¹	influent	Grab
Total Fixed Solids	mg/Kg	1/ year	Sediment	Composite
NH ₃ (as N)	mg/L	2/ year ¹	Influent	Grab
NH ₄ (as N)	mg/Kg	1/ year	Sediment	Composite
Nitrate (as N)	mg/L	2/ year ¹	Influent	Grab
TKN (as N)	mg/Kg	1/ year	Sediment	Composite
pH	Standard units	2/ year ¹	Influent	Grab
Atrazine	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Chlorothalonil	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Endosulfan	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
EPTC (ethyl dipropylthiocarbamate)	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
ETU (ethylenethiourea)	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Mefenoxam	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Methamidophos	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Metolachlor	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
Metribuzin	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
MITC (methylisothiocyanate)	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
PCNB (pentachloronitrobenzene)	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite

Parameter	Units	Sampling Frequency	Sample Location	Sample Type
1,3 dichloropropene	mg/L mg/Kg	2/ year ¹ 1/ year	Influent Sediment	Grab Composite
¹ 2/ year means: May and October				

I. Nitrogen, FDS and COD Load Reporting

The Permittee must report the following nitrogen load values to the sprayfield system for the previous year.

This information will be made part of Table 1, Farm Operations Summary – System Totals, in the annual irrigation and crop plan; S.10

Parameter	Units	Sampling Frequency	Sample Type
Total annual net nitrogen load ¹	Lbs	1/ year	Calculated
Total annual net nitrogen load capacity	Lbs	1/ year	Calculated
Gross nitrogen load to each sprayfield	Lbs	1/ year	Calculated
Total annual FDS load	Lbs	1/ year	Calculated
Total annual COD load	Lbs	1/ year	Calculated
¹ Total = wastewater + fertilizer + supplemental water			

J. Process Control Testing

The Permittee must perform all necessary process control testing as required in the Operations and Maintenance manual to maximize treatment efficiency.

K. 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. The Permittee must conduct representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions that may affect effluent quality.

Ground water sampling must conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

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 Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by Ecology.

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, 2nd Edition, 2003*.

L. Field Measurement and Continuous Monitoring Devices

The Permittee must:

1. Select and use appropriate field measurement, and continuous monitoring 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.
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.

M. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology 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. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

Crops and soils data are considered 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.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

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

A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must:

1. Submit monitoring results each month.
2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.
3. Submit DMR forms monthly whether or not the facility was discharging. If the facility did not discharge during a given monitoring period, submit the form as required with the words "NO DISCHARGE" entered in place of the monitoring results.
4. Ensure that DMR forms are postmarked or received by Ecology no later than the 25th day of the month following the completed monitoring period, unless otherwise specified in this permit.
5. Send report(s) to Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Eastern Regional Office
4601 North Monroe Street
Spokane, WA 99205-1295

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.

C. Recording of Results

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

1. The date, exact place and time of sampling.
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.

D. Additional Monitoring by the Permittee

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

E. Reporting Permit Violations

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

- a. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
- b. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.
 1. Any collection system overflows, or any plant bypass discharging to a waterbody used as a source of drinking water must be reported immediately to the Department of Ecology and the Department of Health, Drinking Water Program at the numbers listed below:

Ecology Eastern Regional Office	509-329-3400
Department of Health, Drinking Water Program	360-521-0323 (business hours) 360-481-4901 (after business hours)
Benton/Franklin County Health	509-582-7761

2. 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:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above.
- b. Any unanticipated bypass that exceeds any effluent limit in the permit (See Part S4.B., "Bypass Procedures").
- c. Any upset that exceeds any 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.

- d. Any violation of the flow limit in Section S1.A of this permit.
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit.

3. Report Within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

4. Waiver of Written Reports

Ecology may waive the written report required in subpart 3, above, on a case-by-case basis upon request if a timely oral report has been received.

5. Report Submittal

The Permittee must submit reports to the address listed in S3.A.

F. Other Reporting

The Permittee must report all instances of noncompliance, not required to be reported immediately or within 24 hours, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E.3, 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.

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: <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm> .

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.

H. Mud Settling Ponds Monitoring

The Permittee shall report the results of the mud settling pond monitoring, as described in Section S2.H, with the December monthly discharge monitoring report each year.

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 includes 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 only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

The Permittee must:

1. Review the O&M Manual at least annually.
2. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
3. Keep the approved O&M Manual at the permitted facility.
4. Follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M manual must include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset, failure, or pipeline leakage.
2. Irrigation system operational controls and procedures.
3. Wastewater system maintenance procedures that contribute to the generation of process 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. Treatment plant process control monitoring schedule.
6. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.

7. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
8. Protocols and procedures for ground water monitoring network, and soil sampling and testing.

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.

Bypass is 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.

1. Bypass is unavoidable, unanticipated, and results in noncompliance with the conditions 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.
- c. The Permittee has properly notified Ecology of the bypass as required in Condition S3.E of this permit.

2. 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.

C. Irrigation Land Application Best Management Practices

The Permittee must:

1. 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 its control.
2. Use recognized good practices, and all available and reasonable procedures to control odors from the land application system.
3. Implement measures to reduce odors to a reasonable minimum when notified by Ecology.
4. Not apply wastewater to the irrigation lands 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 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 ground water quality in amounts that would affect current and future beneficial uses.
5. 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.
6. Immediately inform Ecology in writing of any proposed changes to existing irrigation agreements.

D. Best Management Practices

1. Stable or declining end-of-year soil profile nitrate concentration trend over three years, based on the summation of the soil nitrate testing in Section S2.F.
2. Adjust the irrigation plans during low evapotranspiration periods to minimize percolate losses on fields that show an increasing trend in the soil nitrate concentration.

3. Irrigation to the fields will be managed in a manner that results in the leaching fraction being at or less than the leaching requirement for each field.

E. Storage Pond Leak Detection

1. Visual Inspection

The Permittee shall conduct an annual visual leak inspection of the storage ponds as described in their leak detection plans that have been submitted to Ecology. The results of the visual inspection shall be submitted to Ecology no later than April 15th of the following year.

2. Comprehensive Leak Test

The Permittee shall perform a comprehensive leak test of the storage ponds in 2011 as per the leak detection plans that have been submitted to Ecology. The results of the comprehensive leak test must be submitted to Ecology no later than December 1, 2011.

S5. SOLID WASTES

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. This requirement extends to second party entities that manage solid waste disposal for the facility.

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.

C. Solid Waste Control Plan

No later than September 1, 2009, the Permittee must submit an update of the current plan, dated August 29, 2006. The updated plan must comply with Ecology's guidance for industrial solid waste plans that can be found at:
www.ecy.wa.gov/biblio/0710024.html.

Specifically, the update must include:

1. A description of any contingency plans for solid waste handling.
2. The name and contact information for each facility receiving the solid waste.

All proposed revisions or modifications to the solid waste control plan must be submitted to Ecology for review and approval at least 30 days prior to implementation. Once approved, the Permittee must comply with any plan modifications.

S6. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by at least one year before the expiration of the permit.

S7. FACILITY LOADING

Design Criteria

The flows or waste loads for the permitted facility must not exceed the following design criteria:

Maximum Month Design Flow from the processing facility	1.84 MGD
Net nitrogen load to the sprayfields	According to the Irrigation and Crop Management Plan

S8. MUD SETTLING PONDS SAMPLING AND MONITORING

No later than September 1, 2009 the Permittee shall submit to Ecology specific sampling protocols for the influent and sediment for the testing of the mud settling ponds required in Section S2.H of this permit.

S9. GROUND WATER DATA INTERPRETIVE REVIEW REPORT

No later than November 2, 2009, the Permittee will submit an interpretive groundwater data review report that contains:

1. An evaluation of the impacts of its land treatment activities on nitrate and total dissolved solids (TDS) concentrations at MW-15, MW-16 and MW-19. The evaluation shall include:
 - a. All ground water data from January 2000 to present, including a schematic of groundwater flow along with Stiff and tri-linear diagrams of MW-12, -15, -16, -19, and -19.
 - b. A discussion of potential causes of the increasing trend in the concentrations at MW-16 and -19 as described in the Fact Sheet.
 - c. A discussion of the causes of why the nitrate concentrations at MW-15 exceed the ground water criteria.
 - d. Recommendations for any changes in the operations of the land treatment site to stop and reverse the increasing trends in nitrate and TDS, and bring the concentrations to at or below the respective background values as given in the Fact Sheet.

- e. A timeline for implementing any recommended changes in the operation of the site.
2. Evaluate the conclusion by the 1999 Hydrogeologic Report that monitoring wells MW-12, -18, and -19, and MW-15 and -16 are hydrogeologically connected.
4. A timeline for the decommissioning of MW-17.
5. An evaluation and determination of a means to determine the upgradient (background) ground water quality of the Wanapum water bearing zone.

S10. IRRIGATION AND CROP MANAGEMENT PLAN

The Permittee must submit an Irrigation and Crop Management Plan annually by April 15th of each year for Ecology review. The plan must be prepared by a certified or registered soil scientist, or agronomist and must generally conform to the *Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*, Ecology 1993.

The plan must include the following elements:

A. Annual Summary of Farm Operations for Previous Year

This summary must include:

1. For each crop grown, the total acreage and quantity harvested.
2. The nitrogen, fixed dissolved solids, and COD load values in Section S2.H of this permit. These values shall be reported in Table 1 of the report; Farm Operations Summary – System Totals.
3. Calculated balances for nitrogen, salts, or other design limiting parameters. The calculations must include crop consumptive use, process wastewater loadings of nitrogen, salts, or other design limiting parameters, contributions from commercial fertilizers applied, and supplemental water.

For crops that are not grain/grass-like (e.g., non-forage crops) and have a large amount of vegetative growth (e.g., corn, potatoes), the use of literature values for nutrient uptake is acceptable. Otherwise, crop monitoring results as per Section S2.G. shall be used in the balance determinations.

4. A water balance including the following calculations:
 - a. Irrigation system efficiency and application uniformity.
 - b. The quantity of supplemental irrigation water and process wastewater applied.
 - c. Crop consumptive use.
 - d. Water stored in the soil profile outside the normal growing season.
 - e. Salt leaching requirements.
 - f. The leaching fraction for each field.
 1. Calculated COD loads to each field.

5. A comparison of the actual total net nitrogen, water, fixed dissolved solids, and COD loads, and the leaching fractions for each field to the estimated values presented in the previous year's Irrigation and Crop Plan.
6. A summary of the nitrogen, fixed dissolved solids, and COD loading to the site as required in Section S2.H of this permit.
7. A narrative on meeting the Best Management Practices listed in Section S4.D of this permit.
8. A summary and evaluation of the soil testing results.
 - a. The report shall include a continuous 3-year trend analysis of the end-of-cropping year soil profile nitrate concentration based on the soil testing in Section S2.F for all fields.
9. A summary and evaluation of the crop testing results.
10. A fifteen (15) year trend analysis of the monthly nitrate and total dissolved solids data collected at MW-15, -16, -18, and -19. The analysis shall start with January 2000.

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 where organic or hydraulic loading is of concern.
 - 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 fixed dissolved solids and COD load to each field based on the estimated process wastewater discharge and planned crop rotation.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

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

- A. All permit applications must be signed by either a principal executive officer or ranking elected official.
- B. 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:
 - 1. The authorization is made in writing by the person described above and is submitted to Ecology at the time of authorization, and
 - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.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.
- D. 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 must 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:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. 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 60 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 must be construed as excusing 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:

- A. 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;
- B. A copy of the permit is provided to the new owner and;
- C. Ecology does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to section A. 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 the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.