

**BEFORE THE ENVIRONMENTAL QUALITY
STATE OF WYOMING**

IN THE MATTER OF THE PROTEST)
TO THE ISSUANCE OF THE PERMIT TO) Docket 11-3801
CONSTRUCT NO. 11-008)

**FINAL ORDER FOR MODIFICATION OF PERMIT TO CONSTRUCT 11-008 AND
DISMISSAL OF PROTEST WITH PREJUDICE**

This matter came before the Environmental Quality Council (“EQC”) on the parties’ Stipulated Motion for Modification of Permit to Construct and to Dismiss Protest With Prejudice (“Stipulated Motion”). Chapter 1, Section 11(a) of the DEQ Rules of Practice and Procedure provides for disposition of contested cases by stipulation of the parties upon approval of the EQC. Having reviewed the parties’ Stipulated Motion and the Modified Permit to Construct 11-008 attached thereto as Attachment 1, the EQC hereby ORDERS as follows:

1. The EQC hereby approves the parties’ Stipulated Motion and the Modified Permit to Construct attached thereto as Attachment 1.
2. Permit to Construct 11-008 issued to New Fashion Pork, LLP is hereby modified and superseded by Modified Permit to Construct 11-008, as specifically set forth in Attachment 1 hereto, and the WDEQ shall promptly execute said Modified Permit to Construct 11-008 and deliver it to New Fashion Pork, LLP.
3. This matter and all claims raised in the Notice of Protest filed by Michael and Heidi Romsa herein are hereby dismissed with prejudice.

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4. Each party shall bear its/their own costs, expenses and attorneys fees in this matter.

DONE this _____ day of May, 2012.

By: _____, Presiding Officer
Environmental Quality Council
122 W 25th Street, Rm. 1714
Herschler Building
Cheyenne, WY 82002
Phone: 307-777-7170
Fax: 307-777-6134

CERTIFICATE OF SERVICE

I hereby certify that on this ____ day of May, 2012, I served a true, full and correct copy of the foregoing Order Granting Stipulated Motion to Dismiss upon the following by depositing the same in the US Mail, postage prepaid and addressed as follows:

Alexander K. Davison
Patton & Davison
1920 Thomes Ave., Suite 600
P.O. Box 945
Cheyenne, WY 82003-0945

Luke Esch
Wyoming Attorney General's Office
123 Capitol Building
Cheyenne, WY 82002

And Hand Delivered to:

Tim Flitner, Chairman
Environmental Quality Council
122 W. 25th Street, Room 1714
Herschler Building
Cheyenne, WY 82002

Kim Waring, Sr. Office Supp. Spec.
Environmental Quality Council
122 W 25th Street, Rm. 1714
Herschler Building
Cheyenne, WY 82002
Phone: 307-777-7170
Fax: 307-777-6134

Attachment 1

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
MODIFIED PERMIT TO CONSTRUCT

PERMIT NO. 11-008

REFERENCE PERMITS 94-341, 00-170, 01-462

NEW FASHION PORK SOW SITE

This permit hereby authorizes the applicant:

New Fashion Pork, LLP
164 Industrial Way
Jackson MN 56143

to modify a swine waste treatment facility according to the procedures and conditions of the application number 11-008. The facility is located in S1/2 Section 26, T17N R62W; Laramie County, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed May 2, 2016.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Granting this permit does not imply that DEQ guarantees or ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements. Compliance with discharge standards remains the responsibility of the permittee.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

1. Attachment 1 is a table of definitions used in the conditions and statement of basis for Permit 11-008.
 - i. The applicant will provide immediate oral or written notice to the Southeast District, Water Quality Division, Herschler Building 4 West, Cheyenne, WY, 82002, Phone 307-777-7088, FAX 307-777-5973, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
2. A permanent benchmark shall be established and the coordinate system used identified. All locations and elevation measurements shall be tied to the permanent benchmark.
3. A minimum of 1,700,000 gallons of fresh water shall be pumped each month to maintain the required groundwater drawdown cone beneath the facility.
 - a. The water may be pumped from the wells on the facility or the adjoining well in the NW ¼ SE ¼ Section 26 T17N R62W.
 - b. When the lagoons are drawn down for irrigation, the minimum level that the primary lagoon may be drawn down to is elevation 5488 ft msl. The new lagoon may be drawn down to elevation 5483 ft msl.
 - c. A permanent pool elevation of 5491 ft msl in the primary lagoon and a permanent pool elevation of 5490 ft msl in the new lagoon shall be achieved by December 31 of each year.
 - d. Water exported for irrigation shall be measured with a totalizing flow meter that satisfies Definition 2. Flow Meter of Attachment 1.
 - e. In the event fresh water from an off-site source is no longer available, twelve months shall be allowed from the last day of irrigation to comply with the requirements of Conditions 4.a., 7 and 9.
 - f. The maximum high water level allowed in either lagoon is 5497 ft msl.
4. The waste water management system will be regulated on the basis of the volatile solids loading rate (VSLR) to the primary lagoon as measured at a representative sampling point to be established in the influent line to the primary lagoon.
 - a. The maximum allowable VSLR shall not exceed a loading rate of 4.25 pounds/1000 cubic feet of primary lagoon volume/day.
 - i. The VSLR shall be based on a rolling three month average, using the current and two previous months test results for volatile solids (VS) concentration (EPA Method 160.4 or Standard Methods 2540), daily average of monthly pumping volumes (fresh water and recycle water) and the volume of liquids present in the primary lagoon on the current sampling day. The VS concentration used to determine the VSLR shall include new VS contributed by fresh manure and wastewater and recycle water VS that pass through the animal confinement

- areas. A sample calculation is attached as Attachment 2 to demonstrate the calculation of the VSLR.
- b. The level of the Primary Lagoon shall be measured from the rim of Manhole #3 the first week day of each month and recorded to the nearest 0.05 ft above msl. The volume shall be calculated using a table prepared by the engineer of record.
 - i. The volume of liquids used for the VSLR calculation shall be based on 60% of the fresh water pumped and 100% of the recycle water pumped.
 - ii. The fresh water volume shall be the cumulative daily average of monthly readings of the flow meters on the two supply wells.
 - iii. The recycle volume shall be based on weekly readings from the totalizing flow meter(s) in the recirculation lines.
 - c. The level of the New Lagoon shall be measured from the rim of Manhole #2 the first week day of each month and recorded to the nearest 0.05 ft above msl. The volume shall be calculated using a table prepared by the engineer of record.
 - d. The total dissolved solids or filterable residue - TDS - (EPA Method 160.1 or Standard Methods 2540) shall not exceed 12,000 mg/L as sampled at Wet Well Manhole #2. The ammonia - NH₃ as N (EPA 350.1 or alternate method acceptable to DEQ/WQD) shall not exceed 1000 mg/L at Wet Well Manhole #2
 - e. If the facility exports waste water for irrigation which results in the primary lagoon volume being lowered to less than the permanent pool volume of 5491 msl, condition 4.a. does not apply. The VSLR may exceed a loading rate of 4.25 pounds/1000 during and following irrigation operations until the primary lagoon volume reaches an elevation of 5491 ft msl.
 - f. Conditions 4.b., 4.c., 4.d., and 4.e apply at all times.
 - g. Conditions 7, and 9 which require animal inventory reduction based on exceeding the allowable VLSR shall not apply during irrigation operations or until the primary lagoon water level is returned to elevation 5491 ft msl and the new lagoon water level is returned to elevation 5490 ft msl. The 3-month rolling average calculation shall begin when the primary lagoon level reaches 5491 msl and the new lagoon reaches 5490 msl.
5. The sampling port for volatile solids shall be located in the influent line to the primary lagoon downstream of the solids separator and upstream of the discharge point of the influent line into the primary lagoon to obtain a representative sample of wastewater discharged to the primary lagoon. The design of the sampling port shall be approved by the DEQ/WQD before being constructed.
 6. Valves or gates must be installed on the influent lines to Manholes 1 and 2.
 7. Exceeding the allowable volatile solids loading rate, ammonia limit, or total dissolved solids limit shall require a reduction of animal population of 15% from the average animal inventory for the previous 90 days. The inventory reduction shall be accomplished within 45 days of the triggering measurement.
 8. All records necessary to validate the requirements of these conditions shall be maintained for a minimum of three years on site and readily accessible to the DEQ/WQD during any site visits.
 9. If the waste treatment system continues to exceed the triggering limit measurement after 270 days, the population shall be reduced an additional 25% within 75 days. The total allowable population after the second reduction will be 60% of average population for the 90 days before the 15% reduction.

10. When the waste treatment system meets the volatile solids, ammonia and total dissolved solids limits for two consecutive monthly sampling events, the population may be returned to the 8100 head limit.
11. Before the new lagoon is placed into service a Concentrated Animal Feeding Facility (CAFO) Permit issued by the Wyoming Department of Environmental Quality with an approved nutrient management plan (NMP) must be in place. The sampling plans, reporting frequencies and records keeping requirements shall be in accordance with the NMP.
12. Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Southeast District, Water Quality Division, Herschler Building 4 West, Cheyenne, WY, 82002 a certification of completion signed by the Engineer of Record or the owner. A form titled "Certificate of Completion" is available at http://deq.state.wy.us/wqd/www/Permitting/Downloads/Certificate_Completion.pdf.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate is required. All modifications or deviations from the authorized plans must be highlighted.
13. The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

AUTHORIZED BY:

 John F. Wagner
 Administrator
 Water Quality Division

 John V. Corra
 Director
 Department of Environmental Quality

Date of Issuance _____

LBH/

ec: Bill DiRienzo, Brian Lovett, John Duestcher, Michael Veenhuizen(mveenhuizen@livestockeng.com)
 cc: Mike Romsa, 5620 State Hwy 216, Albin, WY 82050

ATTACHMENT 1 Definitions

1. Ammonia: Ammonia (NH₃) and ammonium (NH₄) occur in the wastewater. EPA Method 350.1 requires immediate preservation of the sample at a pH <2 to convert all NH₃ to NH₄. The test results are reported as ammonia in terms of nitrogen (N) measured as mg/L.
2. Flow Meter: A totalizing flow meter with an accuracy of plus or minus 2% shall be installed on each well. The flow meter accuracy shall be verified annually by a method acceptable to WQD.
3. Fresh water: Fresh water is groundwater pumped from one of the two wells east of the lagoons that has not previously been used for any purpose.
4. Hour Meter: A simple electrically driven electric clock attached to the starting circuit of one pump motor to accumulate the operating time of that motor.
5. Recycle water: Water pumped from wetwell #1 or wetwell #2.
6. Recycling pump calibration: Each individual wetwell pump must be calibrated to determine its pumping rate. This calibration shall be accomplished by determining the volume of the liquid removed from the wetwell by the individual pump in a timed interval with no additional inflow or outflow allowed to the wetwell.
7. Rolling three month average: A rolling average is determined by averaging the three most recent monthly values of the parameter measured. For example the March rolling average would be the January, February, and March values summed and divided by three. The April rolling average would be February, March, and April values summed and divided by three.
8. Total Dissolved Solids (TDS) EPA Method 160.1: Sometimes referred to as filterable residue, the sample is filtered through a glass fiber filter and dried at 180°C.
9. Volatile Solids (VS) EPA Method 160.4: The total (filterable and suspended) are determined by ignition at 550°C in a muffle furnace. The volatile solids are a good measure of the organic compounds in the wastewater that will decompose due to aerobic and anaerobic action in the waste treatment processes, thus represent the organic loading being placed on the wastewater treatment system.
10. Volatile Solids Loading Rate (VSLR): The volatile solids loading rate is a determination of the actual weight of volatile solids being added by the wastewater flow to each 1000 cubic feet of primary lagoon volume per day. Attachment 2 provides a sample calculation of the VSLR for a hypothetical set of conditions.
11. Volume of liquids calculation: The volume of liquids in a lagoon is based on a volume of the lagoon as determined by reference to a level vs volume table to provided and certified by the engineer of record.

ATTACHMENT 2 Sample Calculations

Volatile Solids Loading Rate Calculation

$$\text{VSLR} = (\text{VS}[\text{concentration}] \times \text{Volume} [\text{inflow to primary lagoon per day}]) / \text{Volume of primary lagoon}$$

Parameter	Amount	Units
Volatile Solids	20,000*	mg/L
Fresh Water	57,600	gallons/day
Recycle Water	81,500	gallons/day
P. lagoon Volume	4,800,000	cu. ft.

**While the maximum daily volatile solids loading from fresh manure is anticipated to be about 12,000 lbs/day which would equate to about 12,000 mg/L, some volatile solids will be recycled with the recycled water. Therefore 20,000 mg/L was used in this calculation.*

$$\text{VSLR} = (20,000/1,000,000) \times (((57,600 \times 60\% \text{gal}) + 81,500 \text{gal}) \times 8.34 \#/\text{gal}) / (4,800,000 \text{cf} / 1000)$$

$$\text{VSLR} = (.02 \times 968,000 \text{ lbs}) / 4800$$

$$\text{VSLR} = 4.0 \text{ lbs} / 1000 \text{ cu. ft of primary lagoon volume}$$

STATEMENT OF BASIS

1. Permit Number: 11-008
2. This application was reviewed for compliance with the applicable regulations ;

Chapters 3 and 11

3. Does the permit comply with all applicable regulations identified above?

No, lagoon infiltration rates will exceed what would be allowed by the equivalent of a 3 ft of 1×10^{-7} soil liner. The Hydro-Engineering Report cited below justifies reducing the minimum pumping rate required in Permit 94-341 to produce a drawdown cone to intercept infiltration to a minimum of 40 gpm.

4. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 was required.
The ground water evaluation for the New Fashion Pork Sow Site prepared by Hydro-Engineering LLC dated October 2010 and signed by Thomas G. Michel, Ph.D, Hydrologist demonstrates that the facilities as constructed and designed will have an acceptable groundwater impact.
5. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by Louis Harmon, Program Manager, Water and Wastewater Section, Wyoming Department of Environmental Quality /Water Quality Division, and completed on February 24, 2012. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents, permit conditions, and the items identified in this "Statement of Basis."