



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
JACKSON DISTRICT OFFICE



C. HEIDI GREYER  
DIRECTOR

January 19, 2018

Mr. Blaine Baker  
Bakerlads Farm  
10960 Cadmus Road  
Clayton, Michigan 49235

CC No. CC-000961

Dear Mr. Baker:

SUBJECT: NPDES Permit No. MI0059009  
Designated Name: Bakerlads Farm-CAFO

On September 27, 2017, staff of the Department of Environmental Quality (DEQ), Water Resources Division (WRD), conducted an evaluation of Bakerlads Farm-CAFO, located at 10960 Cadmus Road, Clayton, Michigan, to evaluate the facility's compliance with Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; and National Pollutant Discharge Elimination System (NPDES) Permit No. MI0059009, issued and effective May 11, 2012.

Mr. Blaine Baker participated in the inspection, which included an inspection of the facility, a complete review of permit required reports and records, and a review of facility operation and maintenance. Bakerlads Farm is a concentrated animal feeding operation (CAFO) with approximately 600 mature dairy cows, 100 dry cows, 75 bred heifers and 20 calves. The facility collects and stores production area wastewater within waste storage structures located on the farmstead and then land applies the material to agricultural fields at agronomic rates. A copy of the full inspection report can be obtained through the MiWaters database by going to the Documents section and typing "E-54B3-C7-6C46" into the search filter at the top of the Source Name Column.

The following items were identified and/or discussed during the inspection:

1. At the time of the inspection, spill-over of manure was noted along the southern side of the solids storage area/manure transfer lane (from the barns to the manure lagoon). Part I.4.a.1. of the facility's permit requires that waste storage structures be maintained and operated in such a way that all production area waste is contained and collected. The farm needs to take appropriate steps to reduce the loss of manure from this storage and transfer area. During the inspection, several options (including the addition of a second row of concrete blocks) were discussed as possible solutions to reduce spill-over of manure from this location.
2. During the inspection, silage leachate was noted along the southern and western sides of the silage bunker. Part I.4.a.1. of the facility's permit requires that this material be collected and transferred to a waste storage structure. A channelized flow path along the south side of the silage bunker appeared to direct most of the silage leachate to a waste storage structure, however, the base of the channel was made of a permeable material and not all of the silage leachate was being collected. Changes need to be made to the

silage bunker to stop the leakage of leachate out of the bunker and/or to ensure that all silage leachate is collected and transferred to a waste storage structure. **By March 1, 2018, please submit a work plan to the WRD describing what steps the farm plans to take to address the two issues noted above (items 1 and 2). The work plan should include a timeline for when the proposed changes will be completed.**

3. The facility is currently keeping land application records and completing weekly operation and maintenance inspections, however, the DEQ approved form is not being utilized for these activities and not all permit required information is being recorded. A copy of the current DEQ approved daily land application form and weekly inspection record is enclosed with this letter. These forms should be used to record all future weekly farmstead inspections and land applications completed by the farm. The forms should be filled out completely; all information on the inspection forms is required under the facility's permit. Utilization of these record forms will be reviewed in greater detail during the next inspection; but to verify that the forms are being used, **please provide a copy of a recently completed land application record form and a weekly inspection record to the WRD by June 1, 2018.**
4. Damaged or missing depth gauge markers need to be re-installed in all liquid waste storage structures. The operational, emergency, and freeboard volumes must be clearly delineated on the depth gauge markers. Complete information on depth gauge markers is available within the permit, Part I.A.4.a.2.a. **Please submit photographic documentation to the WRD by June 1, 2018 that depth gauge markers have been installed in both manure lagoons.**

In addition to the items listed above, stockpiling locations were also discussed during the inspection. In follow-up to that discussion, please note that Hamann W is not included in the current list of approved field stockpiling locations. If the farm intends to stockpile manure of this field in the future, please submit a request for site approval to the WRD prior to use.

Thank you for your cooperation in these matters. Should you require further information, please contact me at 517-416-4073; burns6@michigan.gov; or DEQ, WRD, Jackson District Office, 301 East Louis Glick Highway, Jackson, Michigan 49201-1535.

Sincerely,



Rachel Burns  
Environmental Quality Analyst  
Water Resources Division

Enclosures

cc/enc: Ms. Beth Gruden, Blue Wing Consulting