



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
FOUR PENN CENTER – 1600 JOHN F. KENNEDY BLVD.
PHILADELPHIA, PENNSYLVANIA 19103-2852

Report Title: Clean Water Act Compliance Inspection Report
Inspection Date(s): August 9, 2023
Regulatory Program(s): National Pollutant Discharge Elimination System (NPDES)
Type of Activity: CAFO Inspection
Facility Name: REM Farms, LLC
Facility Address: 5374 Amore Dr. Laurel, DE 19956
Facility Latitude: 38.527222
Facility Longitude: -75.656111
County/Parish: Sussex County
CAFO Permit No: DE5000N11
Site Specific Permit No: DEA116020
NAICS Code: 112310
SIC: 0251
Unique Project #: 3E23WN110A

Facility Representative(s):

Rick Moore, Owner/Operator
Email: rjmoore4@gmail.com

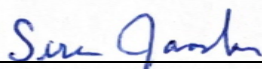
Point of Contact



Inspectors:

Sirese Jacobson, PG Environmental
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Email: andrew.rimelman@pgenv.com

Report Preparer
Signature/Date



Sirese Jacobson, PG Environmental

September 26, 2023

Date

Supervisor
Signature/Date

Mark Zolandz, Section Chief
NPDES Enforcement Section (3ED32)

Date

Attachments

Attachment A Site Map

Attachment B Photo Log

DELAWARE CAFO INSPECTION REPORT

GENERAL INFORMATION

Facility ID #: DEA116020 Facility Name: REM Farms, LLC Facility Owner: Rick Moore Facility Operator: Rick Moore Mailing Address: 5374 Amore Dr. Laurel DE 19956 Physical Address: 5374 Amore Dr. Laurel DE 19956 County: Sussex Contact Person: Rick Moore Phone (office): N/A (fax): N/A (cell): 302-569-1311 E-mail: rjmoore4@gmail.com Persons Present During Inspection: Sirese Jacobson and Andrew Rimelman (PG Environmental); Peter Gold, Mark Zolandz, and Michael Greenwald (United States Environmental Protection Agency, Region 3); Chris Brosch, Aaron Givens, and Bob Coleman (Delaware Department of Agriculture [DDA]); Gordon Woodrow and Lydia Smith (Delaware Department of Natural Resources and Environmental Control [DNREC]); Ric Moore and Ed Moore (Facility Representatives)	Inspectors: Sirese Jacobson and Andrew Rimelman (PG Environmental) Inspection Date: 8/9/2023 Time in: 8:00 AM Time out: 10:30 AM Weather: Sunny, approximately 75° F with light wind. 2.85 in of precipitation was measured at the nearest NOAA weather station (NOAA Gauge # US1DESS0064 - approximately 8 miles NE of the facility) the night before the inspection. GPS Reading (at gate) North: 38.527222° West: -75.656111° Does the facility owner/operator own and/or operate any other animal feeding operations? Yes If yes provide name(s) and address(es) and indicate whether the facility is an AFO or a CAFO: Mr. Moore operates one other leased facility: RAKM Farms - 5325 Amore Dr., Laurel, DE 19956 This facility is a permitted CAFO.										
Max. Animals Confined per Month: Approximately 299,200 (facility personnel stated that the number of chickens confined on the day of the inspection was the approximate maximum number of chickens that are confined per month).	Location and name of nearest surface water¹ and description of flow path: Cod Creek is located less than 0.1 mile southeast of the facility. Cod Creek flows northwest and is a tributary to the Nanticoke River.										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Animal Type</th> <th style="width: 25%;">Permitted # confined (as reported in public notice of application for coverage)</th> <th style="width: 15%;"># Confined Today</th> <th style="width: 15%;">Max. # Capacity of Facility</th> <th style="width: 20%;">Max. # Confined Per Month</th> </tr> </thead> <tbody> <tr> <td>Poultry (Roaster, 0-60 days)</td> <td style="text-align: center;">333,600</td> <td style="text-align: center;">299,200</td> <td style="text-align: center;">299,400</td> <td style="text-align: center;">292,000</td> </tr> </tbody> </table>	Animal Type	Permitted # confined (as reported in public notice of application for coverage)	# Confined Today	Max. # Capacity of Facility	Max. # Confined Per Month	Poultry (Roaster, 0-60 days)	333,600	299,200	299,400	292,000	
Animal Type	Permitted # confined (as reported in public notice of application for coverage)	# Confined Today	Max. # Capacity of Facility	Max. # Confined Per Month							
Poultry (Roaster, 0-60 days)	333,600	299,200	299,400	292,000							
Number of animals today (all animals in production area): 299,200 roaster chickens											
X	Presented credentials? (check if yes)										
X	Inspection photos attached? (check if yes)										

¹ Surface water means all waters of the United States.

INSPECTION OVERVIEW AND FACILITY DESCRIPTION

On August 9, 2023, EPA Region 3 inspectors Peter Gold, Mark Zolandz, and Michael Greenwald, along with their contractors Sirese Jacobson and Andrew Rimelman (PG Environmental) (collectively, the EPA inspection team), conducted a compliance inspection of REM Farms, LLC, a concentrated animal feeding operation (CAFO) located in Laurel, Sussex County, Delaware. Chris Brosch, Aaron Givens, and Bob Coleman from the Nutrient Management Division of the Delaware Department of Agriculture (referred to hereinafter as DDA) and Gordon Woodrow and Lydia Smith from the Delaware Department of Natural Resources and Environmental Control (referred to hereinafter as DNREC) were also present for the inspection. The EPA inspection team, DNREC, and DDA entered the facility at approximately 8:00 am and stopped at the facility entrance to carry out biosecurity measures, including disinfecting vehicle tires and putting on disposable coveralls, hair nets, and boot covers. The group then proceeded into the facility where they met the facility operator, Mr. Rick Moore, and Mr. Ed Moore (referred to hereinafter as the facility representatives). Peter Gold and Sirese Jacobson presented their credentials and explained the inspection goals and procedure. EPA contract inspectors conducted an opening conference. Then, Mr. Ed Moore led the group on a site walk around the production area. After the site walk, the group conducted a records review and closing conference. The EPA inspection team left the facility at approximately 10:30 AM, stopping at the facility entrance on the way out to disinfect the vehicle tires.

REM Farms is a contract poultry growing operation that produces roaster chickens. The facility receives day old chickens and raises them for approximately 58-61 days. The facility raises an average of 4.5 flocks per year, with an average of 21 days between flocks. The facility consists of eight poultry houses (shown in Photographs 2-9 and Photographs 23-31) and two manure storage buildings located on the east side of the property (shown in Photographs 10-15). The facility is located approximately 0.1 miles from the nearest surface water, Cod Creek, which flows northeast into the Nanticoke River.

The facility exports all poultry manure offsite. A cake-out of the poultry houses is performed between each flock and stored in two designated manure storage buildings located on the east side of the facility before it is exported offsite. Facility representatives stated that manure exports occur twice per year, generally during the fall and winter. The facility's NOI states that the manure storage buildings can store approximately 146 tons of manure. Mortality composting is performed in a composter at the east side of the southern manure storage building (shown in Photograph 10).

Stormwater runoff from the two northern poultry houses runs east to west (parallel to the buildings) to a drainage channel that runs along the western edge of the facility (shown in Photographs 2-8). This drainage flows south toward a stormwater basin located on the southern edge of the facility (shown in Photographs 19-22). Stormwater runoff from the southern six poultry houses flows south through drainage channels located between each poultry house (shown in Photographs 23-31) and then through culverts to the stormwater basin located along the southern edge of the facility. Runoff from the manure storage buildings, their concrete pads, and areas around the manure storage buildings flows generally south through a drainage channel (shown in Photographs 14-18) into the stormwater basin. According to the facility representatives, the stormwater basin includes an overflow culvert on the south side of the basin to convey any discharges from the basin into a tax ditch before entering Cod Creek. However, facility representatives stated that no overflows had occurred since they assumed ownership of the facility. The inspection team did not observe the overflow culvert of the stormwater basin during the inspection.

SUMMARY OF OBSERVATIONS

The following observations were identified relative to the requirements of NPDES Concentrated Animal Feeding Operation (CAFO) General Permit for Large, Medium, & Designated Poultry CAFOs – Manure Generation Facilities Only (No. DE5000N11) and the Delaware Administrative Code. Part I.B.1 of the permit requires the CAFO to comply with DNREC's 7 Del. Admin. C. §7201-9.5, the CAFO Regulations. In the observations below, references to sections of the permit refer to Permit No. DE5000N11, which became effective April 1, 2016. Each observation also includes a reference to questions that are included in the "Inspection Checklist" section below.

- Part I.D.1 of the permit states *"The permittee shall also maintain a copy of the "Notice of Intent & Application for Coverage" and a copy of the most current AWMP/NMP at the CAFO with this issued NPDES CAFO Permit."*

Observation #1

- The facility did not have a copy of the current Animal Waste Management Plan (AWMP) onsite at the time of the inspection. DDA personnel were able to provide a copy of the AWMP (dated 5-22-2016) which was reviewed during the inspection. DDA indicated that this was the current version of the AWMP. The AWMP provided by DDA listed an expiration date of 11/20/2020; however DDA indicated that the AWMP had been renewed and approved without changes. See question 1 of the Inspection Checklist below.
- The facility did not have a copy of the current notice of intent (NOI) onsite and available for review at the time of the inspection. The facility had a copy of an older NOI from 2013 that was reviewed by the inspection team. A copy of the current NOI and an approval letter for the NOI were provided by DDA by email correspondence on 9/8/2023. See question 15 of the Inspection Checklist below.
- 40 CFR § 412.37(a)(1) states *"There must be routine visual inspections of the CAFO production area. At a minimum, the following must be visually inspected: (i) Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure."*

40 CFR 412.37(b)(1) and 7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.2 require the facility to maintain records of inspections on-site for a period of five years. These inspections include *"Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure."*

Observation #2

- The facility was unable to provide records of weekly inspections of diversion devices or runoff diversion devices stored on-site at the time of the inspection. Facility representatives stated that stormwater controls were being inspected but were not being documented. See question 19.a of the Inspection Checklist below.

- 40 CFR § 412.37(a)(1) states *“There must be routine visual inspections of the CAFO production area. At a minimum, the following must be visually inspected: ... (ii) Daily inspection of water lines, including drinking water or cooling water lines.”*

40 CFR 412.37(b)(1) and 7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.3 require the facility to maintain records of inspections on-site for a period of five years. These inspections include *“Daily inspection of water lines, including drinking water or cooling water lines”*.

Observation #3

- The facility did not provide records of daily inspections of waterlines at the time of the inspection. Facility representatives stated the water lines were being inspected but the inspections were not being documented. Facility personnel walk through poultry houses each day in order to collect mortalities, during these walk throughs water lines could be observed. See question 19.b of the Inspection Checklist below.
- 40 CFR 412.37(c)(4) require the facility to maintain records of *“Test methods used to sample and analyze manure, litter, process wastewater, and soil”* for five years.

Part I.D.4 of the permit states: *“If sampling and/or monitoring is performed, samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Sampling and monitoring records shall include the date, place, and time of sampling or measurements, and the individuals who performed the sampling or measurements. The facility responsible for analysis of the sample shall document the date of the analysis, the individual who performed the analysis, the analytical techniques/methods used, and the results of such analysis in accordance with 7 Del. Admin. C. §7201-6.41.2.”*

Observation #4

- The manure analysis results onsite did not include the following elements (see questions 26 and 28b of the Inspection Checklist below):
 - Time of sampling
 - Individuals who performed sampling
 - Individual who performed the analysis
 - Analytical test method used
- 40 CFR 122.421(1)(i) require that permittees implement a nutrient management plan, including a requirement to *“Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities”*.

Part II.A.6 of the permit states *“The permittee shall have manure residue and litter residue adequately cleaned up on a reasonable and necessary basis.”*

Part II.A.6 of the permit states *“The permittee shall at all times maintain in good working order and operate as efficiently as possible all BMP’s installed or used by the permittee for water*

pollution control to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, good housekeeping practices, appropriate chemical storage and handling, proper handling and storage of manure, and proper handling of mortalities as addressed in the AWMP or NMP.”

Observation #5

- The inspection team made the following observations regarding the stormwater basin:
 - Residual manure was observed on the concrete pad located on the north end of the south manure storage building (Photographs 10 and 11). See questions 46 and 48 of the Inspection Checklist below.
 - The EPA inspection team observed discoloration of standing water located in the stormwater drainage west of the manure storage building. (Photograph 16) See *Additional Production Area Comments* section of the Inspection Checklist below.
 - A layer of algae growth and/or duckweed was observed on the surface of the stormwater basin (Photographs 24 and 25). See *Additional Production Area Comments* section of the Inspection Checklist below.
- Part I.D.2.c.iv of the permit requires that if “manure, litter or process wastewater is sold or given to other persons for disposal or utilization”, the CAFO generating the manure, litter or process wastewater must maintain “a copy of the most recent manure, litter and process wastewater nutrient analysis shall be given to the receiver on or before the date of transfer.”

Observation #6

- The facility representative stated that he does not provide the manure recipients with a copy of the most recent manure analysis. See question 18.e of the Inspection Checklist below.

INSPECTION CHECKLIST

Nutrient Management Plan (NMP)

Required NMP Element [40 CFR 122.42(e)(1)] [7 DE Admin. Code § 7201-9.5.5.2] [DE GP1 Part II.A.2]

No	1. Is the facility's AWMP/NMP available on-site? Does it reflect the current operational characteristics and practices? [40 CFR 122.42(e)(2)(ii)] [7 DE Admin. Code § 7201-9.5.5.2] [DE GP1 Part I.D.1] Date developed or last revised: <u>5/22/2016</u> Approved by: <u>Brian Ashby (DNREC) and Chris Brosch (DDA)</u> Approval date: <u>8/3/2016</u> Date submitted to DNREC: <u>5/22/2016</u> <u>The AWMP that was available to review on-site was developed on 5/22/2016 and had an expiration date of 11/20/2020. However, DDA stated that AWMPs are generally reissued by a letter from DDA and DNREC notifying the permittee that their current AWMP has been extended if there are no major modifications to the facility. The facility did not have a copy of this correspondence from DDA and DNREC onsite at the time of the inspection.</u>
Yes	2. Ensure adequate storage of manure and process wastewater, including operation and maintenance procedures. [40 CFR 122.42(e)(1)(i)]
Yes	3. Ensure proper management of animal mortalities. [40 CFR 122.42(e)(1)(ii)]
No	4. Ensure that clean water is diverted, as appropriate, from the production area. [40 CFR 122.42(e)(1)(iii)] <u>The AWMP does not identify site-specific controls to divert clean water away from the production areas. Roof runoff from the poultry houses is directed into the drainage channels into the stormwater basin located on the south side of the facility. In the stormwater basin, clean water from roof runoff could commingle with process wastewater generated from runoff that has contacted manure (i.e., runoff from the manure storage building concrete pads). The topography of the site prevents clean water from running onto the production area from offsite.</u>
Yes	5. Prevent direct contact of confined animals with surface waters. [40 CFR 122.42(e)(1)(iv)] <u>The chickens are housed in the poultry houses and do not have direct access to surface waters.</u>
Yes	6. Ensure proper disposal of chemicals and other contaminants. [40 CFR 122.42(e)(1)(v)] <u>The AWMP includes general information on chemical handling.</u>
Yes	7. Identify site-specific conservation practices to control runoff of pollutants. [40 CFR 122.42(e)(1)(vi)] <u>The AWMP lists "good housekeeping" as an additional production area conservation practice. (the plan specifies that this practice is not required). The AWMP lists Waste Storage Facility (NRCS conservation practice 313), animal mortality facility (NRCS</u>

conservation practice 316) and heavy use area protection (NRCS conservation practice 561) as production area conservation practices that must be implemented.

Nutrient Management Plan (NMP) (continued)

- Yes 8. Identify protocols for manure, process wastewater, and soil sampling and testing. [40 CFR 122.42(e)(1)(vii)]
The facility has identified protocols for manure sampling testing in the AWMP. These protocols include analyzing a manure sample for nutrients at least annually and in accordance with the recommendations from the University of Delaware. Testing for process wastewater and soil sampling and testing are not applicable to this facility.
- N/A 9. Establish protocols to land apply manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater. [40 CFR 122.42(e)(1)(viii)]
- Yes 10. Identify specific records that will be maintained to document the implementation and management of the minimum NMP elements (#2-#9 above).
Section 9 of the NMP outlined recordkeeping requirements. In addition, the general permit specifies the records that must be maintained to document implementation of the AWMP.

Additional NMP Requirements for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs

- N/A 11. Application rates are calculated as required by 40 CFR 412.4(c)(2).
- Yes 12. Specifies the manure, process wastewater, and soil sampling at the required frequencies and for the required parameters? [40 CFR 412.4(c)(3)] *(manure/wastewater annually for P & N (at minimum, analysis for total nitrogen (N), ammonium N, total phosphorus (P) or P₂O₅, total potassium (K) or K₂O, and percent solids); soils (at a minimum, analysis for organic matter, pH, lime requirement, and plant available phosphorus and potassium; Current soil tests are ones that are no older than three years) in accordance with State Technical Standards) [DE GP1 Part I.D.3]*
- N/A 13. Includes periodic inspection of land application equipment? [40 CFR 412.4(c)(4)]
- N/A 14. Includes 100-foot setback or 35-foot vegetated buffer, or approved alternative? [40 CFR 412.4(c)(5)]

Where applicable, identify each field and setback type:

Field ID	Setback Type
N/A	

Nutrient Management Plan (NMP) comments:

An AWMP from 2016 with a listed expiration year of 2021 was provided for review by DDA during the onsite inspection, the facility did not provide an AWMP during the inspection. DDA representatives stated that the 2016 AWMP was the current version.

Monitoring, Documentation and Recordkeeping

Does the facility maintain the following records? [7 DE Admin. Code § 7201-9.5.6.4.3]

- | | |
|-----|---|
| No | 15. The completed permit application? [40 CFR 412.37(b)]
<u>Facility personnel did not have the completed permit application onsite and available for review at the time of the inspection. However, DDA was able to provide a copy of the permit application (dated 5/22/2016) that was reviewed during the inspection.</u> |
| Yes | 16. The current design of manure storage structures, including volume of solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity? [40 CFR 412.37(b)(5)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.5] |
| N/A | 17. The date, time, and estimated volume of any overflow? [40 CFR 412.37(b)(6)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.4]
<u>Facility personnel stated that no overflows have occurred since Mr. Moore assumed ownership of the facility.</u> |
| Yes | 18. Manure and process wastewater transfers, including the most current nutrient analysis of the manure or wastewater that was provided to the recipient, the date and approximate amount transferred, and the name and address of the recipient? [40 CFR 122.42(e)(3)] [DE GP1 Part I.D.2.c.iv] [7 DE Admin. Code § 7201-9.5.6.4.3.1.3.1]
<u>The inspection team observed manure transfer records retained onsite back to 2014, with the most recent transfer occurring on 1/30/2023. According to facility representatives, manure analysis is not provided during manure transfers.</u> |
| Yes | a. Name of recipient and contact information |
| Yes | b. Address of recipient
<u>According to the facility operator, the address was kept separately on site and was not observed during the inspection.</u> |
| Yes | c. Date of transfer |
| Yes | d. Approximate amount transferred (tons/gallons) |
| No | e. A copy of the most recent manure, litter and process wastewater nutrient analysis shall be given to the receiver on or before the date of transfer. [DE GP1 Part I.D.2.c.iv]
<u>The facility representative stated that he does not provide the manure recipients with a copy of the most recent manure analysis.</u> |
| Yes | f. Does the facility maintain these manure transfer records for 6 years? |

Additional Production Area Records for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs

- | | |
|----|---|
| No | 19. Documentation of daily and weekly visual inspections of the production area, including: |
| No | a. Weekly inspection of stormwater diversions, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage containment structure? [40 CFR 412.37(b)(1)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.2] |

No	b. Daily inspection of water lines? [40 CFR 412.37(b)(1)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.3]
N/A	c. Weekly inspection of impoundments and tanks? [40 CFR 412.37(b)(1)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.4]
Monitoring, Documentation and Recordkeeping (continued)	
N/A	20. Weekly records of the depth of manure and process wastewater in liquid impoundments and terminal tanks? [40 CFR 412.37(b)(2)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.4] (Permit requires records of “amount stored” [DE GP1 Part I.D.2.b].)
N/A	a. Does the facility maintain these records for 6 years? <u>The facility does not operate the stormwater basin as a wastewater impoundment.</u>
No	21. Documentation of actions taken to correct deficiencies found as a result of production area inspections? [40 CFR 412.37(b)(3)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.1]
Unknown	a. Were deficiencies corrected within 30 days?
N/A	b. If not, does the file contain an explanation of factors preventing immediate correction? [40 CFR 412.37(b)(3)]
Yes	22. Documentation of mortalities management? [40 CFR 412.37(b)(4)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.1] [DE GP1 Part I.D.2.a]
Yes	a. Does the facility maintain these records for 6 years?
<i>Land Application Area Records for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs</i>	
N/A	23. Expected crop yields? [40 CFR 412.37(c)(1)]
N/A	24. Date(s) manure or process wastewater is applied to each land application site? [40 CFR 412.37(c)(2)]
N/A	25. Weather conditions at the time of, and for 24 hours prior to and following, land application? [40 CFR 412.37(c)(3)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.3]
No	26. Test methods used to sample and analyze manure, process wastewater, and soil? [40 CFR 412.37(c)(4)] <u>The manure analysis results that were reviewed onsite did not include the test methods that were used. Process wastewater and soil sampling and analysis is not applicable to this facility since there is no land application of waste.</u>
Yes	27. Results from manure, process wastewater, and soil analyses? [40 CFR 412.37(c)(5)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.1] [DE GP1 Part I.D.3] (maintained onsite and also provided to DDA as an attachment to the annual report)
Yes	28.a. If sampling and/or monitoring is performed, samples and measurements are representative of the monitored activity? [DE GP1 Part I.D.4]

No	b. Sampling and monitoring records shall include the date, place, and time of sampling or measurements, and the individuals who performed the sampling or measurements. The facility responsible for analysis of the sample shall document the date of the analysis, the individual who performed the analysis, the analytical techniques/methods used, and the results of such analysis in accordance with 7 Del. Admin. C. §7201-6.41.2. <u>The manure analysis results onsite did not appear to include time of sampling, the individuals who performed the sampling, the analytical methods, nor the person who performed the analysis.</u>
Monitoring, Documentation and Recordkeeping (continued)	
N/A	29. Manure and process wastewater application rates determined in accordance with the technical standards? [40 CFR 412.37(c)(6)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.1]
N/A	30. Calculations showing the total N and P to be applied to each land application site, including sources other than manure or process wastewater? [40 CFR 412.37(c)(7)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.1]
N/A	31. Total amount of N and P actually applied to each land application site, including calculations? [40 CFR 412.37(c)(8)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.2]
N/A	32. Method used to apply manure and process wastewater? [40 CFR 412.37(c)(9)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.3]
N/A	33. Date(s) of manure application equipment inspections for leaks? [40 CFR 412.37(c)(10)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.2.5]
No	34. Has the facility notified DDA/DNREC of any actual or planned physical alterations or additions to the facility: [DE GP1 Part II.A.3] • New poultry houses are to be constructed at the permitted facility; • The alteration or addition meets criteria of a "New Source" in accordance with 7 Del. Admin. C. §9.5. 7.0 of the CAFO Regulations; • The alteration or addition changes the location of discharge points, if any. If yes, describe: <u>Facility representatives stated there were no recent physical alterations to the facility and there were no planned changes. In the AWMP, updated 5/22/2016, the manure and mortality composting area is described as a single, temporary manure storage facility that was also used to compost mortalities. The 2016 AWMP identifies constructing two new manure barns and a single new composter for mortality composting as additional structures that are necessary for current operations. At the time of the inspection, manure was stored in two buildings that match the descriptions of additional structures needed that were described in the 2016 NMP, and a separate composter on the side of the north facility used for composting. This suggests that the manure storage and mortality composting buildings on site were constructed after the 2016 NMP was developed.</u>
No	35. Has the facility reported any noncompliance? [DE GP1 Part I.F]

If yes, describe: N/A. According to the facility operator, the facility has not reported any incidents of non-compliance.

Monitoring, Documentation and Recordkeeping (continued)

Yes 36. Has the facility retained a copy of the annual report and supporting documents onsite? [DE GP1 Part I.D.5]

Additional Monitoring, Documentation and Recordkeeping comments:

The facility did not have copies of the following documents available for review at the time of the inspection:

- Current NOI (the NOI from 2013 was available)
- Weekly Stormwater Controls Inspection Records
- Daily Water Line Inspection Records

DDA was able to provide a copy of both the AWMP and the most recent NOI (from 2018) for review during the inspection. DDA was also able to provide a copy of the AWMP dated 5/22/2016 for review. Facility representatives stated that stormwater controls and water lines were being inspected weekly and daily respectively, but the inspections were not being formally documented.

Land Application Sites

- No 37. Does the facility apply manure or wastewater to land owned by or under the operational control of the CAFO?
- Number of land application sites: N/A
 - Irrigation type(s): N/A
 - Furrow/flood irrigation sites – what is fate of applied wastewater and tailwater?: N/A
- N/A 38. Was manure/wastewater applied in accordance with the procedures and protocols identified in the NMP? (*spot check records for one for one field to complete the information below.*) If no, describe:?
- N/A

Production Area

39. List impoundments (attach additional sheet(s), if needed)

Impoundment ID	Wastewater Type	Wastewater Source(s)	Pumping level ²	Wastewater below pumping level?	Max. recorded level	Date of max. recorded level
N/A	☐ process generated ☐ runoff	N/A	N/A	N/A	N/A	N/A

40. Impoundment(s) collect all runoff from:

- N/A Animal confinement areas?³
- No Manure storage areas?⁴
- Poultry manure is stored in two manure storage buildings located on the east side of the production area. During the site walk, the inspection team observed residual manure on the concrete pad between the two manure storage buildings (Photographs 10 and 11). Runoff from this area could potentially flow to the stormwater basin on the south side of the facility.
- N/A Raw material storage areas?⁵
- N/A Waste containment areas?⁶
- N/A Egg washing or egg processing facility?

² The pumping level represents the minimum capacity necessary to contain runoff and direct precipitation from the 25-year, 24-hour rainfall event (40 CFR 40 CFR 412.37(a)(2)). [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.4.1]

³ Animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables (40 CFR 40 CFR 122.23(b)(8)).

⁴ Manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles (40 CFR 40 CFR 122.23(b)(8)).

⁵ Raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials (40 CFR 40 CFR 122.23(b)(8)).

⁶ The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water (40 CFR 40 CFR 122.23(b)(8)).

Production Area (continued)

- | | |
|-----|--|
| N/A | <p>Mortality storage, handling, treatment or disposal area?</p> <p><u>Mortalities are composted in the composter on the east side of the southern manure storage building.</u></p> |
| N/A | <p>Other? (describe): <u>N/A</u></p> <p>If no, describe non-retained areas:</p> <p><u>The facility generates solid manure and litter which is stored in the two manure storage buildings. Stormwater runoff from the areas around the poultry houses, the manure storage building, and the mortality composting unit is captured in the stormwater basin located at the south side of the production area. The inspection team observed a layer of algae and/or duckweed present on the stormwater basin during the inspection (Photographs 24 and 25) (see the additional comments on the production area below). As discussed above, the facility does not operate the stormwater basin as a wastewater impoundment.</u></p> |
| No | <p>41. Was manure or wastewater observed in a waterway? If yes, describe: <u>N/A</u></p> |
| No | <p>42. Adequate storage available for manure, litter, and process wastewater, and procedures are in place to ensure proper operation and maintenance of the storage facilities? [40 CFR 122.42(e)(1)(i)]</p> <p><u>The manure storage buildings appeared to have adequate storage capacity for manure and litter at the time of the inspection. However, the inspection team observed residual manure observed on the concrete pad located on the north side of the south manure storage building (Photographs 10 and 11).</u></p> |
| Yes | <p>43. Confined animals do not have direct contact with waters of the United States? [40 CFR 122.42(e)(1)(iv)]</p> <p><u>Confined animals do not have direct contact with waters of the United States.</u></p> |
| No | <p>44. Clean water is diverted from the production area? [40 CFR 122.42(e)(1)(iii)]</p> <p><u>Roof runoff from the poultry houses is directed into the drainage channels into the stormwater basin located on the south side of the facility. In the stormwater basin, clean water from roof runoff could commingle with process wastewater generated from runoff that has contacted manure (i.e., runoff from the manure storage building concrete pads). The topography of the site prevents clean water from running onto the production area from offsite.</u></p> |
| Yes | <p>45. Chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system? [40 CFR 122.42(e)(1)(v)] [DE GP1 Part II.A.6]</p> <p><u>The inspection team did not observe evidence of chemicals or other contaminants being disposed of in the manure, litter, or stormwater basin.</u></p> |

Production Area (continued)

- No 46. Manure residue and litter residue is adequately cleaned up on a reasonable and necessary basis? [DE GP1 Part II.A.4]
The inspection team observed residual manure on the concrete pad located on the north end of the southern manure storage facility (Photographs 10 and 11).
- Yes 47. Manure residue and litter residue is adequately cleaned up from the exterior area(s) of the poultry house(s) as soon as practically possible after bird movement not to exceed 14 days? [DE GP1 Part II.A.5]
- No 48. All BMPs installed or used by the facility for water pollution control to achieve compliance with the terms and conditions of the permit are maintained in good working order and operate as efficiently as possible at all times? [DE GP1 Part II.A.6]

a. Identify water pollution control BMPs	b. Describe maintenance activities
Good Housekeeping	The AWMP does not require this BMP, but includes it as an additional production area conservation practice (which is not required). The inspection team observed that areas around the poultry houses and mortality composting areas were generally clean. However, the inspection team observed residual manure on the concrete pad located on the north end of the southern manure storage facility (Photographs 10 and 11).

Additional Production Area Requirements for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs (Subparts C and D)

- N/A 49. All open surface impoundments and terminal storage tanks have depth markers which clearly indicate the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event? [40 CFR 412.37(a)(2)] [7 DE Admin. Code § 7201-9.5.6.4.3.1.1.3.4.1]
The facility does not have any liquid wastewater impoundments.
- Yes 50. Mortalities remain in the production area until disposal, are not disposed in liquid manure or process wastewater treatment systems, and are handled to prevent discharge of pollutants to surface waters? [40 CFR 412.37(a)(4)] [DE GP1 Part II.A.6]
Mortalities are composted in the mortalities composting shed (Photograph 10).
- N/A 51. If manure is stockpiled in the production area for more than 14 days, is it under cover in an approved Manure Storage Structure? (stockpiling must be conducted and positioned in accordance with State Technical Standards)? [DE GP1 Part I.G.35]
According to the facility operator, the facility does not stockpile manure.

Additional Production Area Comments:

The inspection team made the following observations regarding the stormwater basin:

- Residual manure on the concrete pad located on the north end of the south manure storage building (Photographs 10 and 11).
- Discoloration in standing water located in the stormwater drainage west of the manure storage building (Photograph 16).
- A layer of algae growth and/or duckweed was observed on the surface of the stormwater basin (Photographs 24 and 25).

Attachment A – Site Map



Attachment B – Photograph Log



Photograph 1. Overview of the facility, view from the northeastern corner, near the facility entrance.



Photograph 2. View of the northern wall of Poultry House 8 from the east. The solar panels (red arrow) run along the northern edge of the facility and have a drainage ditch underneath them.



Photograph 3. Drainage ditch underneath solar panels along the northern edge of the facility.



Photograph 4. View of the northern wall of the Poultry House 8 from the west. The solar panels (red arrow) run along the northern edge of the facility and have a drainage ditch underneath them.



Photograph 5. View of the western edge of the facility, taken from the north.



Photograph 6. View of the area between Poultry Houses 7 and 8. A drainage and a culvert (red arrow) convey runoff from the roof and the areas surrounding the houses to the western edge of the facility.



Photograph 7. Close-up view of the drainage between Poultry Houses 7 and 8. Standing water (red circle) was observed in the drainage.



Photograph 8. View of the southern wall of Poultry House 7. A drainage and a culvert (red arrow) convey runoff from the roof and the areas surrounding the house to the western edge of the facility.



Photograph 9. View, looking west, of the area between the southern wall of Poultry House 7 and the northern walls of Poultry Houses 1-6.



Photograph 10. View of the southern manure storage building and the concrete pad at the northern end of the building. Residual manure was observed on the concrete pad (red arrows). Mortality composting is performed in the composter located on the eastern edge of the building (yellow arrow).



Photograph 11. Close-up view of the residual manure (red circles) on concrete pad on north end of the southern manure storage building.



Photograph 12. View of the northern manure storage building and the concrete pad on the southern end of the building.



Photograph 13. View of hay and litter stored in the southern manure storage building.



Photograph 14. Downgradient view of the stormwater drainage on the west side of the southern manure storage facility that conveys flows from the manure storage buildings to the stormwater basin.



Photograph 15. Upgradient view of the stormwater drainage located west of the southern manure storage facility that conveys flows from the manure storage facilities to the stormwater basin.



Photograph 16. Alternative view of the stormwater drainage and standing water shown in Photograph 15. The inspection team observed discoloration in the standing water.



Photograph 17. Upgradient view of the stormwater drainage shown in Photographs 14-16. The southern manure storage facility is visible in the background. The stormwater drainage conveys flows from the manure storage facilities to the stormwater basin.



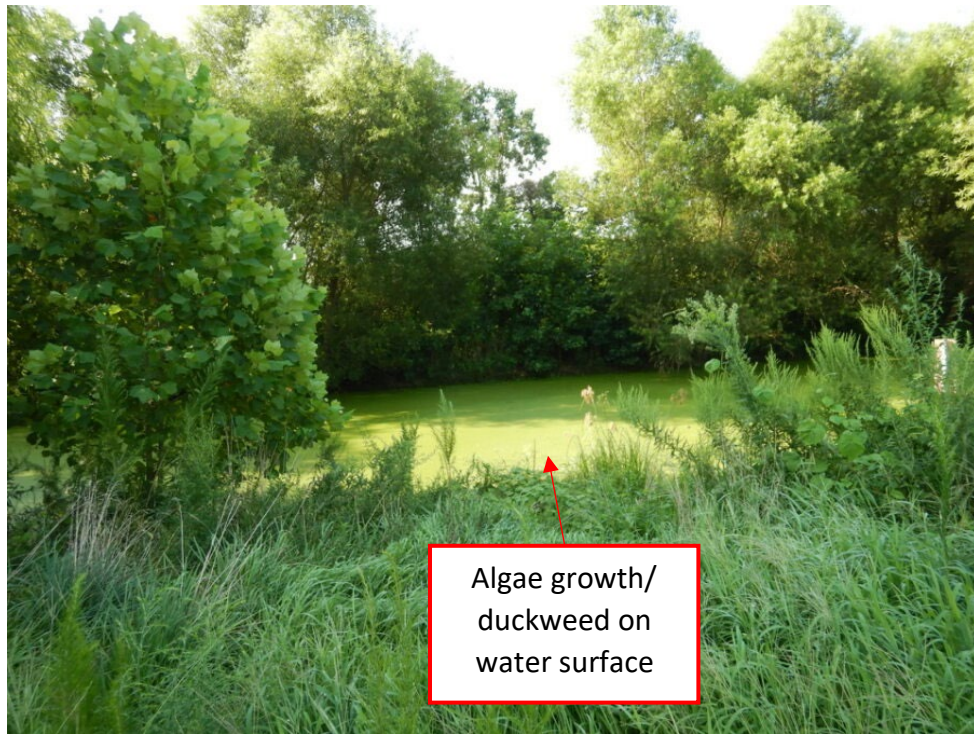
Photograph 18. Continuation of the drainage that originates west of the manure storage buildings along the eastern edge of the facility.



Photograph 19. View, looking west, of the area south of Poultry Houses 1 through 6. The red arrow shows the location of the stormwater retention pond on the south side of the facility.



Photograph 20. Eastern edge of the stormwater basin and surrounding vegetation.



Photograph 21. View of the stormwater basin on the south side of the facility. The surface of the water is covered by a layer of algae and/or duckweed.



Photograph 22. Second view of the stormwater basin on the south side of the facility. The surface of the water is covered by a layer of algae and/or duckweed.



Photograph 23. View of the area between Poultry Houses 1 through 2 from the south. Stormwater runoff flows south through the drainage to a culvert (red arrow) that conveys it to the stormwater basin.



Photograph 24. Close up view of the culvert in the drainage between Poultry Houses 1 and 2.



Photograph 25. View, looking north, of the area between Poultry Houses 3 and 4. Stormwater runoff flows south through the drainage to a culvert (red arrow) that conveys it to the stormwater basin.



Photograph 26. View of the area between Houses 3 and 4 from the south.



Photograph 27. View, looking north, of the area between Poultry Houses 4 and 5. Stormwater runoff flows south through the drainage to a culvert (red arrow) that conveys it to the stormwater basin.



Photograph 28. View, looking north, of the area between Poultry Houses 5 and 6.



Photograph 29. View, looking east, of the area south of Poultry Houses 1 through 6. The red arrow shows the location of the stormwater basin on the south side of the facility.



Photograph 30. View of the drainage culvert (indicated by the red arrow) between Poultry Houses 3 and 4. Stormwater runoff flows south through the culvert to the stormwater basin.



Photograph 31. View of fuel tanks between Poultry Houses 3 and 4.