

REPORT OF COMPLIANCE EVALUATION INSPECTION
at
Guthrie Center Egg Farm

Guthrie Center, Iowa 50115

NPDES PERMIT NUMBER: IA-0075361

September 19-20, 2022

BY
U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)

INTRODUCTION

I performed a Compliance Evaluation Inspection (CEI) at the Guthrie Center Egg Farm near Guthrie Center, Iowa, from September 19-20, 2022. The inspection was authorized by Section 308(a) of the Federal Water Pollution Control Act, as amended. This narrative report presents the findings of the inspection.

PARTICIPANTS

Guthrie Center Egg Farm
John Knobbe, Complex Manager (515) 314-7768
Email: jknobbe@roseacre.com
Sidney Bailey, Assistant Complex Manager
Shawn Stonehocker, Compliance Officer
Kevin White, Regional Complex Manager, Rose Acre Farms

U. S. Environmental Protection Agency (EPA)
Joe Heafner, Life Scientist (913) 551-7091
Email: heafner.joseph@epa.gov

PROCEDURES

On September 14, 2022, I contacted Mr. Knobbe and stated that I would be conducting an inspection at the Guthrie Center Egg farm the next week. I stated that I would be conducting sampling starting on September 19, 2022. Mr. Knobbe stated at that time that the facility had been land applying effluent and was not discharging. I then stated that I would still anticipate sampling if the facility was discharging during the inspection. Mr. Knobbe and I then discussed the facility's bio-security protocol. I informed Mr. Knobbe that there was no reason for me to be

in or around the barns near the laying hens. He stated that I was not to be around any other birds or waterfowl within 72 hours of my arrival and that I would have to wear boot covers while on the facility. I stated that those conditions were acceptable and then explained the Region 7 bio-security protocol that I would also follow during and after the inspection. During our phone conversation, I also provided a Microsoft One Drive link that could be used to upload any documents requested during the inspection. I then stated that I would meet with him during the late morning on September 19, 2022. I arrived at the Guthrie Center Egg Farm at approximately 11:30 am on September 19, 2022, and met with Mr. Knobbe. At that time, Mr. Knobbe stated that the facility was not discharging as the egg breaking facility was down and all effluent was being diverted to the storage lagoons. At that point, I stated that since the facility was not discharging, I would not set up sampling devices and I would return on September 20, 2022 to conduct the inspection. On September 20, 2022, I returned to the facility and again made contact with Mr. Knobbe. He introduced Mr. Bailey, Mr. Stonehocker, and Mr. White. I re-introduced, presented my credentials, and explained the purpose and procedures of the inspection. These procedures included a facility walk-through with photos (attachment 1), a check of the self-monitoring records, and an exit interview. This inspection was to be a compliance sampling inspection; however, due to the facility not discharging at the time of the inspection, it was changed to a non-sampling inspection.

FACILITY DESCRIPTION

The Guthrie Center Egg Farm is located approximately one mile northwest of Guthrie Center, Iowa (attachment 2). The facility consists of 14 barns with the capacity to hold approximately 1.6 million laying hens. At the time of the inspection there was approximately 400,000 hens at the facility. Manure from the laying hens is collected underneath the barns and is removed on a bi-annual basis. Manure is sold under the authority of the Iowa Department of Agriculture and Land Stewardship (IDALS).

The facility also has an egg washing system, egg breaking, and egg drying system. Process wastewater from the egg washing, and egg breaking facilities is treated by a four-cell lagoon system. Cells 1 and 2 are aerated. From Cell 2, process wastewater flows to a clarifier, then can be discharged directly to the South Raccoon River located south of the facility or diverted to either Cells 3 or 4. Process wastewater from Cells 3 and 4 can be land applied to fields east and west of the facility either by center pivot irrigation or traveling gun. Land application is authorized under an Iowa wastewater land application construction/operations permit (attachment 3).

The WWTF's National Pollutant Discharge Elimination System (NPDES) Permit was issued on October 1, 2019 (attachment 4). The permit expires on September 30, 2024. The permit was amended on March 1, 2022, to add annual average total nitrogen mass limits, added a requirement to submit a new nutrient removal feasibility study for total phosphorus, removed the compliance schedule for chemical oxygen demand and makes the final effluent limits effective as of the date of the amendment.

FINDINGS AND OBSERVATIONS

The following findings were noted during the facility tour and record review. These findings were discussed with Mr. Knobbe during the exit meeting.

Self-Monitoring Data Review:

I obtained a spreadsheet of the NetDMR data for the Guthrie Center Egg Farm from January 2018, through August 2022, and reviewed the data. During the inspection, I also obtained electronic copies of the facility's Discharge Monitoring Reports for the years 2018 – 2022. After the completion of the review, I placed both the NetDMR spreadsheet and the DMRs within the ECAD electronic file system.

The table below represents effluent violations that were noted during the review of the DMRs.

	BOD	Limit (lbs/day)	Ammonia	Limit (mg/L)	Total Suspended Solids (TSS)	Limit (mg/L)	pH	Limit (S.U.)
Jun-18	40.17/79.69	30/45						
Jul-18							11	6 to 9
Aug-18			4.39	3.4				
May-19	90.55/299.47	30/45						
Jul-19								
Aug-19					269.61	30/45	12	6 to 9
Sep-19			4.27	3.8	419.075	30/45		
Mar-20							10	6 to 9
Jun-20							11	6 to 9
Jul-20							11	6 to 9
Aug-20					33/51.5	30/45		
Nov-20							11	6 to 9
Jan-21							10	6 to 9
Sep-21							5.5	6 to 9
Dec-21					32.03/90	30/45		
Jun-22	49.105	45			32.71	30	6	6.5 to 9
Jul-22					47	45		

During the review, I noted that there were several data entry errors that lead to reported violations of effluent limits. I noted that during the month of May 2019, it appears that the influent and effluent numbers were transposed. Data entry errors were also noted during July 2019, April 2020, June 2022, and July 2022. In an email to Mr. Bailey on October 11, 2022, I suggested that the facility contact IDNR to discuss the best way to fix the data entry errors.

I also noted that the facility reported No Discharge from December 2018 – April 2019. The facility also entered sampling data for this time frame. I spoke with Mr. Bailey and he stated that he had spoke to IDNR on this issue previously. I stated that he should correct the DMRs and resubmit to IDNR to correct the record. Mr. Bailey in an email on October 6, 2022, that he had corrected the DMRs and resubmitted them to IDNR.

Land Application

As stated earlier, the facility has a permit issued by IDNR for the land application of process wastewater when not discharging to the South Racoon River. There are two sites that are authorized to receive the process wastewater. Site #2 is located east of the facility and Site #1 is located northwest of the production barns. Land application at Site #2 is by traveling gun, while a center pivot irrigation system is used at Site #1.

During the inspection, Mr. Bailey provided the land application data from 2020 through 2022 (attachment 5). I reviewed the data then placed the data into the ECAD electronic file system.

Operational Issues and Observations

I observed all areas of the facility's wastewater treatment system during the inspection (photos 1-6). I noted that Cells # 3 and #4 were significantly low at the time of the inspection. Mr. Knobbe stated that the facility recently completed repairs to the synthetic line of Cell #4 and that is why it was drawn down.

Since the facility was not discharging at the time of the inspection, I did not observe the receiving stream. Mr. Knobbe stated that the facility has not been discharging for a while as the egg breaking facility had been down for the week prior to the inspection. He also stated that since there was capacity in the storage lagoons, the facility would not be discharging and would be refilling the storage cells.

During the inspection, I noted that land application site #2 was being used as a temporary storage/composting area for manure from the production barns (photos 9-12). Mr. Knobbe explained that the facility experienced an outbreak of avian influenza during the spring of 2022, all the laying hens were removed from the barns along with the manure. He stated that he worked with IDALS and it was determined that the best solution was to compost the manure then they would be able to sell the manure under the IDALS permit. He stated that the manure was composted at a 2 to 1 ratio of woodchips to manure. Mr. Knobbe stated that all of the manure has been sold and they are in the process of having the manure hauled away. I noted during the inspection that process wastewater that contacts the manure flows in a southerly direction and into a grass field south of the land application site. During the inspection, I observed the grass field and noted that there was no traces of manure or process wastewater within the grass field (photo 12). Mr. Knobbe stated that he hoped that the manure would be completely removed by the end of fall 2022. I cautioned Mr. Knobbe that if process wastewater from the manure pile was to leave runoff the property, that this could be considered an authorized discharge and a violation of the NPDES permit.

Summary

The facility has seen sporadic effluent violations for BOD, TSS, Ammonia, and pH over the past 4 years. The facility should continue to refine their process when determining when to discharge or land apply to avoid effluent violations in the future.

The facility needs to continue to reduce the amount of composted manure that is stored on the land application #2 site. If manure removal is anticipated to take longer, the facility will need to have controls in place to contain process wastewater from the area.

**JOSEPH
HEAFNER**

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JOSEPH HEAFNER
Date: 2022.10.18
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Joe Heafner
Life Scientist

**NICOLE
MORAN**

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NICOLE MORAN
Date: 2022.10.25
13:35:30 -05'00'

Nicole Moran
Section Chief

Attachments:

1. Digital Photographs with Photo Log (8 pages)
2. Facility Satellite Photos/Maps (3 pages)
3. Iowa State Land Application Permit (9 pages)
4. NPDES permit issued on October 1, 2019 (15 pages)
5. Land Application Information (20 pages)