



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch

2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334
404-463-1511

APR 02 2019

Persons who commented on
Draft NPDES Permit No. GAJ010369

RE: EPD Response to Comments
Fieldale Farms Poultry Rendering Facility
LAS Permit No. GAJ010369
City of Eastanollee, Stephens County

Dear Sir/Madam:

Thank you for your comments regarding the permit issuance for the Fieldale Farms Poultry Rendering Facility Land Application System (LAS) permit. Attached is a summary of comments from the public and our responses to the issue raised. In addition, we have attached the Permit Revisions and Fact Sheet Revisions documenting the changes made to the attached permit. We appreciate your interest in this matter.

After consideration of your comments, EPD has determined that the permit is protective of water quality standards and we have issued the permit.

If you have any questions, please contact me at 404-463-4934.

Sincerely,

Audra Dickson, Manager
Wastewater Regulatory Program
Watershed Protection Branch

AHD
Attachment

**Public Comments and EPD Responses on Draft LAS Permit
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COMMENT RECEIVED	EPD RESPONSE
1. I respectfully request a public hearing be held in Stephens County. 2. Why was the public not notified sooner? Notice was received in the Toccoa Record dated January 17 and the meeting was at 7:00 pm on January 17, not even 24 hours-notice.	On November 28, 2018, EPD posted public notice No. 2018-22ML announcing a public hearing for the Fieldale Farms Corporation, Permit No. GAJ010369. Fieldale Farms Corporation posted a public notice for the hearing in The Toccoa Record newspaper which ran from December 13, 2018 to January 17, 2019. EPD held a public hearing at 7:00 p.m. on January 17, 2019, at the Old Historic Courthouse Courtroom, located at 37 West Tugalo Street Toccoa, GA 30577.
1. Can you tell us how this permit differs from the permit and operation that have been in place? 2. Reissue with substantial modifications from previous permit. What are the substantial modifications? 3. Remember issues at Wilbros. A representative from Fieldale reported no changes to the permit on the radio; however the fact sheet clearly indicates there are substantial changes in the draft permit. 4. How is the waste currently handled and where is it taken today?	In addition to the draft permit, EPD prepared a draft fact sheet and summary of changes documenting the substantial changes to the draft permit. The application, draft permit, fact sheet, and summary of changes are available for public review. EPD's intended use of the phrase "substantial changes" which appears on the first page of the fact sheet is to identify a draft permit that may include additional fields, changes in the discharge limits or application rates, changes in monitoring locations, addition of special conditions, and/or any other change from the current permit to the draft permit that may be considered substantial. The draft permit for Fieldale Farms Corporation contains substantial changes from the current permit. There were two (2) substantial changes in the draft permit. Two

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	(2) new sprayfields were added to reduce the hydraulic loading to the entire land treatment system and a compliance schedule was included to upgrade the existing wastewater treatment plant. Other changes are documented in the permit file.
1. The permit application says area of total sites as 397.27 acres but the EPD fact sheet says 896 acres. 2. Part 14: 868 acres are reported by applicant. Has the State confirmed this acreage? Is the statement incorrect? please adjust the acreage references below to coincide with the correct area.	The draft fact sheet had a typographical error regarding the total area of the site. The current permit authorizes land application of the treated wastewater to 68.1 acres of grass land and 47.7 acres of forested land (2007 DDR) for a total of 115.8 acres. With the addition of the two new fields, the draft permit authorizes land application of treated wastewater to 82.95 acres of grass land and 47.7 acres of forested land for a total of 130.65 acres.
1. Besides the awful smell of the wastewater, my concerns are for the wildlife inhabiting this area and the pollutants building up in the groundwater from the continuous discharge of affected water. The smell alone has affected the communities way of life. It makes a day outside unbearable. As a 29 year Eastanollee resident, It is becoming increasingly difficult to tolerate. 2. Currently this facility emits a constant odoriferous stench from the rendering operations carried out at this facility.	EPD does not regulate odors that may come from the processing plant or the land treatment system. EPD is responsible for issuing protective, legal and enforceable permits in accordance with the applicable Rules. Permits are based on the pollutant data submitted in the application and along with other supporting documents and the approved DDR. Odors from the wastewater ponds in the land treatment system may occur due to a phenomenon known as pond turnover. Wastewater in treatment ponds is known to stratify due to the varying water temperatures and their densities. As the air temperature changes, the deeper water mixes with the surface water resulting in a release of odorous compounds from the ponds. Pond turnover, typically occur in the spring and fall.

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3. The odor is usually most notable on days with poor atmospheric ventilation. 4. Why is the State only concerned with issues concerning water quality, and why will the State of Georgia not consider entertaining questions regarding Quality of Life issues such as noxious odors that are emitted from the spray field applications? 5. What guarantees do the citizens of Stephens County have that the air will not be polluted and the odor will not affect the citizens? We just got rid of Wilbros which polluted the air.	However, pond turnover could occur more frequently if a shallow wastewater treatment pond is not maintained properly. The new ponds are designed to be deeper and, if maintained properly, should minimize odors emitted from the wastewater ponds throughout the year. However, EPD expects odors to be emitted from wastewater ponds in the spring and fall due to the pond turnover phenomenon. If a continuous odor is present from the wastewater treatment ponds it could be an indicator of septage wastewater being land applied as a result of several factors, such as a build-up of excessive sludge in the ponds that should be removed as part of an ongoing operational and maintenance plan. The presence of excessive odors from the wastewater treatment process can be an operational indicator for the wastewater treatment system operator.
Extreme rain events which have become all the more common, including hurricane and tropical storms' inland effects can cause massive environmental disasters in their aftermath. As the consequences of Hurricane Florence are going to be felt for years in North Carolina, we need to learn from that. Hurricane Michael has shown that even the interior of Georgia is at risk from damage as our hurricane season becomes more intense.	Comment noted.

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While the new regulations being proposed could help to ensure better use of LAS systems in the future they don't go far enough to halt these kind of potentially harmful projects. This kind of abuse needs specific regulations that curtail the possibly devastating impacts these systems can have.	EPD is unaware of any new regulations being proposed for land disposal or treatment systems in the state of Georgia. EPD is in the process of updating the engineering design development guidance for spray and drip land disposal systems.
The location of this facility is also very poor. In an area with so much rain and constantly wet soils could easily lead to failure of the system due to mounding and then mass runoff.	Constantly saturated soils due to excessive precipitation could limit the use of the land treatment system. Land treatment systems are generally designed with operational storage ponds providing a facility with flexibility to account for precipitation occurring throughout the year. Storage ponds allow a facility to retain treated wastewater when the soil conditions limit the amount of wastewater that can be applied due to saturated soils.
Fieldale Farms has a history of noncompliance and violations, any past issue should be proven to be completely fixed before any new permit is issued or even considered.	On February 23, 2016, EPD issued a Notice of Violation to Fieldale Farms Corporation for the exceedence of the nitrate-nitrogen concentration in the downgradient monitoring wells D3, D5, and D6. On March 10, 2016, EPD received a Corrective Action Plan from Fieldale Farms Corporation to investigate the cause of the violations. On February 21, 2017, EPD had a follow-up meeting with Fieldale Farms Corporation and in March 2017, Fieldale Farms Corporation submitted a DDR proposing to upgrade the wastewater treatment system and add new sprayfields to address the permit noncompliance and violations. EPD is proposing to re-issue an existing permit to Fieldale Farms Corporation for an existing land treatment system and the permit

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	is required to implement the corrective actions. The draft permit has specific conditions requiring Fieldale Farms Corporation to replace and upgrade the wastewater treatment system addressing the recent noncompliance and violations.
Groundwater flow and proof of adequate monitoring capability needs to be demonstrated before this permit is issued. Asking for this information after the fact is creating a rubber stamp system where the permit has been issued without background data.	Part II.C.3 of the proposed permit requires the permittee to submit a comprehensive evaluation of the current site conditions including potentiometric maps to confirm groundwater flow direction. The land treatment system currently has several groundwater monitoring wells which are used to evaluate the site conditions and determine compliance with the permit. The draft permit requires Fieldale Farms Corporation to continually evaluate the land treatment system and perform an extensive groundwater evaluation determining if additional groundwater monitoring wells are necessary.
1. If the groundwater cannot accept the waste will the permit be revoked? 2. How will control of application be applied by EPD, when water cannot be accepted by the ground? This company has shown a lack of self-control for application and been found in violation in the past.	EPD will take appropriate enforcement actions to ensure the permit is complied with. Part II.B.1 of the draft permit included the following language requiring Fieldale Farms Corporation to comply with issued permit, "The permittee must comply with this permit. Any permit noncompliance is a violation of the State Act, and the Rules, and is grounds for: a.Enforcement action; b.Permit termination, revocation and reissuance, or modification; or c.Denial of a permit renewal application."

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Will EPD be verifying the expanded groundwater monitoring system and vegetated areas represented on the submitted sitemaps at 6 months?	EPD continually reviews the submitted Discharge Monitoring Reports and Operational Monitoring Reports submitted by Fieldale Farms Corporation. In addition, EPD will review the submitted site evaluation and potentiometric maps.
Average Flow: 250,000 GPD stated. What is the current output?	The March 2017 Design Development Report (DDR) submitted by Fieldale Farm Corporation states a daily influent (to the wastewater treatment system) flow of 250,000 gallons/day and a daily effluent flow of 196,460 gallons/day.
Phase II and Phase III will be completed as funding is available. Will the GPD output increase with each Phase?	The 2017 DDR submitted and approved by EPD in the draft permit does not authorize an increase in the volume of treated wastewater to be land applied for disposal. The approved DDR only allows for wastewater treatment upgrades with the addition of two new spray fields.
1. 250,000 gallon of wastewater flows into an aerated pond. This states the quantity of water that flows into the pond, but does not state the rate at which the wastewater flows into the pond. At what flow rate does the wastewater flow into the aerated pond? 2. What is the capacity of the storage pond? 3. What happens with the overflow from the storage	The existing wastewater treatment system is designed to treat 250,000 gallons per day. The existing wastewater treatment system is comprised of screening for solids removal, followed by flow equalization. Wastewater then travels to a series of lagoons for biological treatment (pond nos. 2 and 3). The facility is also equipped with an evaporative pond (pond no. 5) and storage lagoon (pond no. 6). Lastly, pond no. 4 is an irrigation and storage lagoon as the final stage prior to land application. The flow rate to each component of the treatment system and wastewater pond in the treatment system will vary depending on

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pond when wastewater input and rainwater input exceed the capacity of the storage pond?	site conditions such as precipitation, daily operations, etc. Attached is Table 7.1 of the March 2017 submitted DDR detailing the Process Design Criteria for the Wastewater Treatment System.
1. What is the GPD equivalent (or the stated application rate of 2.33 inches/week? 2. Spraying is only prohibited while it is actively raining. Why is ground saturation during frequent and extended periods of rain not taken into consideration to determine when is inappropriate for the spraying activities to occur?	Attached is Table 4.2 of the March 2017 submitted DDR detailing the Water Balance Calculations providing the maximum hydraulic wastewater loading to the site for each month.
1. Does the State of Georgia confirm these levels of pollutants they are allowing to be introduced into the local environment are safe and acceptable levels of exposure for the citizens of the State of Georgia and Stephens County? 2. Does the State of Georgia agree that 7 compliance wells across the spray area are a sufficient number of wells to provide sufficient monitoring of groundwater?	EPD is responsible for issuing protective, legal and enforceable permits in accordance with the applicable Rules. Permits are based on the pollutant data submitted in the application and along with other supporting documents. EPD reviews and approves DDRs, including the proposed groundwater monitoring wells. Part II.A.9.a and .b of the proposed permit has been revised to include the following language, consistent with the all land treatment system permits issued by EPD, "a. If any groundwater samples taken from the groundwater monitoring wells at the land treatment system are above the primary maximum contaminant levels for drinking water the permittee shall immediately develop a plan which will ensure that the primary maximum contaminant levels for drinking water are not exceeded. b. If any pollutants

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	which are being discharged to the land treatment system are detected in the groundwater samples taken from the compliance monitoring wells at the land treatment system in amounts or concentrations which could be toxic or otherwise harmful to humans or biota if those pollutants mingle with waters of the State, then the permittee shall immediately develop a plan which will reduce the amounts or concentrations of the pollutants to ensure they are not toxic or otherwise harmful to humans or biota if those pollutants mingle with waters of the State. The plan(s) will be implemented by the permittee upon EPD approval.”
These groundwater compliance wells are to be monitored at a frequency of once per quarter, or once during a 3 month period. Does the State of Georgia believe this is frequent enough to monitor daily outputs of the proposed 250, 000 gallons at wastewater, per day, and any spray fluctuations that may occur, on a property which is self-monitored?	Based on the data submitted and reviewed by EPD, the frequency of the ground water monitoring is appropriate at this time. However, if submitted data indicated a need for increased sampling, EPD could request or modify the permit to include increased monitoring.
Soil monitoring requirements are only required to be performed annually during the fourth (4th) quarter of each year. Does the State of Georgia agree this frequency is often enough to provide a safe environment for the citizens of the State of Georgia and Stephens County? Where are the soil samples from the how many are taken across the spray field area?	As a standard permit condition, individual land treatment system permits issued in the last several years are all required to perform, at a minimum, annual soil monitoring to adequately monitor the site conditions. Soil samples are taken in December on each of the site's major soil series. Since there is only two (2) major soil series on the LAS site, there are two (2) samples taken. As a means of tracking nitrate migration in the site soils; Fieldale Farms Corporation began soil sampling in each of the ten (10) fields in 2007. Soil

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	samples are collected at six (6) inches, then at one (1) foot intervals, down to five (5) feet. This gives a soil sample of six (6) per field, for a total of 60 samples. These samples are collected in April.
Surface water monitoring is only required quarterly, or once every three months. Does the State of the Georgia believe this frequency of self-monitoring is sufficient for the safety and environment and for the citizens of the State of Georgia?	Based on the data submitted and reviewed by EPD, the frequency of the surface water monitoring is appropriate at this time. However, if submitted data indicated a need for increased sampling, EPD could request or modify the permit to include increased monitoring.
At what frequency does the State of Georgia perform actual monitoring procedures using qualified State of Georgia personnel or witness the self-monitoring procedures of the applicant?	EPD has the authority to perform monitoring and/or witness monitoring performed by the permittee at any time during the permit term.
What guarantee's do the citizens of Stephens County have that this waste will not flow into the streams and further into Lake Hartwell, contaminating our beautiful lake.	Land treatment systems are designed as no point source into surface waters of the state. Additionally, land application system permits do not authorize point source discharges into waters of the state. Part II.A.10 of the proposed permit has been revised to include the following language, consistent with the all land treatment system permits issued by EPD, "Land treatment system permits are not point source discharge permits to surface water regulated under the CWA, but nonpoint source permits regulated under State law. The land treatment system must be operated and maintained to ensure there is no point source discharge(s) of

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1. Fieldale Farms is an industry and they are not adequately mitigating issues related to their industrial farming and processing practices. Stephens County is far less rural than it had been 20 years ago. We can't be the dumping grounds for commercial agriculture. Can't this waste be cooked in sealed massive containers and used to generate heat to be used as a power source? Can't Fieldale be guided into a partnership with an energy provider toward that end? There must be some alternative solutions besides spraying rendering waste over the same area over and over. BMW is always looking for alternate energy sources and unique solutions, would they be interested in a partnership? Would Clemson University or Georgia Tech be able to provide some guidance? We have some great innovation in this region and I would love to see innovative partners help bring local solutions. They can't help if nobody asks them to. 2. Why was Stephens County picked as the site for this waste disposal?	pollutants to surface waters of the State.” Comment noted. EPD does not have the regulatory authority to require Fieldale Farms Corporation to form a partnership with a third party. According to Fieldale Farms Corporation, Stephens County was chosen for two (2) reasons. One of which is the proximity of the rendering processing plant. The other is that Fieldale Farms Corporation already owned the disposal site, when the rendering facility was built.

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EPD stated they do not regulate local ordinances and that is wrong.	EPD's public hearing presentation had the following language: "The comments made tonight should be limited to water quality issues specific to the Fieldale Farms Corporation LAS draft permit. EPD has no regulatory oversight over local planning and zoning ordinances, as this is overseen at the local level." The state rules governing land treatment and land disposal systems do not have regulatory oversight over local planning and zoning ordinances.
Can a permit term be reduced to 1 year?	The term of the permit cannot exceed five (5) years. Fieldale Farms Corporation is expected to comply with the terms of the permit for the duration of the permit; hence EPD does not believe a one (1) year permit is necessary at this time.
Mist from the land treatment system site drifts onto the commenters property and it has ruined the clear coat of the truck.	Fieldale Farms Corporation has informed EPD that Leland Cypress Green Giant (an evergreen known for its rapid growth) trees have been planted along Hwy. 145 to address the concerns of mist drifting offsite.

Attach

Table 7.1 of the March 2017 submitted DDR detailing the Process Design Criteria for the Wastewater Treatment System
 Table 4.2 of the March 2017 submitted DDR detailing the Water Balance Calculations

TABLE 4.2
FIELDALE FARMS
TOCCOA, GEORGIA

WATER BALANCE CALCULATIONS

Month	Days/Month	(A.) Evapotranspiration In./Month	(B.) Percolation In./Month	(C.) Precipitation In./Month	Hydraulic Loading In./Month	D Allowed (E.) In./Month	In./Week
January	31	0.37	20.01	7.44	12.94	11.2	2.5
February	28	0.51	18.08	7.43	11.16	10.1	2.5
March	31	1.28	20.01	9.98	11.13	11.2	2.5
April	30	2.57	19.37	7.19	14.75	10.8	2.5
May	31	4.07	20.01	7.17	16.91	11.2	2.5
June	30	5.26	19.37	6.02	18.61	10.8	2.5
July	31	6.07	20.01	6.90	19.18	11.2	2.5
August	31	5.58	20.01	6.64	18.95	11.2	2.5
September	30	3.97	19.37	6.18	17.16	10.8	2.5
October	31	2.29	20.01	5.58	16.72	11.2	2.5
November	30	1.05	19.37	5.64	14.78	10.8	2.5
December	31	0.47	20.01	7.32	13.16	11.2	2.5
Total	365	33.49	235.63	83.49			

- A. Thornwaite average monthly evapotranspiration reference "Criteria for Slow Rate Land Treatment" State of Georgia, Department of Natural Resources Environmental Protection Division, Water Protection Branch March 1992.
- B. Based on number of days per month, a saturated vertical hydraulic conductivity of 0.00019 cm/s (0.269 in/hr and a design safety factor of 10.
- C. Five year return monthly precipitation Period 1951 - 1980
- D. The maximum allowed hydraulic wastewater loading is not to exceed 0.36 in/day or 2.5 in/week.
- Water balance calculations based on Climatological Data Annual Summary, Georgia 1986 Volume 90, NOAA for years 1951 - 1980.

TABLE 7.1
PROCESS DESIGN CRITERIA
WASTEWATER TREATMENT SYSTEM

Flow Rate	250,000 Gal/Day
Flow Equalization Basin	
Depth	12 Feet
Volume	67,000 Gallons
Retention Time	12 Hours
Dissolved Air Flotation Unit	
By-Product Holding Tanks (2)	
Depth	15 Feet
Volume	12,000 Gallons
Primary Aeration Pond # 1	
Surface Area	1.0 Acres
Depth	15 Feet
Volume	3.3 MG
Retention Time	13.2 Days
Second Aeration Pond # 2	
Surface Area	0.6 Acres
Depth	5 Feet
Volume	0.8 MG
Retention Time	3.2 Days
Aeration Pump Power	2 @ 30 HP
This pond to be filled in when new Pond #2 is in service	
New Pond #2	
Surface Area	1.3 Acres
Depth	15 Feet
Volume	4.6 MG
Aeration Blowers	2 @ 75 HP Each
Retention Time	18.4 Days

Un aerated Treatment Pond # 3

Surface Area	1.5 Acres
Depth	5 Feet
Volume	2.3 MG
Retention Time	9.2 Days
Surface Aeration	2 @ 10 HP
This pond to be filled in when Pond #3 is in service	

New Pond #3

Surface Area	1.05 Acres
Depth	15 Feet
Volume	3.5 MG
Surface Aeration	2 @ 75 HP
Retention Time	14 Days

Un aerated Treatment (Irrigation) Pond # 4

Surface Area	1.5 Acres
Depth	5 Feet
Volume	2.3 MG
Retention Time	9.2 Days
This pond to be filled in when Pond #4 is in service	

New Pond #4

Surface Area	1.05 Acres
Depth	15 Feet
Volume	3.5 MG
Mixer	1 @ 15 HP
Retention Time	14 Days

Evaporative Condensing Pond # 5

Surface Area	1.0 Acres
Depth	5 Feet
Volume	1.4 MG
Retention Time	5.6 Days

Storage Pond # 6

Surface Area	1.8 Acres
Depth	16 Feet
Volume	8.1 MG
Retention Time	32 Days