Written Public Comments Submitted after Public Hearing
Regarding renewal of General Permit DE 5000N/11– noticed on May 30, 2021
LARGE, MEDIUM, & DESIGNATED POULTRY CAFOS – MANURE GENERATION FACILITIES ONLY Deadline for public comments: Thursday July 15, 2021
Public Comments submitted to DNREC Surface Water Discharges Section

The following written comments were prepared for SHEN and local community organizations in anticipation of submitting to Delaware Department of Natural Resources and Environmental Control (DNREC) regarding the renewal of the NPDES General Permit for Large, Medium and Designated Poultry CAFOs (without land application). SHEN is a coalition of stakeholders in Sussex County working to ensure a clean, healthy environment for current and future generations. SHEN brings attention to environmental health threats and environmental justice issues in Sussex County by partnering with local businesses, non-profit groups, community ambassadors, and residents to hold local, state, and federal government accountable.

Documents reviewed in preparation of these comments include, but are not limited to, the current and proposed renewal permit and fact sheet, applicable state and federal regulations, reports, available public files, and regulations and standards cited in the proposed permit.

A. Background of Delaware Poultry Industry

1. Delaware Broiler/Poultry Production. According to the USDA National Agricultural Statistical Survey, Delaware broiler production was 250,500,000 birds in 2020.[1] The breakdown of poultry farms in Delaware between 2012 and 2017 indicates that the majority of Delaware poultry farms are located in Sussex County.[2]

Poultry	State	Kent	New Castle	Sussex
2017 Farms	602	145 (24%)	11 (1.8%)	446 (74%)
2012 Farms	672	119 (18%)	None	553 (82%)
2017 Poultry	262,807,807	68,820,439	1,031,700	192,955,668
2012 Poultry	211,576,121	37,533,471	None	174,042,650

In 2019, the USDA recognized Sussex County, Delaware as the largest broiler producing county in the entire country.[3]

[1] See: https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=DELAWARE
[2] See: https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Delaware/st10_2_0019_0019.pdf
[3] See: https://www.usda.gov/media/blog/2019/06/21/delaware-small-state-big-agriculture

> "Delaware produced about 263 million broilers in 2017. Sussex County, Delaware is the largest broiler producing county in the United States and Kent County, Delaware is in the top 15 broiler producing counties."

The Cape Gazette provided a history of poultry production in Delaware that started 100 years ago with one poultry barn to today's distinction of Sussex County, Delaware being the Number 1 poultry producing county in the nation and a billion dollar industry.[4]

> "Today on Delmarva, there are 10 processing plants, 13 hatcheries and 10 feed mills. Sussex County is ranked No. 1 among all United States counties in meat chicken production at about 200 million pounds per year. In 2017, three area poultry companies were ranked among the top 20 in the country based on weekly production by weight: Perdue Farms, Salisbury, Md., ranked fourth; Mountaire Farms, Millsboro, ranked sixth; and Allen Harim Foods, Seaford (now Millsboro) ranked 20th."

The size of poultry barns has increased dramatically in the past five years and the number of barns per 'facility' as reported in 2017 by the Dover Post:[5]

> "According to the National Agriculture Statistics Service, in the 1980s chicken houses were about 16,000 square feet, or 400 feet long and 40 feet wide. Today's chicken houses are usually 36,000 square feet, or 600 feet long and 60 feet wide."

Poultry barns that could house 20,000 broilers are being replaced with mega-sized barns that can hold 40,000 to 50,000 broilers each. Poultry production facilities proposed lately have 12 to 20 such barns per location which means each new poultry production facility would house.

> New barn style: 12 barns x 40,000 birds = 480,000 birds per facility
> Old barn style: 2 x 20,000 birds = 40,000 birds per facility

A new poultry production facility capacity is more than 10 times older style facilities. These larger production facilities are being proposed close to each other within rural agricultural communities with literally millions of broilers concentrated in a small geographical area as described in the Dover Post:[6]

> "There are eight chicken houses being built right now on a swath of land on Seashore Highway near Georgetown, across the road from Elmer's Market and Fat Daddy's BBQ. You'll find eight more off Route 16 on the western side of Ellendale, six on Rabbit Run Road in Bridgeville and six on Shortly Road near

[4] See: https://www.capegazette.com/article/mistake-kick-starts-billion-dollar-poultry-industry/187194
[5] See: https://www.doverpost.com/news/20170817/poultry-houses-bigger-than-ever
[6] See: https://www.doverpost.com/news/20170817/poultry-houses-bigger-than-ever

Georgetown, just to name a few. Over in Frankford, on Gum Road, you'll find over 20 chicken houses - with still more being built."

Number of birds = (8 + 8 + 6 + 20) barns x 40,000 birds/barn = 1,680,000 birds
Number of birds = (8 + 8 + 6 + 20) barns x 50,000 birds/barn = 2,100,000 birds

Figure 1 – Mega poultry facility 800 feet from Fat Daddy's BBQ Georgetown DE.

In 2014, more than 20 chicken houses are planned for a one square mile of land in Kent County, Delaware and represent an investment of approximately $400,000 per house. The one facility recently permitted for 22 structures represent an $8 million investment.[7]

"Delaware's Agricultural Secretary Ed Kee said two operators have received permits to build a total of 22 chicken houses: 10 at one site and 12 at another adjacent location on Woodyard Road off of Rt. 13."

Number of birds = 22 barns x 40,000 birds/farm = 880,000 birds
Number of birds = 22 barns x 50,000 birds/farm = 1,100,000 birds

[7] See: https://whyy.org/articles/delawares-growing-poultry-industry/

Figure 2 – Poultry complexes built east of Farmington on Woodyard Rd.

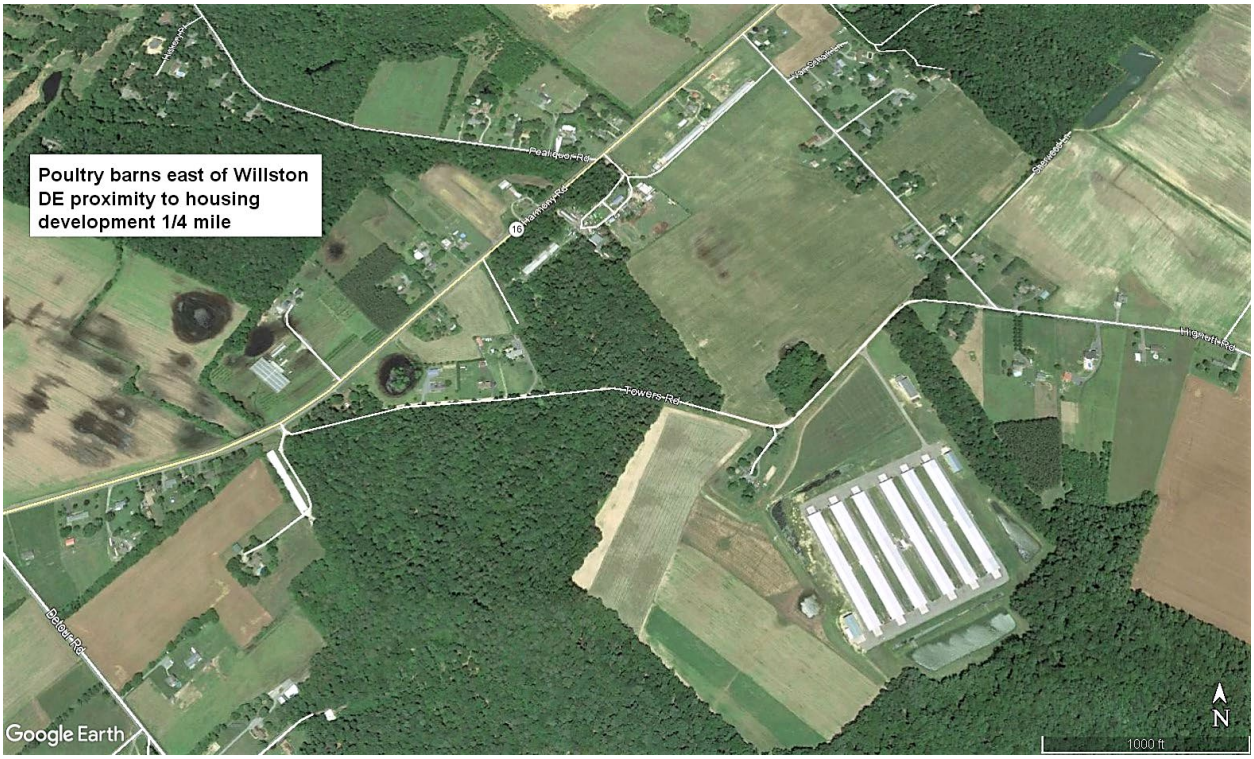

Figure 3 – Mega poultry complex built within quarter mile of residential area Willston DE

Figure 4 – Poultry barns between Scott's Corner and Greenwood, DE.

The trend towards larger poultry production barns and number of barns per facility is explained in this financial analysis published by WattAgNet back in 2009:[8]

> "Initial Investment. Examples of initial investments for new house construction are summarized in Table 1. Current cost for broiler houses in Georgia is around $9.00 per square foot but may be more or less depending on house type, pad costs and equipment used.
>
> Total costs for the 50-foot-wide houses for these examples exceed the costs of the 40-foot-wide houses by approximately 14 percent, but the 25 percent additional floor space provided by the wider houses results in a reduced cost of about 10 percent on a square foot basis.
>
> Four 50- by 500-foot houses would provide the equivalent floor space of five 40- by 500-foot houses but at a reduced cost. Using these numbers, four 50- by 500-foot houses would have an initial investment cost of $840,000 compared to $925,000 for the initial investment to provide the comparable floor space in five 40- by 500-foot houses (a saving of some $85,000 to the grower for the same floor space)."

[8] See: https://www.wattagnet.com/articles/28-cash-flow-checkup-for-new-construction

Setbacks to residential areas are dictated by each County in Delaware.[9]

- In New Castle and Kent Counties:
  - 100 feet from property lines
  - 300 feet from any dwelling not on the same property
  - 25 feet from wetlands
- In Sussex County:
  - 50 feet from property lines
  - 200 feet from any dwelling not on the same property
- DPI's Best Management Practices for Good Neighbor Relations:
  - 200 feet from the center of a public road
  - 100 feet from property lines
  - 400 feet from any dwelling not on the same property

2. Delaware Phase II Watershed Implementation Plan (WIP). The proposed renewal of the NPDES Poultry CAFO (no land application) General Permit (page 3 of 17) references the Watershed Implementation Plan as follows (emphasis added):[10]

> For Large and Medium Poultry CAFOs within the Chesapeake Bay watershed, BMPs have been identified in **Delaware's Phase II Watershed Implementation Plan (WIP)** as specific production area practices to meet Agricultural Waste Load Allocations (WLAs). Such BMPs may include, but are not limited to: Nutrient Management Compliance; Soil Conservation and Water Quality Plans; Heavy Use Poultry Area Pads; Livestock Waste Structures; Manure Relocation; Poultry Waste Structures; Mortality Composters; Streamside Grass Buffers; Streamside Forest Buffers; Wetland Restoration, and; Shoreline Erosion Control."

The USEPA and Region III States are working together to develop goals and milestones related to improved water quality in the Chesapeake Bay as explained by EPA:[11]

> "There are three phases of WIPs developed by the Bay jurisdictions. Phase I and Phase II WIPs were developed and submitted to EPA in 2010 and 2012, respectively. Both Phase I and Phase II WIPs describe actions and controls to be implemented by 2017 and 2025 to achieve applicable water quality standards. The Phase II WIPs build on the initial Phase I WIPs by providing more specific local actions. Phase III WIPs will be developed by jurisdictions based on a midpoint assessment of progress and scientific analyses that is currently underway through 2017. Phase III WIPs will provide information on actions the Bay jurisdictions intend to implement between 2018 and 2025 to meet the Bay restoration goals."

[9] See: http://dechickenchecklist.com/the-building-process
[10] See: https://dnrec.alpha.delaware.gov/watershed-stewardship/nps/chesapeake/phase-ii/
[11] See: https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-watershed-implementation-plans-wips

The Delaware WIP Program website includes the following information about the process:[12]

> "Delaware's WIP work is being led by an interagency workgroup made up of representatives from DNREC, the Department of Agriculture, the Department of Transportation, the Office of State Planning Coordination, the County Conservation Districts, agencies of the U.S. Department of Agriculture, the U.S. Geological Survey and other stakeholders such as representatives from the farming and development communities.
> Nine subcommittees were formed to address: agriculture; stormwater; wastewater; land use and comprehensive plans; restoration; public lands; funding; information technology; and communications."

Phase I of the Delaware WIP involved identifying known AFOs as follows:

> In the late 1990s and early 2000, staff from the Kent and Sussex Conservation Districts did a GIS assessment to identify animal operations across much of the State of Delaware. Delaware's 1997 digital orthophotography was first used as a preliminary visual census to create a shapefile of AFOs and BMPs at a sub-watershed scale. Then, the information was field verified through a road survey; the operations and BMPs visible from the road were noted and the shapefile was updated accordingly. Capacity information, for poultry especially, was estimated based on the size of the poultry house.
>
> [As of 2010] This is currently the only known state-maintained government dataset of animal operations within the First State. There is some concern that the dataset is outdated and incomplete. The number of animal operations falling within the medium and large CAFO designation was determined where data was available, and a summary is displayed in Table 34 below.

Table 34: Chesapeake Bay Animal Operation Summary (*Assume Small AFO)

Animal	Number of Operations	% With Capacity Information	% Without Capacity Information*	Number of Small AFO	Number of Medium CAFO	Number of Large CAFO
Hog	24	13%	88%	23	1	0
Dairy	31	45%	55%	28	2	0
Bovine	48	35%	65%	48	0	0
Equine	76	34%	66%	76	0	0
Poultry	725	96%	4%	188	480	57

> "In February 2010, Delaware had only twenty-four (24) NPDES CAFO permitted operations. As a result of an extensive educational push by DDA, DNMC, and

[12] See: https://dnrec.alpha.delaware.gov/watershed-stewardship/nps/chesapeake/

EPA in the winter/spring of this year, Delaware now has approximately 372 permitted CAFOs, with 240 located in the Chesapeake Bay Watershed. Table 35 provides a breakdown of the types of CAFOs in Delaware. We believe that almost 100% of operations or sources subject to NPDES regulations have permits."

Table 35: Number of Delaware CAFO Permits, 2010

Total active CAFO permits		372
Poultry-broiler farms		**356**
Dairy farms	9	
Horse farms	4	
Beef farm	1	
Swine farm	1	
Poultry-layer farm	1	
Total inactive CAFO permits		5
Number of poultry farms over 125k capacity		**51**
Permit coverage within the Chesapeake Bay		
Poultry farm		**240**
Beef farm	1	
Dairy farm	2	
Complete CAFO files		245
Incomplete CAFO files		**127**
Manure generation and exported		**94**
Manure generation and land applied		151

On page 126 of 440 of the Delaware **Phase I** WIP, there was this statement:

The Delaware Department of Agriculture (DDA) does not expect the number of poultry operations in the Chesapeake to increase between now and 2025 and they may actually decrease.

On page 15 of 313 of the Delaware **Phase II** WIP, a comment was added:

"A section was added to highlight the concerning difference between the Chesapeake Bay Programs estimates of poultry manure volume and nutrient content and the much lower amounts calculated by the University of Delaware, University of Maryland, and Delaware Department of Agriculture."

On page 154 of 313 of the Plan, there is a list of accomplishments in Table 36, including the topic of Waste Management Systems as follows:

"This section documents the accomplishments and highlights of the State of Delaware during the 2010 calendar year within the Chesapeake Bay Watershed. As noted below, Delaware's agriculture community is committed to reducing

nutrient and sediment loads through priority practices and other best management practices."

Table 36 - Accomplishments and highlights of the State of Delaware during the 2010 calendar year within the Chesapeake Bay Watershed ***Agriculture Practices.***

Topic	Unit	2009	2010	Change
Nutrient Management on Crops	Acres	198,625	197,348	-1,277
Enhanced Nutrient Management	Acres	0	0	0
Poultry Waste Management Systems	AU	10,640	13,678	+3,038
Poultry Mortality Composting	AU	4,304,336	3,084	*
Manure Transport outside CBWS	Tons	14,747	31,569	+16,822
Manure Transport within CBWS	Tons	43,122	11,526	-31,596
Manure Transport	Tons	57,869	43,095	-14,774

*Jurisdictions transitioned to reporting progress through the National Environmental Information Exchange Network (NEIEN) in 2010 and some practices require additional attention to ensure that data is appropriately submitted and credited.

On page 159 of the Plan, there is a description of the Delaware Nutrient Management Commission as follows:

> "The Delaware Nutrient Management Commission (DNMC) was formed to direct the Program and develop regulations pertaining to nutrient management, waste management for Animal Feeding Operations (AFOs), and National Pollutant Discharge Elimination System (NPDES) permits for concentrated animal feeding operations (CAFOs). The Commission is composed of fifteen voting members and four ex-officio members. The voting members include seven full-time farmers, one commercial/agricultural nutrient applicator, one member of the commercial nursery industry, one golf course/lawn care industry representative, two members from one or more environmental advocacy groups, one nutrient consultant, one public citizen, and a representative of DNREC. To clarify, the NPDES CAFO program is administered by DNREC and managed by DDA. The DNMC serves an advisory role."

From pdf page 204 of 313 of the Plan:

9.6.1.15 Poultry Waste Structures: These structures protect poultry waste from rain so that it can be used as a crop fertilizer when conditions are appropriate for transport to another location.

There are currently 444 structures of Poultry Waste Structures. Delaware's goal is to increase this by 20% annually. Delaware intends to achieve full implementation of 723 structures by 2025. The cost to fully implement this practice is $7,534,395 using a rate of $27,005/each.

- **2011 Goal:** 532 structures.
- **2013 Goal:** 708 structures.
- **2017 Goal:** 712 structures.
- **2025 Goal:** 723 structures.

FUNDING MECHANISM: Cost share funding to offset the costs if implementation to the landowners is available from the State of Delaware Conservation Cost Share Program and the various Farm Bill programs. Additional funding is provided through the Chesapeake Bay Grant and the CWA Section 319 Program. Additional sources will be pursued to allow for the increased BMP implementation schedule. For example, additional funding requests will be made through the State of Delaware Legislative Budget development process to increase contributions to the State of Delaware Conservation Cost Share Program.

From pdf page 205 of the Plan:

9.6.1.18 Mortality Composters: Recommend dead bird composters/incinerators on all poultry operations for bird mortality. Dead bird composters have been cost shared and promoted in Delaware, however, there is likely room to increase this implementation rate. Increase implementation of Mortality Composters: for small operations (AFOs), at least 50% of operations in each sub-watershed should have these practices; for medium and large operations (CAFOs), 100% of operations should have these practices.

There are currently **449 Mortality Composters**; Delaware's goal is to increase this to 539 composters for 2011. Approximately $595,620 is needed to meet the 2011 goal. Delaware intends to achieve full implementation (723 structures) by 2017. Currently, adequate funds exist to meet this goal.

- **2011 Goal:** 539 composters.
- **2013 Goal:** 600 structures.
- **2017 Goal:** Achieve full implementation of 723 structures.
- **2025 Goal:** Maintain full implementation

From page 213 of 313 of the Plan:

> **9.6.3.3 Vegetative Environmental Buffers**: A vegetative environmental buffer is the strategic planting of combinations or trees and shrubs around poultry houses to address environmental, production, and public relations issues by providing a vegetative filter to lower emissions of ammonia, dust, odor, feathers, and noise on a potential of 82 operations. In addition to offering a practical, efficient, and cost effective means of capturing emissions, a properly designed vegetative environmental buffer program can help to conserve energy and reduce air borne pathogens by offering shade and slowing wind speeds, as well as create a more attractive landscape and screen routine operations from view.
>
> There are currently 72 Vegetative Environmental Buffers. Delaware's goal is to expand this to 82 additional Operations for 2011. Additional funding of $4,000 per system is needed. By 2025, Delaware's goal is to Vegetative Environmental Buffers to 222 Operations.
>
> **2011 Goal:** 82 Operations.
> **2013 Goal:** 102 Operations.
> **2017 Goal:** 162 Operations.
> **2025 Goal:** 222 Operations

3. Delaware Phase III Watershed Implementation Plan.

> "On April 12, 2019, Delaware submitted a draft version of the Phase III WIP to EPA and posted it on DNREC's website. Delaware solicited public comments from April 12 through June 7, with comments submitted via electronic form, email, and the United States Postal Service. Delaware has consolidated every comment received in Appendix J, along with a response.
> The updated version of the Phase III Watershed Implementation Plan was submitted to the EPA and posted onto DNREC's website for final review on Aug. 23, 2019.

On page 11 of the 2004 USEPA Evaluation of the Delaware NPDES program included the following comments about which state agency would pursue NPDES delegation:[13]

> "DNREC has delegated responsibility for the CAFO program to DDA but will still be involved with the program to some extent. Although DDA will be the primary administrator of the program, DNREC is still technically and legally responsible for the CAFO NPDES program as a whole. It is expected that once the final regulations and strategy are approved and the program has been functioning for a while, either DDA or the Nutrient Management Commission will pursue full and complete delegation of the program."

[13] See: https://www3.epa.gov/npdes/pubs/delaware_final_profile.pdf

In the 2018-2021 EPA evaluation of Delaware's progress in achieving the State's WIP milestones, the EPA stated the following strengths and weaknesses of the program:[14]

> "Some notable strengths identified in this evaluation of the Delaware 2018-2019 milestones and the 2020-2021 milestones include **(emphasis added)**:
>
> - Developing Standard Operating Procedures for Delaware Nutrient Management Plan Verification for Land and/or Animal Operations that were approved by the Delaware Nutrient Management Commission and supported by EPA.
> - Quantifying numeric milestones for the priority BMPs listed in the table below.
> - **Issuing coverage for 197** Concentrated Animal Feeding Operations (CAFOs) under the National Pollutant Discharge Elimination System (NPDES) CAFO General Permit for Large, Medium, & Designated Poultry Operations with No-Land Application of Manure **(GP1).**
> - Issuing the NPDES CAFO General Permit for Large, Medium & Designated Poultry Operations with the Land Application of Manure **(GP2)** and committing to issue the NPDES CAFO General Permit for Large, Medium, & Designated Non-Poultry Operations **(GP3).**
> - Revising the Sediment and Stormwater Regulations to include an added section for stormwater management offset provisions, fees-in-lieu, trading, banking, and stormwater management offset districts.
>
> Some key areas that EPA recommends addressing during the 2020-2021 milestone period and beyond include **(emphasis added)**:
>
> - Reporting on programmatic actions that will achieve the anticipated BMP implementation rates for the priority BMPs. **Programmatic milestones were not provided and/or did not demonstrate an increase in implementation levels for animal waste management storage, manure transport, grass buffers, and nutrient management rate and timing.**
> - Providing, the number of CAFOs registered under GP3 in 2020 and 2021, following the issuance of GP3 in 2020. "

Note: According to the USEPA report, Delaware has permitted 197 CAFOs under the Poultry CAFO General Permit that is up for renewal and a subject of these comments.

[14] See: https://www.epa.gov/sites/production/files/2020-07/documents/de_2018_2019_2020_2021_final_milestone_evaluation.pdf

B. Comments on Proposed Renewal of General Permit for Poultry Manure Generating Facilities Only (no land application)

1. Records Need to be in the Public File and Accessible to the Public. From pdf pages 4 and 5 of the proposed renewal:

> **D. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**
> 2. The permittee shall operate and comply with all applicable requirements in 7 Del. Admin. C. §7201-9.5.6.4.3.1.1 and §9.5.6.4.3.1.3 of the CAFO Regulations for Large CAFOs or 7 Del. Admin. C. §7201-9.5.6.6.2.1.1 and §9.5.6.6.2.1.3 of the CAFO Regulations for Medium CAFOs. The permittee shall maintain records of implementation for six (6) years at the CAFO in accordance with State Technical Standards. Applicable records of implementation in the production area include:
>
> a. Records indicating mortality management to include number disposed and method of disposal. The total number of mortality disposed may be documented with integrator developed mortality sheets, integrator settlement sheets, or any other recording of the information.
>
> b. Records of manure storage activities, length of storage, amount stored, and maintenance of manure storage facilities.
>
> c. If manure, litter or process wastewater is sold or given to other persons for disposal or utilization, the following information shall be maintained at the CAFO generating the manure, litter or process wastewater:
>
> i. The date of manure, litter or process wastewater removal.
> ii. Name of receiver and contact information.
> iii. Quantity (tons/gallons) of manure, litter or process wastewater removed.
> iv. 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.
>
> d. Records of implementation in the land application area are not applicable to this facility because the permittee does not propose land application of manure. Land application of manure is not permitted on any land that is under the direct control of the permittee unless the AWMP is revised to a NMP to account for such land applications of manure in accordance with Part II.A.2.a. and Part II.A.16. of this permit.

Question: What legal procedure is available for the public at large and the adversely impacted communities to obtain access to these records to evaluate the efficacy of the operator's implementation of BMPs and determination whether the State Technical Standards are being followed correctly?

The following information was found in the 2017-2021 USEPA evaluation of Delaware's WIP milestones – specifically the milestones for manure transport:[15]

BMP	2009	2019	2021	2025
Manure Transport (Dry Tons)	14,199	17,388	45,734	74,080

Questions: According to the data above, it took 10 years to increase the transport of dry poultry litter by as little as 3,000 dry tons. How will Delaware achieve an increase in transport from 17,388 to 45, 734 this year (2021)? How will the reporting requirements of this General Permit be used to prove that the poultry litter has actually been transported outside of the Chesapeake Bay watershed?

Questions: The reporting requirements in D(2)(c) of the General Permit do not ask for the location where the poultry litter will be disposed, it requires only the contact name of the person and/or company "receiving" the poultry litter. What mechanism is used by the state to track the movement of this 'received' poultry litter to determine how much is land applied within the watershed and how much is transported out of the watershed?

On page 4 of 8 of the USEPA evaluation of Delaware's WIP milestones, the following comment is made:

> "The Delaware Department of Agriculture has a goal of capturing supplemental nutrient management practices in annual reporting from the State's producers. Delaware should indicate what data will be provided to EPA to verify nutrient management implementation acres reported to the CBP partnership's watershed model."

Questions: Does the Department of Agriculture retrieve the above mentioned data from the reporting requirements of this General Permit? If so, which requirements in this General Permit are specifically written to capture the appropriate "supplemental nutrient management practices"? How does the Department of Agriculture identify the number of implementation acres from record keeping requirements of this General Permit?

[15] See: https://www.epa.gov/sites/production/files/2020-07/documents/de_2018_2019_2020_2021_final_milestone_evaluation.pdf

2. Substantial Changes and Public Notice. On pdf page 11 of the proposed renewal, the example of substantial change is given as follows:

> b. A substantial change to the NPDES CAFO Permit will be determined by the Secretary. Changes determined to be substantial are subject to public review and comment. The Secretary may include the changes to the incorporated Animal Waste Management Plan in the NPDES CAFO Permit, and will notify the owner or operator and the public of the final decision concerning revisions to the terms and conditions of the NPDES CAFO Permit.
>
> A substantial change includes, but is not limited to, an annual increase in the facility's animal feeding capacity greater than 25% and/or any change to the operation that presents a risk of nitrogen and phosphorus runoff as determined by the Secretary constitutes a substantial change.
>
> If the permitting authority decides that the changes that have been implemented do not ensure compliance with state and federal regulations, the permittee would be subject to enforcement under 7 Del. Admin. C. §9.5.9.1 of the CAFO Regulations.

Questions: With respect to the trigger of an 'increase of 25%" of the animal feeding capacity – does the state have scientific or other documentation that explains why an increase less than 25% would not be substantial and thus trigger public notice? How many times may the operator increase the animal feeding capacity by say 24.9% before the Secretary would decide that public notice is warranted?

> Original permitted capacity: 8 barns with 40,000 birds/barn = 320,000 birds
> 25% of 320,000 = 80,000 birds
> Expanded capacity = 320,000 + 79,999 = 399,999 birds (10 barns)
> 25% of 399,999 birds = 99,999 birds
> Expanded capacity = 399,999 + 99,998 = 499,997 birds (12.4 barns)

Questions: Could the operator increase the animal feeding capacity every year and never trigger public notice? Isn't it true that under that scenario – every time the operator increased the animal feeding capacity the next time there is an expansion, the number of animals that would be considered less than or greater than 25% would be a larger number? When would the Secretary address the cumulative impacts of these allowed expansions and finally say – that amount of expansion warrants public notice?

Questions: How many facilities permitted under this General Permit have expanded? How many times did the Secretary determine that the amount of expansion warranted new 'public review and notice'? How many facilities have expanded their animal feeding capacity without triggering new public notice?

3. Permitting Poultry Operations without public access to locations used to dispose of litter.

According to the DE-DOA website, there is a financial program to assist poultry operators who intend on transporting their poultry litter waste:[16]

> "The Nutrient Management Relocation Program is a cost assistance program designed to assist in transporting nutrients (manure) from areas of excess, to areas in need of nutrients. Many farms are dealing with excess manure, namely poultry litter, and need to export the manure in order to balance crop nutrient demands. The Delaware Nutrient Management Program provides financial assistance for the cost of Delaware manure to alternative use projects or farms in need of nutrients."

Questions: How many of the facilities operating under this General Permit have received financial assistance to transport poultry litter waste "outside areas of excess"? Does the State used record keeping required under this General Permit to verify that the waste has been transported to these "outside areas of excess" and if so, what records help prove that the operator has contractual relations with someone that performs the transport? What data is available to the general public and adversely impacted communities to track this poultry litter waste from the point of generation to the point of land application?

4. Inspections of facilities operating under this General Permit. According to the 2017-2021 USEPA evaluation of Delaware's WIP milestones, the following was stated about inspection milestones for 2018-2019 fiscal year:[17]

- Did not achieve its annual inspection goal of 20% of currently permitted CAFOs (inspected 18% in 2018 and inspected 11% in 2019). Delaware expects to increase the numbers of inspections and has a goal for 2020 of inspecting 20% of all currently permitted CAFOs.

Questions: How is the public health and environment protected if the state only inspects less than 20% and, in some cases only 11% of the 197 permitted facilities under this General Permit? How many inspectors are available to inspect the 197 permitted facilities? Does the state perform a site inspection before the facility is permitted? Are the inspections referred to in the USEPA evaluation considered to be annual compliance inspections and not initial site inspections? Does the state get paid by the USEPA to perform these NPDES inspections as part of the state delegation of the NPDES program?

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[16] See: https://agriculture.delaware.gov/nutrient-management/cost-share/

[17] See: https://www.epa.gov/sites/production/files/2020-07/documents/de_2018_2019_2020_2021_final_milestone_evaluation.pdf

These USEPA comments were made about 2020-2021 WIP milestones:

- Commitment to bring the percentage of permitted CAFOs to 50% of the known universe by processing an additional 75 applications for permit coverage in 2020 and 75 more in 2021.
- Commitment to meet or exceed 20% of permitted facilities inspected annually, in addition to inspections of new or problem facilities.
- Commitment to reissue CAFO GP1, which expires March 31, 2021, during this milestone period.
- The Delaware Department of Agriculture hired a full-time CAFO inspector in November 2019 in order to increase the number of CAFO inspections performed in 2020-2021.

Questions: What is meant by the USEPA's comment that the state has committed to "bring the percentage of permitted CAFOs to 50% of the known universe"? What percentage of the known universe is the 197 currently permitted poultry facilities? Does that mean there are at the very least 197 facilities operating without a permit? How did this happen? Does the state regularly allow the construction of poultry facilities without a permit? Does the state have a list of the 150 facilities that could be permitted to meet this WIP milestone for 2020-2021? How many of those facilities have been identified this year and has the state received their permit applications to operate under this renewed General Permit?

According to the 2020-2021 milestones of permitting additional facilities (75 + 75 = 150), that 150 plus the currently permitted 197 facilities would then be 50% of the known universe of poultry CAFOs or a total of 347 facilities.

Questions: Does that mean that the state has identified twice that number as 100% of the known universe of poultry CAFOs or 694 facilities? Which agency has a list of the 694 total facilities (DDA and/or DNREC)?

In Section C (1)(b) of the General Permit, it states the following caveat for the Large Poultry Effluent Guidelines:

> "b. In accordance with 7 Del. Admin. C. §7201-9.5.6.4.1.1.1.2 of the CAFO Regulations, whenever precipitation causes an overflow of manure, litter or process wastewater, the overflow may be discharged into Waters of the State if:
>
> > i. The production area is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewaters plus the runoff and direct precipitation from a 25-year, 24 hour rainfall event; and
> > ii. The production area is operated in accordance with the measures and records required in 7 Del. Admin. C. §7201-9.5.5.0 of the CAFO Regulations. "

Questions: Which state agency determines that the "production area is designed, constructed, operated, and maintained" satisfactorily to meet the requirements of this part of the General Permit? If the state only inspects less than 20% of the permitted facilities each year – how does the state determine that all the facilities are being maintained and operated properly and thus in compliance with the Large Poultry Effluent Guidelines? How many facilities operating under this General Permit have been determined by the state to be properly "designed, constructed, operated, and maintained" and is there written policy or forms used to make that determination? Does the inspector make the determination each time an inspection is performed? Does the inspector have training to read engineering designs and the ability to compare those designs to the structures at the permitted facilities? How much time does it take the inspector to determine that the facility under inspection has been properly operated? Properly maintained?

5. Notification procedures for releases/discharges/upsets. In Section F of the proposed renewal, there are requirements to notify the DDA and DNREC as follows:

> **"F. NOTIFICATION REQUIREMENTS**
> 1. The permittee shall follow emergency notification procedures in accordance with 7 Del. Admin. C. §7201-9.5.6.1.1.7.2 of the CAFO Regulations. If for any reason there is a discharge of pollutants from the permittee's CAFO, the permittee shall verbally notify the DDA (Nutrient Management Program) at 1-800-282-8685 and the DNREC Emergency Response Branch at 1-800-662-8802 within 24 hours of becoming aware of the discharge and document the incident in writing within five (5) days. The information to be provided shall include:
>
> > a. A description of the discharge and cause, including a description of the flow path to the receiving waters, an estimate of the flow and volume discharged;
> > b. The period of discharge, including exact dates and times and if not corrected, the anticipated time the discharge is expected to continue and the steps being taken to reduce, eliminate and prevent recurrence of the discharge;
> > c. If the discharge was caused by precipitation event(s), the amount of rainfall, as measured with a rain gauge at the site.
> > d. Results of any sampling and analysis of the discharge, if available."

Questions: Does either DDA or DNREC notify downstream landowners, residents, and/or the general public that a release/discharge/upset has occurred? What procedure is in place for the public to obtain documentation of all the releases from a permitted facility? Which state agency maintains the records of all releases/discharges/upsets? How many releases/discharges/upsets have been reported in the five years the General Permit was in effect? What were the causes for those releases/discharges/upsets? Did either DDA or DNREC issue Notices of Violation as a result of those events? Which agency is responsible to investigate reports made under this section of the General

Permit? Which agency houses the documentation of the event and what procedure is available for the public to review those documents?

6. Site Specific Animal Waste Management or Nutrient Management Plans. On page 11 of 17 of the proposed renewal, the following requirement for plans is given in Part II A:

> "2. Requirement to Implement a Site Specific Animal Waste Management Plan or Nutrient Management Plan.
> A CAFO owner or operator under this permit shall implement and fully comply with the AWMP/NMP as described in 7 Del. Admin. C. §7201-9.5.5.0 of the CAFO Regulations developed by a Delaware certified nutrient consultant that contains site specific Best Management Practices necessary to meet the requirements of this permit and applicable Effluent Limitations and standards as specified in the CAFO Regulations. The AWMP/NMP submitted by the applicant for coverage is incorporated into this NPDES CAFO Permit and any violation of its terms shall constitute a violation of the NPDES CAFO permit."

Note: Since 2014, the DDA has appeared to make it a policy to accept Notice of Intents that did not include nutrient management plans and thus the permit applications are not complete. Since 2019, the DDA has been stalling when the public has requested access to the public records for numerous poultry facilities.[18]

Questions: How many poultry CAFOs have submitted an incomplete NOI and are operating a large poultry CAFO without being fully permitted under this General Permit or an individual permit? Does the state convey that information to the USEPA during the milestone evaluations? What is the state's policy on responding to public requests for information (FOIAs) and requests to access the public files for Large Poultry CAFOs? If the AWMP/NMP is incorporated into the NPDES CAFO permit (a federal permit issued by the State of Delaware), then what legal authority does the state have to deny public access to the files of a federally permitted facility?

The permit language in Part II A (2) continues with this information about revised AWMP/NMPs (emphasis added):

> "a. Anytime changes to an AWMP/NMP occur, the new updated plan and/or addendum to the plan must be submitted to DDA. The permittee shall provide the DDA with the revised/updated CAFO's AWMP/NMP within 90 days of any update, and shall identify changes from the previous version. The DDA will review the revised AWMP/NMP to ensure it meets the requirements of the regulations and the standards as described in the State Technical Standards, and will determine whether the changes to the AWMP/NMP require revision to the terms of the NPDES CAFO Permit issued to the CAFO. If revision to the

[18] *See:* personal communication with Maria Payan of Socially Responsible Agriculture Project.

terms of the AWMP/NMP is not necessary, the DDA will notify the CAFO owner or operator and upon such notification the CAFO may implement the revised AWMP. If the DDA determines that the changes to the terms of the AWMP/NMP **are not substantial**, **the Secretary will make the revised AWMP/NMP publicly available and include it in the permit record**, revise the terms of the AWMP/NMP incorporated into the permit, and notify the owner or operator and inform the public of any changes to the terms of the AWMP/NMP that are incorporated into the permit.

b. A substantial change to the NPDES CAFO Permit will be determined by the Secretary. **Changes determined to be substantial are subject to public review and comment.** The Secretary may include the changes to the incorporated Animal Waste Management Plan in the NPDES CAFO Permit, and will notify the owner or operator and the public of the final decision concerning revisions to the terms and conditions of the NPDES CAFO Permit. A substantial change includes, but is not limited to, an annual increase in the facility's animal feeding capacity greater than 25% and/or any change to the operation that presents a risk of nitrogen and phosphorus runoff as determined by the Secretary constitutes a substantial change."

Questions: In Part II A (2)(a), the General Permit states that the AWMP/NMP will be publicly available – so why does the DDA deny public access to these plans? How many of the currently permitted 197 facilities have changed their AWMP/NMP in the past five years? How many times were those changes considered to be 'not substantial' and did the DDA post public notice of those changes?

Questions: What type or amount of change is considered to be a 'substantial change' to the AWMP/NMP according to DDA and the Secretary (see Part II A (2)(b) of the General Permit)? How many of the 197 currently permitted facilities changed their AWMP/NMP to such a degree that the Secretary has deemed it to be substantial? Did the DDA post public notice of opportunity for public review and comment?

7. Expansion of Large Poultry CAFOs. On page 11 of 17 of the proposed renewed General Permit, Part II A (3) states:

"3. Planned Alterations/Additions to the Permitted Facility. The permittee shall give notice to the Secretary through the DDA /DNREC as soon as possible of any planned physical alterations or additions to the permitted facility. Notification is only required when one or more of the following conditions are satisfied:

a. New poultry houses are to be constructed at the permitted facility.
b. 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.
c. The alteration or addition changes the location of discharge points, if any."

Questions: If the permittee plans to add an additional poultry house, does the DDA have a procedure to notify neighboring landowners and communities?

8. Incorporating site-specific BMPs into the General Permit. In Part II (A)(6) of the proposed renewed General Permit there is reference to Best Management Practices:

> "6. Proper Operation and Maintenance. 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."

Questions: The General Permit in this section does not identify any site-specific BMPs that would be maintained and operated – are those site specific BMPs incorporated by reference and if so where is the language in the General Permit that accomplishes that?

9. Protecting groundwater from pollution. In Part II (A)(7) of the proposed renewed General Permit there is a brief mention of groundwater as follows:

> "7. Discharge Minimization. The permittee must take immediate steps to stop, contain, and adequately clean up any discharge resulting from manure, litter, and/or process wastewater that materially adversely affect surface water. Additionally, the permittee shall take all reasonable and necessary steps to minimize any adverse impacts to groundwater."

Questions: What does DDA and DNREC consider to be 'all reasonable and necessary steps to minimize adverse impacts to groundwater' for poultry facilities operating under this General Permit? Does the permittee even have to identify the depth to groundwater at the production area? Has the DDA and/or DNREC ever investigated the possibility of groundwater contamination from poultry CAFOs operating under this General Permit? If so, what measures were taken to determine that groundwater quality standards have not been violated during the operation of poultry CAFOs under this permit?

10. Public access to information. On page 13 of 17 of the proposed renewed General Permit it states (emphasis added):

> "14. Public Access to Information. All information pertaining to this NPDES CAFO permit issuance, reissuance, modification, revocation or termination, including NOIs, attachments including the AWMP/NMP, comments received by the public, and draft NPDES CAFO permits **shall be available for review by the public.** Annual reports, including without limitation a statement by the owner or operator stating whether or not the owner or operator met or exceeded the projected crop yields provided in the CAFO's NMP, shall be available for review

by the public, provided that the actual crop yields provided and contained in annual reports **shall be confidential and non-public to the maximum extent permitted under Delaware law.** The crop yields provided and contained in annual reports may be used for data compilation in an aggregated form, and such data compilation in an aggregated form may be made public. Information transmitted by the Secretary to EPA shall be subject to appropriate Federal regulations. Knowingly making any false statement in any such report may result in the imposition of criminal penalties as provided for under 7 *Del.C.* §6013."

Questions: Considering the crop yields is a vital part of determining if there are sufficient acres of crops to utilize the nitrogen and phosphorus in the poultry litter waste at agronomic rates – and that the agronomic rate is the federal effluent guideline for CAFOs – how does the USEPA justify the non-public nature of that data?

The USEPA Final CAFO Rule includes this requirements, including information about crop yields (emphasis added):[19]

> (4) Annual reporting requirements for CAFOs. The permittee must submit an annual report to the Director. The annual report must include:
>
> > (i) The number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);
> >
> > (ii) Estimated amount of total manure, litter and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);
> >
> > (iii) Estimated amount of total manure, litter and process wastewater transferred to other person by the CAFO in the previous 12 months (tons/gallons);
> >
> > (iv) Total number of acres for land application covered by the nutrient management plan developed in accordance with paragraph (e)(1) of this section;
> >
> > (v) Total number of acres under control of the CAFO that were used for land application of manure, litter and process wastewater in the previous 12 months;
> >
> > (vi) Summary of all manure, litter and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume;

[19] See: https://www.epa.gov/sites/production/files/2015-08/documents/cafo_final_rule2008_comp.pdf

(vii) A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner; and

(viii) **The actual crop(s) planted and actual yield(s) for each field**, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs (e)(5)(i)(B) and (e)(5)(ii)(D) of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph (e)(5)(ii) of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph (e)(5)(ii)(D) of this section, and the amount of any supplemental fertilizer applied during the previous 12 months."

In other words, the State of Delaware has a law that prohibits public access to data that is required to be included in the CAFO NPDES permit application. The crop yield is critical in determining compliance with the federal NPDES effluent guidelines of limiting land application of CAFO manure waste to the agronomic uptake of nutrients by identified crops and by the actual/historic crop yields for each parcel of land used.

Questions: Why does DDA, DNREC, and the USEPA allow this major conflict between state and federal law to continue? Why hasn't the Delaware Legislature remedied this legal conflict? Why would the USEPA convey delegation of the NPDES program to a state that has state law that conflicts with the very core of the NPDES permitting program – the effluent limitation guidelines for proper disposal of CAFO waste?