Colon Exh. #1

Share:

Letters to the Editor

Please rethink DNREC permit for Allen Harim

L. Colon

November 9, 2017

This is a tragedy. An environmental tragedy. What is DNREC thinking? Chicken waste contains salmonella bacteria, and it also contains campylobacteria, both of which can make a person sick or dead. When these bacteria affect the food or water supply of humans, it can infect the digestive systems of people. In other words, eating products grown from chicken poop could be dangerous.

I beseech DNREC, Gov. John Carney, elected officials, Sussex County executives to explain to me and the public at large: How can DNREC permits that expired in 2009, originally issued to complement a proposed 3,700-unit housing project, be approved for a 2017 agricultural waste project? Those are different uses and different projects with a whole set of different criteria. Most importantly - where are the studies that prove that Allen Harim explored environmentally friendly alternatives? e.g. composting. I repeat, overlooked by the governing authorities are the new homes and new wells that have been constructed since 2009, which are in the wake of this project. Where are the environmental impact studies that are an application requirement, and which prove that no new wells would be affected, nor would there be any level of impact to the environment (air/flora/fauna). How about air quality impact studies. I know of no malodorous waste.

Let's not overlook the native plant and native animal impact studies? How about real estate value studies? The EPA shut down this project a few weeks ago because Allen Harim/Artesian were constructing without a permit. DNREC was not effective in its policing of its own expired permits. How can we be assured that DNREC will police this proposed project any better in the present or future? This is a very creative way for Allen Harim to pass/push their compliance burden onto Artesian. I would suggest that a performance bond or environmental insurance be required as part of this fast-tracked approval. Can anyone say: superfund sites?

L. Colon
Milton

– Chair, Milton Sustainability Committee

Lou Colon
127 Morris Ave.
Milton, De 19968
August 21, 2019
Louisd.colon@gmail.com

DNREC

Diorio Exh. #1

Department of Natural Resources and Environmental Control, Division of Water

Re: Permit Applications: Allen Harim Foods and Artesian Wastewater Management

Public Hearing, Docket #2019-P-W-0016

August 21, 2019

Attention: Lisa Vest, Hearing Officer

We as citizens have very little faith in a system that has shown itself to be a protector of Big Corporate Interests, who have been poisoning Delaware's water for years, at the expense of the health and welfare of its Citizens / Taxpayers.

It is estimated by Federal and State authorities that 92% of Delaware's water is polluted by nitrates, bacteria, algae, chemicals, pesticides, etc. The cause is mostly a result of corporate Chemical and Agricultural related pollution. As citizens we are advised against swimming in our lakes, rivers and bays. We are cautioned against eating fish caught in our waters and in many cases warned not to drink from our wells or city water supplies.

Permitting of this Artesian Facility is Flawed for the following reasons:

1. This project does nothing to lessen the water / well pollution. It only adds to it. It's a known fact that the majority of private resident wells in this area are already contaminated with high levels of nitrates. The answer to this present contamination is to NOT add any additional nitrates level to the soil. The proposed treatment level of nitrates to be sprayed on the fields will only add to the already contaminated aquifers. You can NOT guarantee that 100% of the nitrates sprayed on the soils will be taken up by crops grown 4- 5 months of the year.

2. Adjacent to this project is an already know polluter, Clean Delaware, which sprays human sewage on their site after minimal sewage treatment. This site is adjacent to the Russel Collins Community whose wells have recorded excessive nitrate levels, some as high as 90 ppm.

3. This Artesian facility and the spray fields are also adjacent to wetlands and streams.

4. Public money has already been used to place this land in an Agricultural Easement for Preservation.

5. The permitting and Approval process is flawed and suspect:
   A. The residential well survey of homes in the area is 10 years old and many more residential homes have not been accounted for. These new homes do not appear in the Artesian Design Plan in their 2017 permit.
   B. Sussex County allowed Artesian to amend its expired permit rather than submit an entirely new application since the focus of this facility had changed from a full residential sewage treatment facility to a disposal facility treating chicken waste from an Industrial Facility.
   C. No recent Hydrology studies have been done or made public that would demonstrate the impact this facility would have on the aquifers.
   D. The Appeals Board decision appeared to be made Prior to the proceedings. I attend both Appeals Board hearings in Dover. The 1st resulted in a 'deferred ruling' because DNREC & Artesian attorney's approached the Citizens Appeal Attorney to work on a mutual solution. After months of waiting that contact was never made by DNREC or Artesian attorneys. At the 2nd hearing, neither the citizen's attorney nor any member of the public was allowed to speak or present or provide evidence or testimony. Thus, the public's rights were circumvented.

6. Funding Irregularities:
   A. The State of Delaware provided a $11.5-million-dollar loan of Taxpayers money to Allen Harim to modernize its plant and upgrade their on-site sewage treatment facility. All sewage from this facility was to be treated at the Harbison plant. At some point a plan or arrangement was reached between Artesian and Allen Harim to have the treated sewage transported, via a to be built 9-mile pipeline, to the Artesian facility now under consideration. This violated the terms of the original loan parameters'. It is estimated that $5 million of the $11.5 million dollars of PUBLIC monies went to finance this arrangement without public input. In effect, the taxpayer money has gone to finance what amounts to a private waste disposal system created for a private corporate interest again without public input. The State Attorney General needs to investigate the propriety of this questionable transaction.

7. DNREC has abdicated their responsibilities:

   Instead of acting to protect the citizens of this County and State they are in effect acting as agents or facilitators for Corporate interest's at the expense of the health and wellbeing of its citizens.
   A. Allen Harim was cited on 90 occasions from 2012 – 2016 for sewage treatment violations. DNREC imposed NO fines until public awareness was raised in 2017. They then imposed $278,000 in fines which were appealed by our good corporate neighbor, Allen Harim.

B. For years DNREC has allowed Clean Delaware to operate in this area and dispose of minimally treated human sewage directly on farmland. This disposal is within DNREC Guidelines when other more effective disposal methods are available and warranted. This site is adjacent to the Artesian facility under consideration.

C. DNREC has not required Artesian to provide new residential well studies or Hydrology studies to determine the impact and effect of this spray disposal on the aquifer and surrounding residential wells.

D. DNREC continues to allow corporate entities to treat sewage with old technology when superior treatment methods exist.

E. When a polluter is identified, DNREC is lax to cite or impose substantial fines to corporate violators.

F. When citizens find it necessary to file Federal Court proceedings because of DNREC inaction to correct violations and impose fines, they, DNREC, file actions to enjoin or circumvent these law suits in order to protect corporate entities against citizen rights. Example: Mountaire.

G. The very fact that Delaware has the 2nd highest cancer rates in the United States (CDC) is further evidence that DREC is not doing its job to protect the health and welfare of its citizens.

There is something radically wrong with a System where private citizens have to buy bottled water or spend their money to buy expensive home water filtrations systems when their Taxes go to support a structure that allows corporations to poison our water supply with little or no consequences.

There is something radically wrong with a System that purposely omits advising prospective buyers and homeowners about the health hazards of their drinking water.

There is something radically wrong with a System where citizens do not trust the very entity, DNREC, that is directed to protect their environmental health because their (DNREC) record demonstrates that they are NOT protecting them.

There is something radically wrong with a System that advertises the notice of this meeting in a New Castle County based newspaper rather than a local Sussex County newspaper where the permit hearing is taking place.

There is something radically wrong with a System when this Permit Hearing is just a formality because it is required or to placate the public when the decision has already been made to approve this facility.

In conclusion:

DNREC you will have done irreparable damage to your image and reputation with your support and approval of this Artesian facility because you have completely disregarded and discounted the facts, the warnings, the concerns and the science presented by private citizens.

DNREC, you and Artesian and Allen Harim will be held liable in the minds of the citizens of this area for years to come by your decision to approve the operation of this facility. Artesian and Allen Harim will never be regarded as 'good neighbors' or good corporate citizens.

We as citizens have very little faith in DNREC and a System that has shown itself to be a protector / partner of Big Corporate Interest at the expense of the health and welfare and protection of its citizens.

Thomas DiOrio

Milton, De.

Green Exh. #1

Andrea G. Green
23861 Dakotas Reach
Milton, DE 19968
August 21, 2019

Lisa A. Vest
Department of Natural Resources and Environmental Control
Office of the Secretary
89 Kings Highway
Dover, DE 19901

Re: Allen Harim Wastewater Treatment System
Docket # 2019-P-W-0016

Madam Hearing Officer:

My comments regarding the above-referenced application of Allen Harim falls into two categories, procedural and substantive.

1. Procedural Defects

   a. The public notice issued by the Department indicates that the public may review the application and draft permits online and provides the site to access the documents. Unfortunately, a full review of the documents available indicates that no draft permits have been made available to the public. Upon inquiry, despite specific request therefor, no draft permits have been made available to the public. Without a draft permit to review, members of the public, including the undersigned, are precluded from having full information and making informed opinions known to the Secretary.

   b. Appendix D to the Operation and Maintenance Plan dated May 30, 2019 consists of the Old Anaerobic Lagoon Cleanout Work Plan. Upon DNREC's review of the Plan, a letter dated July 17, 2019 forwarded to Michael Sause at Allen Harim Foods, Inc., specifically directs that the applicant submit a "viable diversion option that will not result in a release to the environment". The re-submission was to be made within fifteen (15) days of the date of the request. Despite the passage of this time period, and despite the importance of the provision of an appropriate diversion lagoon for non-compliant wastewater effluent, no such document has been posted for review by the public. If it has been received, it must be provided to the public with an opportunity for the public to review it and be heard in response. If it has not been submitted, it evidences the applicant's failure to comply with its most basic requirements as an applicant. I therefore request that the comment period be extended to at least 30 days after the Department posts the response to its July 17, 2019 letter in such a manner as those desiring to review and comment have notice and the ability to respond and be heard on the diversion issue.

2. Substantive Defects

a. One of the first documents included in the Allen Harim Application is its Final Design Summary of Wastewater Treatment System Upgrade & Expansion (Phase 2). This document, dated November 23, 2015, is not the plan for which Allen Harim is apparently requesting approval. It is the plan that Allen Harim has abandoned, a plan that would have treated the wastewater to a degree such that the nitrates would be reduced to a level of 4 mg/L. At pages 56 and 72, the Summary lists the total Nitrogen level anticipated at between 2 and 4 mg/L and Total Nitrogen of < 4 mg/L. That is not what Allen Harim is proposing so the Final Design Summary appears to be a document that does not actually indicate Allen Harim's proposed or intended activity.

b. The Allen Harim Operation & Maintenance Plan dated May 30, 2019 at 1.6 on page 5 contains an entry that reads "Error! Reference source not found.." Without being able to read the actual entry, there is no way to know what it contains, if anything, and to determine its relevance or whether it should be the subject of an objection.

c. The reference to wastewater from the Pinnacle facility at 1.8 of the Allen Harim Operation & Maintenance Plan indicates total wastewater of 30,000 gallons per day. However, Allen Harim, in application submitted to the Sussex County Board of Adjustment seeking a special use exception, listed the wastewater from the Pinnacle operation at 40,000 gallons per day. *See*, copy of correspondence attached. An applicant that misstates the effluent from a particular source under its own control by a factor of 25% has established its own lack of credibility.

d. Testing for nitrates in the wastewater is inadequate. Despite the applicant's history of egregious violations of its existing permit, the Operation and Maintenance Plan permits onsite testing for nitrates "in the office trailer" with weekly testing. The "action threshold" is listed as tests showing levels of total N above 30 mg/L. At another section, the Plan indicates sampling of Nitrates five days/week, and states that, if the level exceeds the threshold, the effluent will be tested again in 24 hours. Only then will samples apparently be taken to a lab. The Plan further states that, if the levels are too high, DNREC will be notified, a plan *will be developed* and Artesian *may* temporarily cease spray operations to assess the quality of the wastewater. At this point, how many millions of gallons of wastewater will have been pumped up to ANSWRF? This Plan utterly fails to satisfy the public and should be deemed to utterly fail to satisfy the Secretary that the public is being protected.

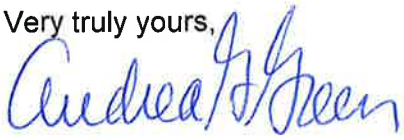
e. Allen Harim's diversion lagoon is not anticipated to be ready for service until June 2021. Allen Harim has known since at least early 2016 that it was planning to pipe wastewater effluent to ANSRWRF and abandoning its plans for Phase 2. It has known for nearly four years that it would need the diversion lagoon. The Secretary should deny this permit until at least such time as the diversion lagoon is ready to be placed in service. Without that, Allen Harim

has every incentive to pump non-compliant wastewater to ANSRWRF where it will have no further obligation to treat the waste.

f. The Public Notice issued in this matter indicates that "Allen Harim Foods, LLC has applied for a State of Delaware operations permit for an on-site wastewater treatment and disposal system to treat up to **4.0 MGD** of poultry processing wastewater at the Allen Harim Harbeson Procession Facility." It further states that "[t]reated wastewater effluent will be pumped via force main to the Artesian Northern Sussex Regional Water Reclamation Facility for storage in a synthetically lined lagoon and disposal via spray irrigation." Allen Harim is therefore applying for a permit to process and pump to Artesian's facility twice the volume that the Artesian facility is designed to accommodate. The State's own notice regarding the Spray Irrigation Permit indicates an average daily flow of **1.5 MGD** with a **peak flow of 2.0 MGD**. Allen Harim's Operation and Maintenance Plan dated May 30, 2019 at page 4, Sec. 1.1.2 Process Design Summary lists peak flow at 4.0 MGD, maximum flow rate of 3.00 MGD and average flow rate of 2.40 MGD. Approving Allen Harim's application will necessarily overwhelm the Artesian facility and the land surrounding it, damaging the land, wetlands, the aquifer and homes.

For the reasons stated above, Allen Harim's application should be denied.

Very truly yours,



Andrea G. Green

Morris James Wilson Halbrook & Bayard LLP

Robert G. Gibbs
302.856.0016
rgibbs@morrisjames.com

January 26, 2018

Via Hand-Delivery and E-Mail: janelle.cornwell@sussexcountyde.gov

Janelle M. Cornwell, AICP
Sussex County Planning & Zoning
2 The Circle
P. O. Box 417
Georgetown, DE 19947

RE: Allen Harim Foods, LLC, Special Use Exception Application, Case No. 11216
Tax Map #: 2-33-5.00-14.00; 15.00 & 16.00 ("Millsboro Property" of "Facility")

Protect Our Indian River v. Sussex County Board of Adjustment, et al.
In The Superior Court of the State of Delaware, C.A. No. S13A-12-002 RFS

Protect Our Indian River vs Sussex County Board of Adjustment
In The Supreme Court of the State of Delaware, No. 406, 2015

Dear Ms. Cornwell:

I am writing on behalf of Allen Harim Foods, LLC ("AHF"). I am on receipt of your letter of January 25, 2018 ("Director's Opinion")[1] and your determinations pertaining to: 1) the status of Special Use Exception Application, Case No. 11216 ("Case 11216"); and 2) AHF's proposed use of a portion of the Millsboro Property for deboning and packaging chickens, which was described in the prior request as "limited processing". Although we maintain our belief that the steps taken by AHF as described in the December 4, 2017 letter supported the requested determination that the Special Use Exception granted in Case 11216 remains valid, we strongly disagree that the second determination, that the current proposed use is hazardous, is supported by the relevant ordinance and supporting facts, and respectfully request your reconsideration.

[1] § 115-111 **Potentially hazardous uses.**

The following uses or the manufacture, compounding, processing, packaging or treatment of products not specifically listed above or below but which may, ***in the opinion of the Director***, have accompanying hazards, such as fire, explosion, noise, vibration, dust or the emission of smoke, odor, toxic gases or other pollutants may, if not in conflict with any state or county law or ordinance, be located in the HI-1 District only after the location and nature of such use shall have been approved by the Board of Adjustment after public hearing as provided in Article XXVII.

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The second determination is made pursuant to Sussex County Zoning Code, Section 115-111 ("Section 115"), restated in the footnote to page 1. The second determination rests on the premise that AHF's limited processing ***is*** one of the specifically listed uses in this section, *i.e.*: **"meat, fish or seafood products including slaughtering of animals or poultry or preparation of fish or seafood for packing"**. Since slaughtering of poultry is altogether excluded from AHF's current proposed use, it is not a specifically listed use under the cited section and does not require BOA approval after a hearing. Rather, BOA approval and a public hearing are only required if the proposed use constitutes "the manufacture, compounding, processing, packaging or treatment of products not specifically listed above or below **but which *may, in the opinion of the Director*, have accompanying hazards, such as fire, explosion, noise, vibration, dust or the emission of smoke, odor, toxic gases or other pollutants".**

In my letter of December 4, 2017, I provided a complete description of the limited process which constitutes the proposed use presented to you under Section 115. I urge you to reconsider that complete description, only summarized herein.

Section 1: The Processes. This section explained in detail the limited process AHF is proposing, which excludes slaughtering, de-feathering at the beginning of the process and collection and removal of the minimal waste generated for off-premises processing of waste, at the end of the process. What is left is deboning and packaging, in a space approximately 1/10 of the space proposed in Case 11216. If you maintain your determination that this limited processing is potentially hazardous, please explain the grounds and/or rationale.

Section 2 Fire/Explosion/Noise/Vibration/Dust/Odor/Emission of Smoke/Toxic Gases or Other Pollutants. This section addressed each of the considerations listed in Section 115:

Fire: A state-of-the-art fire detection and suppression system that automatically engages prior to even notifying the local fire company.

Explosion: There is no risk of explosion with a deboning operation.

Noise/Vibration/Dust: There is no significant noise associated with a deboning operation; none discernible outside the building; and vastly reduced traffic generated from the limited process than that proposed under Case11216 and even less than that generated by Pinnacle when operational.

Odor: The deboning operation, which generated minimal waste, collected daily and processed off-premises, is expected to produce minimal odor.

Emission of Smoke/Toxic Gases or Other Pollutants: A deboning operation typically produces no airborne pollutants. As noted in the December 4, 2017 letter (which specifically described the safeguards that are planned via new equipment and systems), this area of potential

concern is directly addressed by DNREC and its regulatory processes, and the statutorily required permitting.

Section 3 Wastewater. This section confirmed that the proposed limited process will use only a fraction of the previously proposed wastewater discharge, and will (upon completion of the planned improvements) completely eliminate wastewater discharge into the adjacent stream (current discharge into the stream is permitted), with a total estimate of approximately 40,000 gallons of wastewater per day. We provided on example of how minimal is this level of discharge. Another measure is the estimate used in rough computations for spray irrigation requirements in gallons of water: 25,000 gallons of water is the equivalent of one inch on one acre of ground per day. **AHF will use 29 acres of the 52 acres available for its wastewater application system.**

Section 4 Permit Requirements. simply cites decisions of the Delaware Courts on the interaction between governmental land use bodies applying land use statutes and codes to applications for land use approvals that also involve State permitting agencies. The clear message is that the State permitting agencies are the appropriate authorities to safeguard public health, and the role of the agencies is not to be substituted or replaced in the context of land use applications.

Lastly, I note the importance of the language of Section 115-109, the stated purpose of language of the HI-1 Heavy Industrial District, the zoning of this property since the zoning statutes and ordinances were established over 40 years ago:

> *The purpose of this district is to provide for a variety of industrial operations but to restrict or prohibit those industries which have characteristics likely to produce serious adverse effects within or beyond the limits of the district. Certain potentially hazardous industries are permitted only after public hearings and review to assure protection of the public interest and surrounding property and persons. It is the intention of the district to preserve the land in the district for industrial use and to exclude new residential or commercial development, except for certain specified uses deemed appropriate adjuncts to industrial operations.*

On behalf of AHF, we respectfully request a reconsideration of the second determination in your letter of January 24, 2018, and because of looming deadlines our client is facing, the most prompt response possible. As to the above factors, if you maintain your opinion that AHF's proposed use is potentially hazardous and thus AHF must repeat the Section 115 Special Use Exception process, please identify the bases of your opinion and specify which factors are potentially hazardous, so that we may focus our attention on those areas.

Thank you for your consideration.

Very truly yours,

MORRIS JAMES WILSON HALBROOK & BAYARD LLP

Robert G. Gibbs, Esq.

RGG/put
Enclosures
cc: Allen Harim Foods, LLC
Attn: Brian G. Hildreth, CFO
Eugene H. Bayard, Esq.
James P. Sharp, Esq. *via email: jsharp@mooreandrutt.com*
Vincent G. Robertson, Esq.

Andrea G. Green
23861 Dakotas Reach
Milton, DE 19968
August 21, 2019

Lisa A. Vest
Department of Natural Resources and Environmental Control
Office of the Secretary
89 Kings Highway
Dover, DE 19901

Re: Artesian Wastewater Management, Inc.
Docket # 2019-P-W-0016

Madam Hearing Officer:

My comments regarding the above-referenced application of Artesian Wastewater Management, Inc. fall into two categories, procedural and substantive.

1. Procedural Defects

    a. The public notice issued by the Department indicates that the public may review the application and draft permits online and provides the site to access the documents. Unfortunately, a full review of the documents available indicates that no draft permits have been made available to the public. Upon inquiry, despite specific request therefor, no draft permits have been made available to the public. Without a draft permit to review, members of the public, including the undersigned, are precluded from having full information and making informed opinions known to the Secretary.

2. Substantive Defects

    a. The use is inconsistent with and contrary to the terms of Sussex County Ordinance No. 1923 which granted a conditional use of the lands designated for spray operation.
    The conditional use granted on July 31, 2007 (a copy of which is attached to these comments) was based upon specific findings of fact and subject to specific conditions. Included among the conditions is the following: "6. **The irrigation rates shall be determined by crop utilization and uptake limits rather than by wastewater disposal needs.**" The Operation and Maintenance Plan submitted by Artesian dated July 17, 2019 states at section 2.5: "In general, *when conditions allow*, effluent will be discharged to available fields at the maximum rates as limited by permit conditions and agreements with the crop farmer."

    The condition imposed by the county on the conditional use is inconsistent with the Operation and Maintenance Plan provision. Further, no agreement with the crop farmer or the lessor of the land is included in the documentation, thereby preventing any member of the public from knowing the terms of the actual spraying, what party controls when or how spraying is performed or the

actual quantities of effluent to be applied. Nor is there an indication of what takes place when conditions do not allow the plan to be followed. If the plan as submitted is approved, the state is condoning activities potentially in violation of the conditions imposed by the county, despite the fact that county approval is one of the threshold requirements.

b. The conditional use granted by the county was based on a series of findings of fact, several of which are no longer applicable.
Since the use was granted by Sussex County for sprayfields for a community wastewater treatment facility serving the needs of the local community (not a commercial, industrial poultry processing facility), the county found that the use was "of a public or semi-public character, essential and desirable for the general convenience and welfare of neighboring properties and the County." The currently proposed use cannot be further from that presented to the county to garner its approval. DNREC cannot simply ignore the findings of fact and conditions imposed by the county. To do so is to accept that total misrepresentations or fabrications can be made to the county to gain a conditional use, with the entire purpose of the use later turned completely on its head when presenting an application for actual use to DNREC.

c. Similarly, the conditional use granted by the county in its Ordinance No. 1922 dated June 27, 2006 (a copy of which is attached to these comments) granted the use for a regional Sewage Treatment Plan for "collection, treatment and disposal of sanitary waste,", not the activity for which Artesian is seeking DNREC's approval. Before the Secretary is simply an application to collect industrial poultry processing waste and that is clearly outside the limits of the conditions explicitly set by the county. The county's approval for the limited purposes listed in the Ordinance was based on findings of fact including that the use of the property "as a sewage treatment plant is generally of a public or semi-public character and is essential and desirable for the general convenience and welfare of neighboring properties..."

Further, the plant was to possess sufficient capacity to serve a substantial volume of users beyond the boundaries of the development to be served by the Plant and was to have no adverse impact upon the county or its residents. The use was approved subject to nine specifically enumerated conditions. The conditions are not met and the use cannot be deemed to be appropriate for the planned operation to dispose of industrial poultry processing wastewater.

d. DNREC, through its counsel, stated at a hearing before the Environmental Appeals Board on May 22, 2018, that wastewater being pumped to Artesian would have to meet certain criteria, and "Artesian will not accept water that does not meet that requirement. That's what the diversion lagoon is for." *See*, Transcript of the EAB hearing at page 107. Counsel also stated that "[t]he diversion lagoon will exist before any permits are issued for either party. An operations permit will exist for Allen Harim. *See*, Transcript of the EAB hearing at pages 106-107.
However, as my comments regarding the Allen Harim operational permit detail, according to Appendix D of Allen Harim's Operation and Maintenance Plan,

Allen Harim does not have a "viable diversion option", and its own statements regarding a diversion lagoon indicate that one is not anticipated to be ready for service until June 2021. Until such time as Allen Harim has a viable diversion option in place and ready for operation, Artesian's operational permit must be denied.

e. At that same hearing, Artesian's counsel stated "there is clearly going to be a prohibition on taking any wastewater that doesn't meet parameters in the operating permit, and that would clearly be an operating permit issue for Artesian." *See*, Transcript of the EAB hearing at pages 161-162. But a reading of the two applications confirms that, from the time of initial testing, to the time when results are obtained, to the time when results of re-testing are received and Artesian is notified of non-compliance so that a plan can be formulated, millions of gallons of potentially non-compliant wastewater will have flowed up the pipeline and into the lagoon. Based on a reading of the documents submitted to DNREC in this application, it appears that Artesian misrepresented the facts to the Environmental Appeals Board, since the application's supporting documents clearly anticipate the receipt of non-compliant wastewater.

f. At the hearing, DNREC's counsel referenced the regulations, specifically, 6.3.2.3.12.3 indicating that "A separate off-line system for storage of reject wastewater must be provided at all unlimited access sites unless another permitted reuse system or effluent disposal system is capable of receiving the rejected wastewater...Provisions for recirculating the reject wastewater back to the treatment facility for further treatment may be incorporated into the design of the facility." *See*, Transcript of the EAB hearing at pages 165-166. Although she referred to these provisions being addressed in the Allen Harim permit application, in fact the only unlimited access site at present is Artesian's, yet there is no off-line system for storage of non-compliant wastewater. It all simply flows into the 90 million gallon lagoon.

g. Given the calculations showing that, assuming all the wastewater piped to Artesian is compliant, and assuming all spraying and crop uptake proceeds under ideal anticipated conditions, the level of nitrates flowing into the groundwater is predicted to be 9.9 mgL. The calculation leaves no room for error or for the reasonably anticipated circumstance when non-compliant wastewater is pumped to Artesian pending testing results. There is simply no adequate protection for the public and stricter controls must be applied.

h. Artesian engaged in a public relations campaign, and on multiple occasions, published in the Cape Gazette, a newspaper of general circulation in Sussex County, a two page spread, intended to influence members of the community. This ad indicated that "onsite quality control check point using sensors verifies quality of flow. If Artesian's standards are not met, flow is returned for further treatment." It goes on to state that if "water meets Artesian's standards, flow proceeds to facility. That is not an accurate representation of what will occur

under the terms of the two permit applications. Before any effluent is diverted, thousands, if not millions of gallons of polluted, non-compliant wastewater will have proceeded up the pipeline and into the lagoon.

i. Artesian's Operation and Maintenance Plan states at 2.9.1 that, to the extent practical, timing and volume will be coordinated with the crop farmer. The Plan further indicates that, in the event of receipt of non-compliant water, in addition to attempts at chlorination or portable treatment, Artesian anticipates seeking temporary approval to exceed by 50% the spray rates or increase the volume to above current limitations. This is not an appropriate use of land for which the state has paid for agricultural preservation rights.

j. Many members of the public are concerned about the impacts of the spray irrigation contemplated under the current permit application on the existing pollution adjacent to Field G, a contamination of which DNREC is well aware. In July 2018, Anthony Scarpa submitted to DNREC a FOIA request for items including "well test data for the past 5 years for all Clean Delaware monitoring wells and well test results for the Slim, Collins & Russell neighborhood." The data requested was for properties immediately downgradient from Field G, the largest spray field and the one contemplated to receive the lion's share of the Allen Harim effluent. DNREC denied the request based on an exemption for "investigatory files compiled for civil or criminal law-enforcement purposes including pending investigative files" and "records pertaining to pending or potential litigation which are not records of any court".

   Despite the fact that there is no evidence that any civil or criminal law-enforcement or pending investigative file exists or existed, Mr. Scarpa's appeal was denied. Further, despite the fact that the records did not then pertain to pending or potential litigation, the appeal was denied.

   The records regarding Clean Delaware and the Slim, Collins & Russell neighborhood well tests results are now relevant to a full evaluation of the current operational permit application, as the information would allow an accurate determination of the actual impact of the spray operation on neighboring and surrounding properties. DNREC has denied access to important data and the current permit application should be denied until such time as the data is produced and the public has an opportunity for review and comment.

For the reasons stated above, Artesian's application should be denied.

Very truly yours,

Andrea G. Green

ORDINANCE NO. 1923

AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR LAND APPLICATION OF SLUDGE, TREATED SLUDGE OR ANY MATERIAL CONTAINING THESE MATERIALS BY SPRAY IRRIGATION TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL AND CEDAR CREEK HUNDREDS, SUSSEX COUNTY, CONTAINING 1,739.779 ACRES, MORE OR LESS

WHEREAS, on the 27th day of June 2006, a conditional use application, denominated Conditional Use No. 1725, was filed on behalf of Harry Isaacs, Jr.; and

WHEREAS, on the 25th day of January 2007, a public hearing was held, after notice, before the Planning and Zoning Commission of Sussex County and on the 18th day of July 2007, said Planning and Zoning Commission recommended that Conditional Use No. 1725 be approved with conditions; and

WHEREAS, on the 13th day of February 2007, a public hearing was held, after notice, before the County Council of Sussex County and the County Council of Sussex County determined, based on the findings of facts, that said conditional use is in accordance with the Comprehensive Development Plan and promotes the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of Sussex County, and that the conditional use is for the general convenience and welfare of the inhabitants of Sussex County;

NOW, THEREFORE,

THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. That Chapter 115, Article IV, Subsection 115-22, Code of Sussex County, be amended by adding the designation of Conditional Use No. 1725 as it applies to the property hereinafter described.

Section 2. The subject property is described as follows:

ALL that certain tract, piece or parcel of land lying and being situate in Broadkill and Cedar Creek Hundreds, Sussex County, Delaware, and lying on both sides of Route 16, both sides of Route 30, both sides of Road 231, east of Road 212, and both sides of Route 38, and being more particularly described as lands identified on the Sussex County Property Maps as: Tax Map I.D. 2.35-13.00-6.06, Tax Map I.D. 2.35-13.00-6.05, Tax Map I.D. 2.30-22.00-1.00, Tax Map I.D. 2.35-7.00-1.00, Tax Map I.D. 2.35-7.00-7.00,

Tax Map I.D. 2.35-7.00-27.00, Tax Map I.D. 2.35-7.00-164.00, Tax Map I.D. 2.35-6.00-11.00, Tax Map I.D. 2.35-6.00-11.02, Tax Map I.D. 2.35-6.00-21.00, Tax Map I.D. 2.30-21.00-13.00, Tax Map I.D. 2.30-21.00-35.00, and Tax Map I.D. 2.30-21.00-35.01, said parcels equal a combined total of 1,739.779 acres, more or less, as verified by Meridian Architects and Engineers.

This Ordinance shall take effect immediately upon its adoption by majority vote of all members of the County Council of Sussex County, Delaware.

This Ordinance was adopted subject to the following conditions:

1. The use shall be reviewed and approved by DNREC and shall be designed and constructed in accordance with all other applicable Federal, State and County requirements, including those mandated by DNREC and other agencies having jurisdiction over it.
2. Any structures on the properties that are part of this application shall appear to be an agricultural building.
3. All improvements for transmission and disposal of treated waste water shall be constructed and maintained in accordance with the requirements of the Sussex County Engineering Department, if any, and the Delaware Department of Natural Resources and Environmental Control, and any other governmental agency with jurisdiction over the use of the site, or any modification thereto.
4. The wastewater applied to the land shall be treated to a level permitting "unlimited public access".
5. No lagoons or storage of wastewater or sludge shall be permitted on the properties that are the subject of this conditional use.
6. The irrigation rates shall be determined by crop utilization and uptake limits rather than by wastewater disposal needs.
7. The Final Site Plan shall be subject to review and approval by the Sussex County Planning and Zoning Commission.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 1923 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 31ST DAY OF JULY 2007.

ROBIN A. GRIFFITH
CLERK OF THE COUNCIL

The Council found that the conditional use was appropriate legislative action based on the following findings of fact:

1. This conditional use is for the land application of sludge, treated sludge or any material containing these materials by spray irrigation on 1,739.779 acres lying on both sides of State Route 16, both sides of State Route 30, both sides of County Road 231, on the east side of County Road 212 and on both sides of County Road 38 in Broadkill Hundred, Sussex County, Delaware.
2. The Council adopted the recommendation of the Planning and Zoning Commission that the application be approved and adopted the Commission's recommended findings and conditions of approval.
3. The proposed use of the subject property is generally of a public or semi-public character and is essential and desirable for the general convenience and welfare of neighboring properties and the County.
4. This use will create a disposal area for treated wastewater that will have sufficient capacity to serve a substantial volume of users beyond the boundaries of the development proposed to be served by the plant and disposal area.
5. The use, with the stipulations and conditions placed upon it will not have any adverse impact upon the County or its residents.
6. The wastewater disposal system will be designed to minimize environmental impacts. Significant buffers will be provided from any wetland areas and no wetland areas on the subject property will be disturbed without a valid Federal or State permit.
7. The proposed regional Sewage Treatment Plant and its collection and disposal systems will be reviewed and approved by DNREC and shall be designed and constructed in accordance with all other applicable Federal, State and County requirements, including those mandated by DNREC and other agencies having jurisdiction over it.

8. **The proposed use is subject to the review and approval of the Public Service Commission.**

9. **The property is currently used for agricultural purposes; this underlying use will not be changed as a result of this conditional use.**

10. **The conditional use is approved subject to nine conditions, which will serve to minimize any potential impacts on the surrounding area.**

ORDINANCE NO. 1922

AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A SEWAGE TREATMENT PLANT TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 74.61 ACRES, MORE OR LESS

WHEREAS, on the 27th day of June 2006 a conditional use application, denominated Conditional Use No. 1724, was filed on behalf of North Milton Development Group II; and

WHEREAS, on the 25th day of January 2007 a public hearing was held, after notice, before the Planning and Zoning Commission of Sussex County and on the 18th day of July 2007, said Planning and Zoning Commission recommended that Conditional Use No. 1724 be approved with conditions; and

WHEREAS, on the 13th day of February 2007, a public hearing was held, after notice, before the County Council of Sussex County and the County Council of Sussex County determined, based on the findings of facts, that said conditional use is in accordance with the Comprehensive Development Plan and promotes the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of Sussex County, and that the conditional use is for the general convenience and welfare of the inhabitants of Sussex County;

NOW, THEREFORE,

THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. That Chapter 115, Article IV, Subsection 115-22, Code of Sussex County, be amended by adding the designation of Conditional Use No. 1724 as it applies to the property hereinafter described.

Section 2. The subject property is described as follows:

ALL that certain tract, piece or parcel of land lying and being situate in Broadkill Hundred, Sussex County, Delaware, and lying east of Route 30, 0.6 mile south of Reynolds Pond Road (Road 231), and being more particularly described as follows:

BEGINNING at a point on the easterly right of way of Route 30 at the centerline of Ingram Branch; thence northerly 1,908.06 feet along the easterly right of way of Route 30 to a point; thence N 70°18'09" E 1,372.42 feet across lands of Ockels Acres to a point; thence southerly along lands of Harry H. Isaacs, Jr., the following six (6) courses: S 08°34'18" W 983.96 feet, S 81°12'47" E 521.76 feet, S 08°38'33" W 1,020.59 feet, S 09°04'21" W 121.98 feet, S 09°04'21" W 68.18 feet, and S 08°08'30" W 3.93 feet to a point in centerline of Ingram Branch; thence westerly by and along the meandering centerline of Ingram Branch 1,858.59 feet to the point and place of beginning, said parcel containing 74.61 acres, more or less, as plotted by Meridian Architects and Engineers.

This Ordinance shall take effect immediately upon its adoption by majority vote of all members of the County Council of Sussex County, Delaware.

This Ordinance was adopted subject to the following conditions:

1. The proposal regional Sewage Treatment Plant and its collection and disposal systems shall be reviewed and approved by DNREC and shall be designed and constructed in accordance with all other applicable Federal, State and County requirements, including those mandated by DNREC and other agencies having jurisdiction over same.
2. Because the Applicant did not apply for a water treatment plant as part of this conditional use, one shall not be permitted on this site unless approved under a separate conditional use application.
3. The treatment plant building shall appear to be an agricultural building.
4. All improvements for collection, treatment and disposal of sanitary waste shall be constructed and maintained in accordance with the requirements of the Sussex County Engineering Department, if any, and the Delaware Department of Natural Resources and Environmental Control, and any other governmental agency with jurisdiction over the use of the site, or any modification thereto.
5. There shall be forested buffers of at least 30 feet from all property lines. Any lagoons, Rapid Infiltration Basins or similar structures shall be located at least 100 feet from any dwellings.

6. One lighted sign shall be permitted on each site, not to exceed 32 square feet in size.
7. With the exception of emergency generators that may be located on the site, all of the equipment needed in the operation of the facility shall be located indoors. The generators shall be housed in enclosures to reduce noise.
8. Any security lighting shall be screened so that it does not shine onto neighboring properties or County Roads.
9. The Final Site Plan shall be subject to review and approval by the Sussex County Planning and Zoning Commission.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 1922 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 31ST DAY OF JULY 2007.

ROBIN A. GRIFFITH
CLERK OF THE COUNCIL

The Council found that the conditional use was appropriate legislative action based on the following findings of fact:

1. This is a conditional use for a sewage treatment plant to be located on 74.61 acres lying on the east side of State Route 30, 6/10's of a mile south of County Road 231 (Reynolds Pond Road), in Broadkill Hundred, Sussex County, Delaware.
2. The Council adopted the recommendation of the Planning and Zoning Commission that the application be approved and adopted the Commission's recommended findings and conditions of approval.
3. The proposed use of the subject property as a sewage treatment plan is generally of a public or semi-public character and is essential and desirable for the general convenience and welfare of neighboring properties and the County.

4. The regional Sewage Treatment Plant will possess sufficient capacity to serve a substantial volume of users beyond the boundaries of the development proposed to be served by the Plant.

5. The regional Sewage Treatment Plant, with the stipulations and conditions placed upon it, will not have any adverse impact upon the County or its residents.

6. The Sewage Treatment Plant will be designed to minimize environmental impacts. Significant buffers will be provided from all wetland areas, no wetland areas on the subject property will be disturbed without a valid Federal or State permit.

7. The proposed regional Sewage Treatment Plant and its collection and disposal systems shall be reviewed and approved by DNREC and shall be designed and constructed in accordance with all other applicable Federal, State and County requirements, including those mandated by DNREC and other agencies having jurisdiction over the use.

8. The proposed use is subject to the review and approval of the Public Service Commission.

9. The conditional use is approved subject to nine conditions, which will serve to minimize any potential impacts on the surrounding area.

In The Matter Of:

Keep Our Wells Clean, et al., v.

Department of Natural Resources & Environmental Control

Hearing

May 22, 2018

Wilcox & Fetzer, Ltd.

1330 King Street

Wilmington, DE 19801

email: depos@wilfet.com, web: www.wilfet.com

phone: 302-655-0477, fax: 302-655-0497

Original File KOWC v. DNREC 05-22-18 Hearing.txt

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
STATE OF DELAWARE

KEEP OUR WELLS CLEAN, GAIL SALOMON, YAUHENIYA ZIALENSKAYA, ULADZISLAU I. NAVITSKI, THOMAS DIORIO, LYNN TAYLOR-MILLER, CHARLIE MILLER, and VIRGINIA WEEKS,
Appellants,
v.
SECRETARY OF THE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL OF THE STATE OF DELAWARE,
Appellees.
ARTESIAN WASTEWATER MANAGEMENT, INC.,
Intervenor/Permittee.

) EAB No. 2017-14

DNREC Auditorium
89 Kings Highway
Dover, Delaware

Tuesday, May 22, 2018
9:00 a.m.

TRANSCRIPT OF HEARING ON DNREC AND ARTESIAN WATER MANAGEMENT, INC. MOTIONS TO DISMISS AND MOTIONS IN LIMINE

WILCOX & FETZER
Registered Professional Reporters
1330 King Street
Wilmington, Delaware 19801
(302) 655-0477

BEFORE:

DEAN E. HOLDEN, KENT COUNTY (CHAIR)
FRANCES RIDDLE, KENT COUNTY
MICHAEL A. HORSEY, SUSSEX COUNTY
SEBASTIAN A. LAROCCA, NEW CASTLE COUNTY
GORDON WOOD, SUSSEX COUNTY
ROBERT MULROONEY, NEW CASTLE COUNTY

KEVIN MALONEY, ESQ.
DEPUTY ATTORNEY GENERAL
COUNSEL TO THE BOARD.

APPEARANCES:

KENNETH T. KRISTL, ESQ.
PROFESSOR OF LAW
DIRECTOR, ENVIRONMENTAL & NATURAL RESOURCES LAW CLINIC
Delaware Law School
4601 Concord Pike
Wilmington, Delaware 19803
For the Appellants,

DEVERA B. SCOTT, ESQ.
KAYLI H. SPIALTER, ESQ.
DEPARTMENT OF JUSTICE
820 N. French Street
Wilmington, Delaware 19801
For the Appellee Secretary of the Department of Natural Resources and Environmental Control of the State of Delaware,

R. JUDSON SCAGGS, JR. ESQ.
BARNABY GRZASLEWICZ, ESQ.
MORRIS, NICHOLS, ARSHT & TUNNELL
1201 North Market Street
Wilmington, Delaware 19801
For the Intervenor/Permittee, Artesian Wastewater Management, Inc.
Management, Inc.

CHAIRMAN HOLDEN: Good morning. The purpose of today's hearing is consideration of Appeal No. 2017-14 filed by Keep Our Wells Clean. Keep Our Wells Clean is appealing Secretary's Order No. 2017-W-0029, which granted the application of Artesian Water Management, Inc., which will be discussed as "Artesian" to amend its permit to construct Phase I of the Artesian Northern Sussex Regional Water Recharge Facility near Milton, Delaware. On November 28, 2017, an association of unnamed individuals as well as named individuals submitted their statement of appeal.

I will now introduce the board members and a few other individuals. My name is Dean Holden, and I'm the board chairperson. To my far left is Mr. Robert Mulrooney; Mr. Sebastian LaRocca; our Deputy Attorney General who represents the board, Kevin Maloney; to my right, Mr. Gordon Wood; Mr. Mike Horsey; and Ms. Fran Riddle.

I'd also ask Mr. Kristl to identify -- he's representing the

appellants.

MR. KRISTL: Sure. Kenneth Kristl on behalf of the appellants.

CHAIRMAN HOLDEN: Thank you.

And Ms. Scott representing DNREC. And you have with you today?

MS. SCOTT: Yes, I have with me my co-counsel, Kayli Spialter.

CHAIRMAN HOLDEN: Thank you.

Mr. Scaggs representing Artesian?

MR. SCAGGS: Yes, RJ Scaggs for Artesian, the permit holder. And with me?

MR. GRZASLEWICZ: Barnaby Grzaslewicz.

MR. SCAGGS: Also from Morris, Nichols.

CHAIRMAN HOLDEN: Thank you.

I would like to note: Please turn off all cellphones and set them to silent. If you need to answer your phone, please leave the auditorium before you begin your conversation.

We will conclude the hearing no

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wastewater is flowing by. Now, when you take the sample, you don't know is it compliant or not, you got to send it to a lab to analyze it. All right. And so the lab has to take time to analyze it. For a BOD test, it needs five days because the water literally has to sit for five days in the dark before you can do the measuring. What's happening in the meantime, the wastewater is flowing. So now your sample says, oh, my goodness, it's not compliant. According to the design, let's divert it into the lagoon. Well, where is the wastewater? It's down in Artesian's lagoon already not able to be diverted. That's a design flaw. That means any time you have noncompliant water at Allen Harim, you won't catch it in time to divert it. It's going to end up in the lagoon. And you know what, if it ends up in the lagoon, where does it end up? Straight on the fields. That's a fundamental design flaw.

And this idea of a little diversion lagoon doesn't solve the problem.

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So there are design problems that go to that that need to be addressed. That's where we're coming from on this.

CHAIRMAN HOLDEN: Additional questions from the board?

MS. SPIALTER: Can DNREC have a moment to correct the record because I believe Mr. Kristl's understanding of the design and the requirements on Artesian and Allen Harim are just factually incorrect?

CHAIRMAN HOLDEN: Certainly, and short. It's pertinent also to keep it to the points raised in the motion to dismiss, which are the two matters that are in front of us right now.

MS. SPIALTER: Yes.

Simply put. Allen Harim already has the majority of their structures built, and the handful that are required are permitted separately through an environmental compliance program.

The diversion lagoon will exist before any permits are issued for either party. An operations permit will exist for

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Allen Harim. Assuming that they may or may not violate that permit is not grounds to give a party standing to -- as a potential injury to argue against a construction permit for a different facility.

Artesian, as part of their operating -- I'm sorry. I'm going to back up quickly.

Allen Harim's operating permit will require that the wastewater being pumped to Artesian meet certain criteria. They violate that, that's a separate violation that DNREC will handle separately.

Artesian will not accept water that does not meet that requirement. That's what the diversion lagoon is for.

Artesian's operating permit will then dictate how the water it receives, which is already treated to a specific level, is dispersed.

So the safety valve mechanisms that Mr. Kristl discusses are already in place and will be formalized in the two operations permit that are to come. At that

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point, if there are still alleged injuries, we can discuss them at that time, but those alleged injuries are so remote and removed from this construction permit that they cannot be considered injury in fact here.

MR. SCAGGS: And 15 seconds.

What we just heard was a very detailed description of a allegation about a design defect that's nowhere in the statement of appeal. In fact, when Mr. Kristl started today, he said I don't know, I need a SWAR and HSR to tell whether this design is very good. But now we're seeing something never put before the Secretary, I never heard before today, which is some allegation about design defects that were no part of this appeal and contrary to what they've actually said about the state of knowledge. It shouldn't enter into it at all. Thank you. That's all.

CHAIRMAN HOLDEN: Any questions by the board?

MR. HORSEY: No.

CHAIRMAN HOLDEN: Is there a

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October 2nd -- again, after the public comment was out. So I think that those are issues that we couldn't fully explore until we got to the documents that were generated. So that's why. I think it's not something that could have been given to the Secretary.

CHAIRMAN HOLDEN: Thank you.

MR. SCAGGS: Chair Holden, just one second.

CHAIRMAN HOLDEN: Mr. Scaggs.

MR. SCAGGS: Thank you. Just about 30 seconds. So to fit in your vision of what would be this operating permit, construction permit area and how you would draw the line between them. I think you said, and nobody has really disagreed with, that the design in evidence in the construction permit should allow the permittee to reach the parameters that will be established in the operating permit that are anticipated. And here, there is clearly going to be a prohibition on taking any wastewater that doesn't meet parameters in the operating permit, and that would clearly

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be an operating permit issue for Artesian. What we're hearing about, the diversion at Allen Harim and inadequate treatment at Allen Harim, is not what we're talking about today. This is Artesian's construction permit.

And if you look at the Allen Harim permit that was issued on November 15 of last year at Exhibit 16 of Artesian's exhibits, it says, "This permit authorizes only the construction of the wastewater collection and conveyance facilities referenced herein. The authorized construction does not include the ability to use the collection and conveyance system" -- this is the stuff that takes the effluent over to Artesian -- "until such time that an approved and permitted wastewater treatment facility exists."

So the department looked at this and said they should be able to do this, reasonably do the diversion, whatever it takes, if it's operated correctly, and whatever tweaks you need to put on it at

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operating time, to send compliant effluent over there.

The problem for appellants is they didn't appeal that permit. So what you are hearing about today is a lot of stuff that wasn't brought up about the design at Allen Harim that they'd like to wedge into this, this construction permit amendment because they didn't bring it up at Allen Harim. That's all we've heard about is the diversion at Allen Harim, can they do it at Allen Harim. Well, as far as the construction being reasonably designed to meet what standards will be imposed in their operating permit, looks like the, you know, the cow is out of the barn. DNREC made that determination. They issued a permit on November 15, 2017. Appellants didn't appeal it. So now they're here to say, no, not good enough, put all that stuff in Artesian's permit, too.

MR. KRISTL: Can I just make a quick comment? Artesian Exhibit 16 is a permit that allows the laying of the pipe

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and it allows pumps to move the water. It's got nothing to do with treatment. So the idea that somehow issues related to how Allen Harim is going to treat the wastewater is simply not caught up in that permit. We're not trying to sort of do a collateral attack on that permit. That permit is just for piping and pumps. What we are challenging is Artesian's ability to deliver the 9.9 milligrams per liter of nitrogen that they claim they're going to deliver. And what Allen Harim issues go to is it's not clear that that number can be met because of the problems that could be there. And that's why we think it's relevant to raise here. The problem may be solved by simply building in conditions into this permit that prevent -- that force the design to recognize those shortfalls. But they don't exist right now. And I think it's legitimate for the appellants here to say maybe they ought to be in there. That's what we're pushing for.

MS. SCOTT: Chair Holden.

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CHAIRMAN HOLDEN: Ms. Scott.
MS. SCOTT: You asked about a regulatory citation that addresses diversion in an operation permit. And I would point to 6.3.2.3.12.3, which states that -- I'll let you... it is Appellants' Exhibit 22, page 82.
CHAIRMAN HOLDEN: 6.2.3.2?
MS. SCOTT: 6.3.2.3.12.3.
MR. KRISTL: The page number is KOWC 514.
MS. SCOTT: Yes.
MR. KRISTL: This item is four up from the bottom.
MS. SCOTT: Yes.
CHAIRMAN HOLDEN: Okay.
MS. SCOTT: Which states that "A separate off-line system for storage of reject wastewater must be provided at all unlimited access sites unless another permitted reuse system or effluent disposal system is capable of receiving the rejected wastewater. At a minimum, this capacity must be the volume equal to two days' flow

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at the average daily design flow rate of the treatment facility. Provisions for recirculating the reject wastewater back to the treatment facility for further treatment may be incorporated into the design of the facility."
Just to correct something -- so there is a provision in an operations permit that would speak to diversion, which, again, would be in an Allen Harim operation permit.
Just to correct something on the record earlier. There was a discussion about what is in Allen Harim's construction permit. They actually have a ten-million-gallon lagoon at Allen Harim that was permitted. It exists. That is the construction permit that we've been discussing that was not appealed.
CHAIRMAN HOLDEN: Thank you.
Do we have other questions from the board?
We have two motions in limine. Is there a motion to go to executive session to address the motions we have on the table?

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MS. RIDDLE: So move.
CHAIRMAN HOLDEN: Is there a second?
MR. HORSEY: Second.
CHAIRMAN HOLDEN: All in favor, aye?
ALL BOARD MEMBERS: Aye.
CHAIRMAN HOLDEN: Opposed?
Very good. We're going to go into executive session. We will address the two motions in limine. We'll be back.
(Executive session.)
CHAIRMAN HOLDEN: Welcome back. Does the board have a motion?
MR. MULROONEY: The board finds the motion in limine is granted such that evidence presented must be limited to evidence before the Secretary that speaks to proper site selection and system design and not the operations of the plant.
MR. LaROCCA: I second.
CHAIRMAN HOLDEN: Motion has been made and seconded.
I will do roll call.

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Mr. Mulrooney?
MR. MULROONEY: In favor.
CHAIRMAN HOLDEN: Mr. LaRocca?
MR. LaROCCA: In favor.
CHAIRMAN HOLDEN: I vote in favor.
Mr. Wood?
MR. WOOD: In favor.
CHAIRMAN HOLDEN: Mr. Horsey?
MR. HORSEY: In favor.
CHAIRMAN HOLDEN: Ms. Riddle?
MS. RIDDLE: In favor.
CHAIRMAN HOLDEN: Motion passes.
It's 3:30 now. We're going to finish somewhere around 4:30. We'll see where we get to here.
Mr. Kristl.
MR. KRISTL: Actually, Mr. Chairman, when the board went into executive session, I spoke with counsel, and we would -- counsel can correct me, but we thought it might be advisable for us to adjourn the hearing at this time for two reasons.

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Scarpa Exh. 1

August 18, 2019

Lisa Vest
Hearing Officer
DNREC
89 Kings Highway
Dover, Delaware 19901

RE: Docket #2019-P-W-0016 Public Comment

Dear Hearing Officer Vest:

I am submitting this comment on the Allen Harim Wastewater Treatment System to raise issues related to this permit application.

On October 30, 2018 the Secretary of DNREC entered into a Conciliation Order by Consent with Allen Harim imposing a fine of $300,000 plus $7,888 to cover DNREC abatement expenses. The fine was for NPDES Permit violations at the Harbeson and Dagsboro Allen Harim facilities.

Allen Harim was to pay $150,000 plus $7,888 of the fine within 30 days of the Order. In addition, Allen Harim was to within 60 days of the Order enter into an agreement to fund a $150,000 Environmental Improvement Project with the Nature Conservancy related to improving water quality by eliminating agricultural runoff and groundwater transfer in the Broadkill River Watershed.

In an email chain attached to this comment, John Hinkson the Marketing and Communications Coordinator for the Nature Conservancy in Delaware confirmed that Allen Harim has "not" given any money to nor entered into an agreement with the Conservancy as ordered by the Secretary of DNREC in October 2018.

Joe Moran the president of Allen Harim signed the Conciliation Order committing to pay the $150,000 to the Nature Conservancy to fund improving water quality by eliminating agricultural runoff and groundwater transfer in the Broadkill Watershed. That was never done. This Permit should not be considered for approval until the prior fine has been paid and Nature Conservancy has completed the project.

Why would DNREC post this matter for public hearing until all outstanding fines are paid? Did the $150,000 fine and $7,888 in abatement fess ever get paid to DNREC? Why has the Allen Harim Conciliation Oder not been rescinded by DNREC for the failure of Allen Harim to comply with the order. DNREC should require Allen Harim to pay the entire $300,000. If this is any indication of how Allen Harim follows DNREC Orders how can the public be assured that Allen Harim will comply with their operations permit and DNREC will carefully monitor them in the future?

A similar Conciliation Order was entered into with Perdue Foods for wastewater violations dating back to 2015. That project was completed and Perdue fulfilled their obligation. Why hasn't Allen Harim?

From 2012 to 2106 Allen Harim had over 90 wastewater violations at the Harbeson facility. DNREC's oversight of this facility and timely reaction to violations has been poor at best.

In the Allen Harim Application materials under Groundwater Monitoring Well Information there are 22 pages of Analytical Test Results from 2016. There are no test results given between 2016 and 2019. Why!

DNREC claims that Allen Harim is currently in compliance but there is no proof in the Allen Harim Application submission. Allen Harim should not be allowed to test their own wastewater. An independent lab should be conducting all testing at this facility. The public has no confidence that accurate test results will be submitted to DNREC or the public.

On the Public Hearing page noticing the date, time and location of the hearings under Details: It states that Allen Harim Foods has applied for an operations permit for an on-site wastewater treatment and disposal system to treat up to 4 million gallons a day of poultry processing wastewater at the Allen Harim Harbeson Facility. The treated wastewater effluent will be pumped via force main to the Artesian Sussex Regional Water Reclamation Facility.

Just below that, Artesian Wastewater Management is applying for a spray irrigation operations permit, to receive that treated wastewater effluent for storage and disposal in the amount of 1.5-2 million gallons a day. Why is Allen Harim seeking a permit to treat up to 4 million gallons a day of chicken process wastewater when Artesian can only handle up to 2 million gallons a day through spray irrigation? Allen Harim should only be applying for a 2 million gallon a day operating permit. Where is the other 2 million gallons a day of wastewater going?

The Allen Harim Wastewater Treatment System Operation and Maintenance Plan, was completed on May 30, 2019 but not submitted to DNREC until July 24, 2019 a week before the public hearing was announced. Did the DNREC staff engineers review the plan for content and accuracy? If DNREC had access to the plan prior to July 24, 2019 how long did you have it for review? What is the normal DNREC review process for this type of application? Does DNREC work with the applicant prior to the submission of formal documents? The public should be given more than 3 weeks to review and comment on applications of this size and complexity.

The Final Design Summary of the Wastewater Treatment System Upgrade & Expansion, (Phase2), was written by Reid Engineering on November 23, 2015 almost 4 years ago. The Final Design Summary was assuming that the NPDES permit would be renewed and the upgraded plant design would handle 2 million gallons a day of chicken process wastewater currently being discharged into the Beaverdam Creek.

The treatment standards outlined in the Phase 2 plan were much higher than the quality of the Allen Harim wastewater being discharged today. This plan was written "before" the Artesian spray irrigation agreement was put in place. In 2016 Allen Harim decided not to build Phase 2 of the Wastewater Treatment System so why is it part of the Application? Since the 2015 Phase 2 plan is not being built the Application should be changed to reflect the actual construction that has taken place and wastewater design standards today.

Allen Harim Received an 11.6 million dollar loan from the State of Delaware to make the Phase 1 & 2 upgrades but never completed them. 6 million dollars of the loan was approved by DNREC to be given to Artesian to offset the cost of the pipeline and lagoon. Why was Allen Harim permitted to take taxpayers money that was borrowed to complete a "Green Wastewater Facility" and used to partially complete a "Non-Green Wastewater Facility?" The money should be returned to the state since it was borrowed and not used correctly.

It is unclear from the Allen Harim "As Built Drawings" if any of the 2015 Wastewater Treatment System Upgrades have been completed. The "As Built Drawings" show new pipelines but no new treatment facilities as outlined in the 2015 Wastewater Treatment System Upgrade & Expansion. The Applicant needs to provide DNREC and the public with an "As Built" plan showing all facility upgrades since 2015 and the actual wastewater test results before this application can proceed. The public should also see an accounting of the 11.6 million dollar loan expenditures for the wastewater plant upgrades since this was public money.

This application contains out of date information, construction plans that were abandoned by the applicant in 2016, well test data that dates back to 2016, "as built" construction plans that lack any detail about the wastewater treatment plant upgrades since 2015, a self-managed wastewater testing program that lacks public confidence, Phase 1 facility construction plans dating back to 2016 without proof the plan was ever built, an Operation and Maintenance Plan that specifies a 4 Million Gallon a Day treatment capacity with a 2 Million Gallon a Day receiving lagoon and spray field capacity, on-site storage lagoons that are not ready to receive non-compliant wastewater and no data on the amount of Nitrogen in the wastewater when it leaves the Allen Harim Facility.

This application should be sent back to Allen Harim and amended to reflect missing data, remove outdated data, submit complete WWTP "as built" construction plans, provide proof that the diversion lagoons are ready for use, a contract with an independent testing laboratory and proof that the 2018 DNREC Conciliation Order has been completed or the total fine paid.

Sincerely,
Anthony Scarpa
15430 Pemberton Way
Milton, DE 19968
(908) 963-9588

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

Office of the
Secretary

Phone: (302) 739-9000
Fax: (302) 739-6242

CONCILIATION ORDER BY CONSENT

SECRETARY'S ORDER No. 2018-W-0057

Issued Pursuant to 7 Del. C §6005(b)(2)

Issued to: Mr. Joe Moran – President & CEO
Allen Harim, LLC
29984 Pinnacle Way
Millsboro, DE 19966

Dear Mr. Moran:

This Conciliation Order by Consent and Secretary's Order ("Order") reflects the mutual effort by Allen Harim, LLC ("Allen Harim") and the Secretary of the Department of Natural Resources and Environmental Control ("Secretary or DNREC") (collectively the "Parties") to attain compliance with *7 Del. C.* Chapter 60 by Conciliation pursuant to *7 Del. C.* §6005(b)(2).

SECTION I : BACKGROUND

WHEREAS, Allen Harim, LLC owns and operates a poultry processing facility located at 18752 Harbeson Road, Harbeson, Delaware ("Harbeson Facility"); and

WHEREAS, DNREC is responsible for the administration of the National Pollutant Discharge Elimination System (NPDES) program in accordance with *33 U.S.C.* §§1251 *et seq.* and *7 Del. C.* Chapter 60; and

WHEREAS, pursuant to this authority, DNREC issued NPDES Permit DE 0000299 ("NPDES Permit"), effective February 1, 2006, to Allen Harim Foods, LLC, which regulates the Wastewater Treatment Plant ("WWTP"), and authorizes the discharge of treated effluent from the Harbeson Facility through Outfall identified as 001, 002, 003, and 004, to the Beaver Dam Creek, and ultimately the Broadkill River; and

WHEREAS, pursuant to Part I.B, of the NPDES Permit, Allen Harim is required to monitor its discharge by collecting samples of said discharge and analyzing them for a number of pollutant parameters as more fully specified in the NPDES Permit, summarizing this data in a monthly Discharge Monitoring Report (DMR) regularly submitted to DNREC; and

WHEREAS, Allen Harim submitted DMRs, "5-Day Letters," and non-compliance letters to DNREC reporting effluent limitation and permit violations, more fully delineated in Exhibit A, attached hereto and incorporated by reference herein; and

WHEREAS, these incidents appear to be the direct result of equipment failures, process overloads, and various other circumstances as described in the reports as submitted to DNREC; and

WHEREAS, as a result of these reported incidents, Notice of Violation (NOV) W-16-SWD-04 was delivered to Allen Harim on November 4, 2016; and

WHEREAS, Allen Harim investigated the violations of the NPDES Permit and formally responded to the NOV on December 1, 2016, conveying the effectiveness of their corrective actions; and

WHEREAS, by the end of December 2016, the previously planned and authorized "phase 1" upgrade to the WWTP was complete; and

WHEREAS, since completion of the improvements Allen Harim has not violated the NPDES Permit wastewater discharge limits, which confirms that the modifications have corrected the circumstances giving rise to the violations; and

WHEREAS, in view of the incidents delineated *supra* and pursuant to *7 Del. C.* §6005(b)(3), DNREC has drafted a Notice of Administrative Penalty Assessment and Secretary's Order 2018-W-0014, attached hereto as Exhibit A, assessing an administrative penalty of Two Hundred Forty One Thousand Dollars ($241,000) for the incidents described herein, and further, pursuant to *7 Del. C.* §6005 (c), assessing an amount of Seven Thousand, Eight Hundred and Eighty Eight Dollars ($7,888) to cover DNREC abatement expenses; and

WHEREAS, Allen Harim, LLC owns and operates a hatchery facility located at 26867 Nine Foot Road, Dagsboro, Delaware ("Dagsboro Hatchery"); and

WHEREAS, pursuant to the authority delineated *supra*, DNREC issued State Permit 258994-04 ("Hatchery Permit"), authorizing spray irrigation of screened hatchery processing wastewater pursuant to a nitrogen loading limit of 260 lbs/acre/year; and

WHEREAS, based on Annual Reports filed by Allen Harim, Allen Harim violated the Hatchery Permit nitrogen loading limits in 2016 and 2017, with 872.3 lbs/acre and 407.9 lbs/acre respectively causing the groundwater to exceed drinking water standards for nitrate nitrogen; and

WHEREAS, groundwater monitoring wells have exceeded the drinking water standard of 10 mg/L for Nitrate Nitrogen. Reported 2016 data from groundwater indicated Nitrate Nitrogen has been as high as 32.7 mg/L in June 2016 with an annual average of 23.95 mg/L. In 2017 groundwater monitoring data identified Nitrate Nitrogen as high as 27.8 mg/L in November 2017 with an annual average of 25.65 mg/L for Monitoring Well DNREC ID 82943; and

WHEREAS, these incidents appear to be related to the use of high ammonia chemicals, process overloads, and various other circumstances as described in the reports as submitted to DNREC; and

WHEREAS, both DNREC and Allen Harim agree that the resolution of these compliance issues without further protracted formal enforcement actions is in the best interest of the Parties and can be effectively accomplished *via* this Order designed to comprehensively address the matters contained in Secretary's Order 2018-W-0014, 5-day and non-compliance letters, and other permitting issues at both the Harbeson Facility and the Dagsboro Hatchery on a facility-wide basis in a systematic manner and additionally providing DNREC with enforceable assurances that the necessary actions will be timely undertaken and completed.

SECTION II: CONCILIATION

NOW THEREFORE, Allen Harim and DNREC jointly execute this Order to effectuate the purposes and actions delineated herein, and pursuant to *7 Del. C.* §6005(b)(2), it is Ordered and Agreed as follows:

1. Pursuant to *7 Del. C.* §6005(b)(3), DNREC assesses and Allen Harim expressly stipulates and agrees to an administrative penalty of **$300,000**. Further, pursuant to *7 Del. C.* §6005(c)(1), Allen Harim shall reimburse DNREC for its abatement expenses in the amount of **$7,888**.

2. In lieu of paying the administrative penalty, Allen Harim has proposed to offset said administrative penalty by undertaking an Environmental Improvement Project (EIP). Allen Harim has not yet submitted a proposed EIP for DNREC's approval. Due to the November 13, 2018 EAB Hearing, however, the parties agree that executing this Order is in their best interests.

    a. Allen Harim expects that the EIP will fund a Nature Conservancy project related to improving water quality by eliminating agricultural runoff and groundwater transfer of nutrients in the Broadkill River Watershed.
    b. The EIP will be memorialized by written agreement ("Agreement") between Allen Harim and any third parties performing and/or directing the work, as accepted and approved by DNREC, which will expressly stipulate the roles, responsibilities and accountabilities of both parties. Further, Allen Harim shall remain in regular contact with DNREC. At a minimum, Allen Harim shall update DNREC every ninety (90) days with an explanation of the work

completed since the previous update and disclosure of any delays or issues reasonably anticipated to affect the timeline. The Agreement must be finalized within sixty (60) calendar days from the effective date of this Order and must stipulate that the EIP will commence within sixty (60) calendar days from the effective date of the Agreement.

c. The successful completion of the EIP, subject to DNREC approval thereof, will result in the direct offset not to exceed **50%** of the Administrative Penalty Assessment (an amount not to exceed **$150,000**), leaving a remaining balance of not less than **$150,000**, plus DNREC abatement expenses in the amount of **$7,888**.

d. It is anticipated by the Parties that Allen Harim will utilize the maximum direct offset amount to fund the EIP. Accordingly, Allen Harim shall remit the minimum $150,000 administrative penalty, plus DNREC abatement expenses in the amount of $7,888 within thirty (30) calendar days of the effective date of this Order. Payment shall be remitted in two checks payable to the State of Delaware, and mailed to: State of Delaware, Department of Natural Resources and Environmental Control, Attn: Kayli Spialter, Esquire, Delaware Department of Justice, 820 North French Street, Sixth Floor, Wilmington, DE 19801.

e. In the event that any of the above deadlines are not met, the entire Administrative Penalty assessment of **$300,000** and abatement expenses of **$7,888** shall become immediately due and payable.

3. Notwithstanding any express stipulation in this Order to the contrary, if any event occurs that causes or may cause a delay or have a materially adverse effect on Allen Harim's ability to perform in compliance with this Order, and such event is beyond Allen Harim's reasonable control and is not the product or result of Allen Harim's negligence (*Force Majeure* Event), Allen Harim shall notify DNREC, in writing, within five (5) calendar days of when Allen Harim first knew of the event or should have known of the event by the exercise of due diligence. In this written notice, Allen Harim shall provide sufficient evidence to support this claim. Unanticipated or increased costs or expenses associated with the performance of Allen Harim's obligations as described herein shall **not** constitute a *Force Majeure* Event. DNREC shall respond to Allen Harim, in writing, regarding its claim of delay or impediment to performance within fifteen (15) calendar days of receipt of notice of claim. Assessment of the effect, if any, of the enumerated factors on Allen Harim's ability to comply with the terms of this Order shall be in the sole discretion of DNREC, and DNREC retains full discretion to extend or modify the terms of this Order, or not, as it sees fit.

4. In the event Allen Harim and/or any third party to the Agreement fails to meet any deadlines or fails to fund the EIP as expressly stipulated in the Agreement, DNREC reserves the right to commence any administrative, civil and/or criminal remedies against Allen Harim pursuant to *7 Del. C.*§6005.

5. When Allen Harim believes that the Agreement has been fully satisfied, in compliance with the requirements of this Order, then Allen Harim shall so certify to DNREC, in writing, including a delineation of the actual expenses incurred in the completion of EIP activities described herein. Within sixty (60) calendar days after the receipt of Allen Harim's certification, DNREC shall provide a written response to Allen Harim indicating partial or complete concurrence. If DNREC determines that concurrence is complete, this Order will be deemed satisfied; if concurrence is partial, DNREC will identify the outstanding activities that require satisfaction. Either notice will be in writing.

6. Allen Harim has terminated all spray irrigation activities at the Dagsboro Hatchery and does not intend to resume spray irrigation activities under State Permit 358994-04. Allen Harim will proceed with spray facility closure requirements in accordance with 7 *Del. C Admin* § 7101-6.14. Allen Harim will continue to comply with all monitoring and reporting requirements of State Permit 358994-04 until DNREC has completed and the facility has passed the final inspection. In lieu of spray irrigation, Allen Harim has planned for a proposed connection to the Sussex County Waste Water Treatment Facility ("WWTF"). Plans for this project have been formally submitted by Allen Harim to Sussex County and are under review. The expected date for the completion of the connection to the Sussex County WWTF is within 12 months from receipt of all required approvals.

7. Pursuant to statute, *7 Del. C.* §6005(b)(2), Allen Harim has the right to a hearing regarding conciliation and, where no hearing is requested, all of the deadlines set forth herein will be entered as a binding Order. By executing this Order, Allen Harim formally acknowledges that it has read and understands this Conciliation Order by Consent, accepts all the stipulations contained herein, and voluntarily waives its right to a hearing. Further, Allen Harim voluntarily waives any right to appeal or contest this Order and further agrees to perform each of the actions listed in this Order pursuant to the schedule set forth herein. Additionally, Allen Harim acknowledges and does not contest the violations set forth in the attached Exhibit A.

8. Miscellaneous Provisions:

a. Binding on Successors: It is the intention of the parties that this Order shall be binding upon and enforceable against the Parties and their successors, heirs, executors, administrators and assigns.
b. Severability: In the event that any provision (section, paragraph, or portions thereof) of this Order shall be held invalid or unenforceable for any reason, it shall not in any way invalidate, affect, or impair the remaining provision(s) (sections, paragraphs, or portions thereof) of this Order, and to this end, the provisions of this Order are hereby declared to be severable.
c. Construction: The agreement shall be construed according to the intent of the parties to resolve the pending violations and to prevent future violations and harm to the environment. No provision(s) or paragraph(s) of this Order shall be construed based on authorship.
d. Compliance with Law: Nothing in this Order shall relieve Allen Harim of its obligation to comply with all applicable federal, state or local laws or regulations.
e. Good Faith: The Parties agree to act in good faith and to cooperate fully with each other in carrying out the intent of this Order, provided that nothing in this Order shall be construed to restrict DNREC's regulatory and permitting judgment and discretion, and nothing in this Order shall be construed to require DNREC to pay or appropriate any monies or expend any funds.
f. Publicity: The Parties agree that the EIP proposed and undertaken pursuant to this Order is undertaken as the result of an enforcement action. Accordingly, Allen Harim is prohibited from publicizing or being recognized for the EIP. If the EIP or results thereof are made public by Allen Harim, it will state in a prominent manner that the project is being undertaken as part of a settlement of an enforcement action.
g. Notices: Any notices in regard to this Order shall be in writing and sent to: Department of Natural Resources and Environmental Control, Division of Water, Surface Water Discharges Section, Compliance & Enforcement Branch, ATTN: Mr. Bryan Ashby, Environmental Program Manager II, 89 Kings Highway, Dover, Delaware, 19901, with a copy sent to: Delaware Department of Justice, ATTN: Kayli Spialter, Esquire, Delaware Department of Justice, 820 North French Street, Sixth Floor, Wilmington, DE, 19801.
h. Entire Understanding: This Order constitutes the entire agreement and settlement between the Parties. The Parties acknowledge that this Order may not be amended except in writing executed by both Parties.
i. No Third Party Rights: The Parties to this Order expressly intend that this Order shall create no right(s) in any person or entity not a party to this Order.

j. This Order becomes effective on the date of execution by the Secretary of DNREC.

Date: 10/30/18

Shawn M. Garvin, Secretary
Department of Natural Resources
and Environmental Control

Agreed and Accepted:

Date: 10/29/18

Allen Harim, LLC

By: Joe Moran
Name: Joe Moran
Title: CEO & President

From: John Hinkson <john.hinkson@TNC.ORG>
To: Anthony Scarpa <ajsinc1@aol.com>
Subject: RE: Hello from The Nature Conservancy
Date: Tue, Aug 20, 2019 3:04 pm

Hello Anthony,

We apologize for the confusion but I do have a response from you regarding the Allen Harim settlement.

The Secretary's order No 2018-W-0057 listed on the DNREC website (http://www.dnrec.delaware.gov/Info/Documents/Secretarys-Order-No-2018-W-0057.pdf) was published by DNREC before any such agreement with The Nature Conservancy was confirmed. It appears that Allen Harim proposed an Environmental Improvement Project (EIP) that would be similar to the agreement we had with Purdue/DNREC from earlier in 2018 (mentioned in email below). The Nature Conservancy did not accept any funds and was not a participant in the conciliation order.

If you have additional questions about that particular conciliation order, we suggest reaching out to DNREC for more information.

We hope this helps you with your research and wish you all the best in your efforts.

Sincerely,

John Hinkson

John Hinkson
Marketing and Communications Coordinator
john.hinkson@tnc.org

O: (302) 654-4707 x 427

The Nature Conservancy in Delaware

100 W. 10th St, Suite 1107

Wilmington, DE 19801

nature.org/delaware

From: Anthony Scarpa <ajsinc1@aol.com>
Sent: Tuesday, August 20, 2019 1:37 PM
To: John Hinkson <john.hinkson@TNC.ORG>
Subject: Re: Hello from The Nature Conservancy

Hi John,

Have you had any luck finding out if Allen Harim has entered into a formal agreement to work with the Nature Conservancy on a project in the Broadkill River Watershed? If they were required by DNREC to give your organization $150,000, I would think that would be a pretty big deal and it would be on your radar.

I am trying to finish a report today for our water group and wanted to include this information in the report. Any help that you can give me will be appreciated.

Thanks,

Anthony

-----Original Message-----
From: John Hinkson <john.hinkson@TNC.ORG>
To: Anthony Scarpa <ajsinc1@aol.com>
Sent: Mon, Aug 19, 2019 5:46 pm
Subject: RE: Hello from The Nature Conservancy

Sorry, Anthony. I will inquire with my colleagues to determine what information we have about the Allen Harim fine.

Sincerely,
John

John Hinkson
Marketing and Communications Coordinator
john.hinkson@tnc.org
O: (302) 654-4707 x 427

The Nature Conservancy in Delaware
100 W. 10th St, Suite 1107
Wilmington, DE 19801

nature.org/delaware

From: Anthony Scarpa <ajsinc1@aol.com>
Sent: Monday, August 19, 2019 4:07 PM
To: John Hinkson <john.hinkson@TNC.ORG>
Subject: Re: Hello from The Nature Conservancy

Hi John,

Thank you for the follow up email. The fine that I was inquiring about was the Allen Harim fine levied by DNREC in October of 2018. The information in your email is related to the Purdue Foods DNREC agreement from 2015.

Allen Harim was ordered by the Secretary of DNREC on October 30, 2018 to pay a fine of $300,000 plus legal fees. $150,000 plus legal fees to be paid directly to DNREC in 30 days and the balance of

$150,000 to fund a Nature Conservancy Environmental Improvement Project in the Broadkill River Watershed.

My question is, has that money been paid to your group and what is the improvement project that the money paid for? Has it been completed? Did Allen Harim pay the required total of $150,000?

Thank you,
Anthony Scarpa

-----Original Message-----
From: John Hinkson <john.hinkson@TNC.ORG>
To: ajsinc1@aol.com <ajsinc1@aol.com>
Sent: Mon, Aug 19, 2019 3:49 pm
Subject: Hello from The Nature Conservancy

Hello Anthony,

My colleague informed me that you were looking for information related to a Purdue fine which DNREC allocated a portion of the funds to The Nature Conservancy. We used the funds to plant 39 acres of native trees on our Edward H. McCabe Preserve located in the Broadkill watershed to help improve water quality.

I have attached our press release that we wrote about the project at the time (3/2/2018).

Separately, this link to The News Journal, contains additional information that you were requesting regarding the total fine. Please see article for details: https://www.delawareonline.com/story/news/local/2018/03/02/sussex-perdue-plant-fined-water-pollution/389096002/

The News Journal article references the original press release from DNREC, which contains a link to DNREC penalty orders. See their websites for additional information: https://news.delaware.gov/2018/03/02/dnrec-issues-conciliation-consent-secretarys-order-77300-penalty-perdue-foods-wastewater-violations/ - See link at bottom of press release to penalty order.

I hope this helps.

Sincerely,
John Hinkson

John Hinkson
Marketing and Communications Coordinator
john.hinkson@tnc.org
O: (302) 654-4707 x 427

The Nature Conservancy in Delaware
100 W. 10th St, Suite 1107
Wilmington, DE 19801

nature.org/delaware

Scarpa Exh. 2

August 19, 2019

Lisa Vest
Hearing Officer
Department of Natural Resources and Environmental Control
89 Kings Highway
Dover, DE 19901

Re: Docket #2019-P-W-0016- Public Comments #2: Public Notice Issues

Dear Hearing Officer Vest:

I am submitting this comment in opposition to the Artesian Spray Irrigation Permit. In my opinion the Application is incomplete and should be sent back to Artesian. The most glaring omission is the complete lack of residential well test data for all homes within 1 mile of the Artesian Milton facility and spray fields. Testing is needed to assess the impact of dumping millions of gallons a day of chicken process wastewater near private wells and the impact of the Artesian Spray Irrigation facility on the highly contaminated Clean Delaware fields. A pre-spray disposal, environmental well test record, should be established and yearly testing required of private wells for a 5 year period to assess the impact of the Artesian Facility on its neighbors.

Directly across Route 30 (Isaacs Road) from Artesian Spray Field G and contiguous to the Artesian lagoon site lies a company called Clean Delaware. Clean Delaware operates under DNERC permit AGU 1701-S-03 with authorization to dispose of stabilized sludge generated in the treatment of wastewater in Delaware and other land treatable wastes approved by DNREC. The agricultural utilization of lime stabilized septage and holding tank waste and approved wastewater treatment residuals.

The Clean Delaware disposal site is 216 acres and is located on the east side of Route 30 (Isaacs Road) and north of Route 16 (Milton-Ellendale Highway) approximately 1 mile northwest of Milton. (See attached DNREC Authorization, To Operate A Land Treatment System For The Agricultural Utilization Of Sludge And Waste Products.) This document outlines the conditions of Permit AGU 1701-S-03 including testing requirements, limitations on which portions of the farm can be used for disposal, monitoring requirements, amounts of sludge and septage for disposal, record retention and owner's responsibilities.

The Clean Delaware Milton Farm site has a long history of nitrate and Enterococcus contamination that has left their property and entered private wells east of their spray fields. Attached is a map of the Clean Delaware facility with pink balloons indicating the level of nitrates found in Clean Delaware test wells and private wells in the Collins, Russell and Slim Street neighborhood east of the spray fields. Nitrate levels 9 times the EPA safe drinking water requirement has been found in the test wells.

For DNREC and Artesian to ignore this glaring deficiency in the Artesian application is unconscionable especially since DNREC has known about the Clean Delaware problem for over 20 years.

I submitted a FOIA request to DNREC last summer to obtain the most recent well test data for the Clean Delaware site only to be denied all the way up to the Delaware Attorney Generals office. I was told that the Clean Delaware files are not available to the public because they are "Under Investigation" by DNREC. I was also told by the Deputy Secretary of DNREC, Lisa Born Ogden, that Clean Delaware was going to be fined, for permit violations. Nothing has happened.

Why is the public being denied records for a company with a long history of contaminating neighboring private wells? Why has Artesian been allowed to ignore the Clean Delaware problem in this operating permit application?

According to a report prepared for Clean Delaware, by Duffield Associates dated 8/20/17, titled Groundwater Flow Sketch, groundwater on the Clean Delaware site from Isaacs Road goes west to east toward the Collins, Russell and Slim Street neighborhood. The ground water from the Artesian Spray Field G, on the other side of Isaacs Road, flows in the same direction west to east. When the spray irrigation of nitrate loaded, chicken wastewater begins it will enter the groundwater and flush the Clean Delaware contaminate plume into the Collins, Russell and Slim Street neighborhood. That will only make a bad situation worse. Spray Field G should not be utilized by Artesian until extensive testing can be done to determine the impact on this neighborhood.

New homes constructed in the Pemberton neighborhood a half a mile away from Clean Delaware have twice the allowable EPA levels of Nitrates in their wells. Even new homes with deeper wells test above the EPA limit.

Attached is a newspaper article with interviews from residents living in the Collins, Russell and Slim Street neighborhood describing their well conditions. The title of the article is "It's Like Living in a Cesspool, Sussex County Wonders How Far Dirty Water Has Spread. Dated April 2018. Similar Clean Delaware sites in Ellendale and Harbeson have experienced nitrate contamination also. Land disposal of sludge and septic tank water should not be done on sandy soils with high water tables. Most states require these types of wastewaters to be sent to a sewage treatment facility for proper treatment before disposal, not sprayed on sandy soils next to residential wells.

Artesian Test Well Data for Field G revels that of the 9 test wells in Field G, 7 wells exceeded the EPA standard for nitrates in drinking water. What will happen when nitrate loaded chicken wastewater is added to the elevated nitrates present in the groundwater? It, should also be noted that the tests were conducted in October after the crops were harvested and again in March and April before the spring crops were planted. These are the time periods when nitrates in the groundwater would be the lowest. After the crops utilize farmer applied fertilizers and before fertilizers are added to new crops by the farmer.

The Artesian Surface Water Monitoring Results show that the highest concentrations of Fecal Coliform and Fecal Enterococcus colonies are found in Surface Water Test Wells 1 & 2. These are the Surface Test Wells closest to the Clean Delaware Facility on the other side of Issacs Road.

If Artesian and DNREC are truly interested in protecting public health and not just in a cheap way to assist the poultry industry in disposing of their wastewater then this application should be suspended until extensive well testing and public health evaluations are completed.

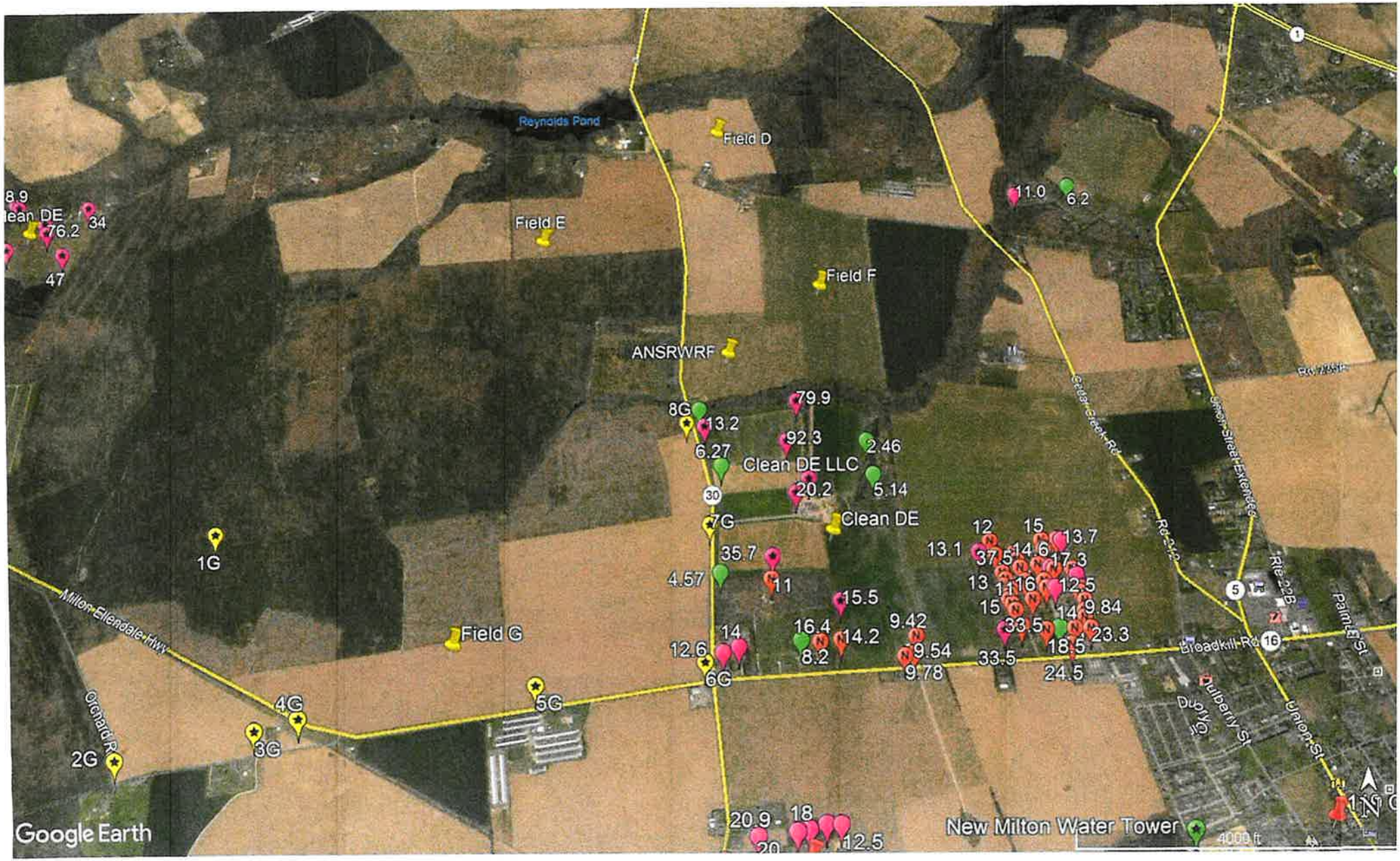
The Department of Agriculture in Maryland has recently updated their Agriculture Operation Nutrient Management Plan Requirements which prohibits the winter (December 16 through February 28) application of nutrients except under special circumstances. Maryland also requires 75 days of storage for wastewater spray irrigation effluent verses the 45 day storage capacity required in Delaware. The Artesian 90 Million gallon storage lagoon is too small.

All spray irrigation of sludge and septage wastewater should be suspended at Clean Delaware until well testing and a public health evaluation is completed. All contaminated wells in the Collins, Russell and Slim Street neighborhood should be hooked up to a public water system before Clean Delaware and Artesian are permitted to operate at this location. Public health should be protected before the interests of corporate profits.

Allen Harim can continue to dispose of their wastewater in the Beaverdam Creek without a financial penalty while well testing and a public health evaluation is completed. Clean Delaware can take their wastewater and sludge to a municipal wastewater treatment facility while their spray operations are suspended.

Artesian took a calculated risk in building the 90 million gallon lagoon in Milton and has the financial ability to wait until this public health crisis is resolved. Everyone involved should be more interested in seeing the residents on Collins, Russell and Slim Streets get clean drinking water than potentially making their problem worse.

Sincerely,
Anthony Scarpa
15430 Pemberton Way
Milton, DE 19968
(908) 963-9588


Reynolds Pond
Field D
Field E
Field F
ANSRWRF
Field G
Clean DE LLC
Clean DE
New Milton Water Tower
Milton-Ellendale Hwy
Orchard Rd
Broadkill Rd
Union St
Mulberry St
Cedar Creek Rd
Union Street Extended
Palmer St
Google Earth
1G
2G
3G
4G
5G
6G
7G
8G
8.9
76.2
34
47
79.9
13.2
6.27
92.3
2.46
20.2
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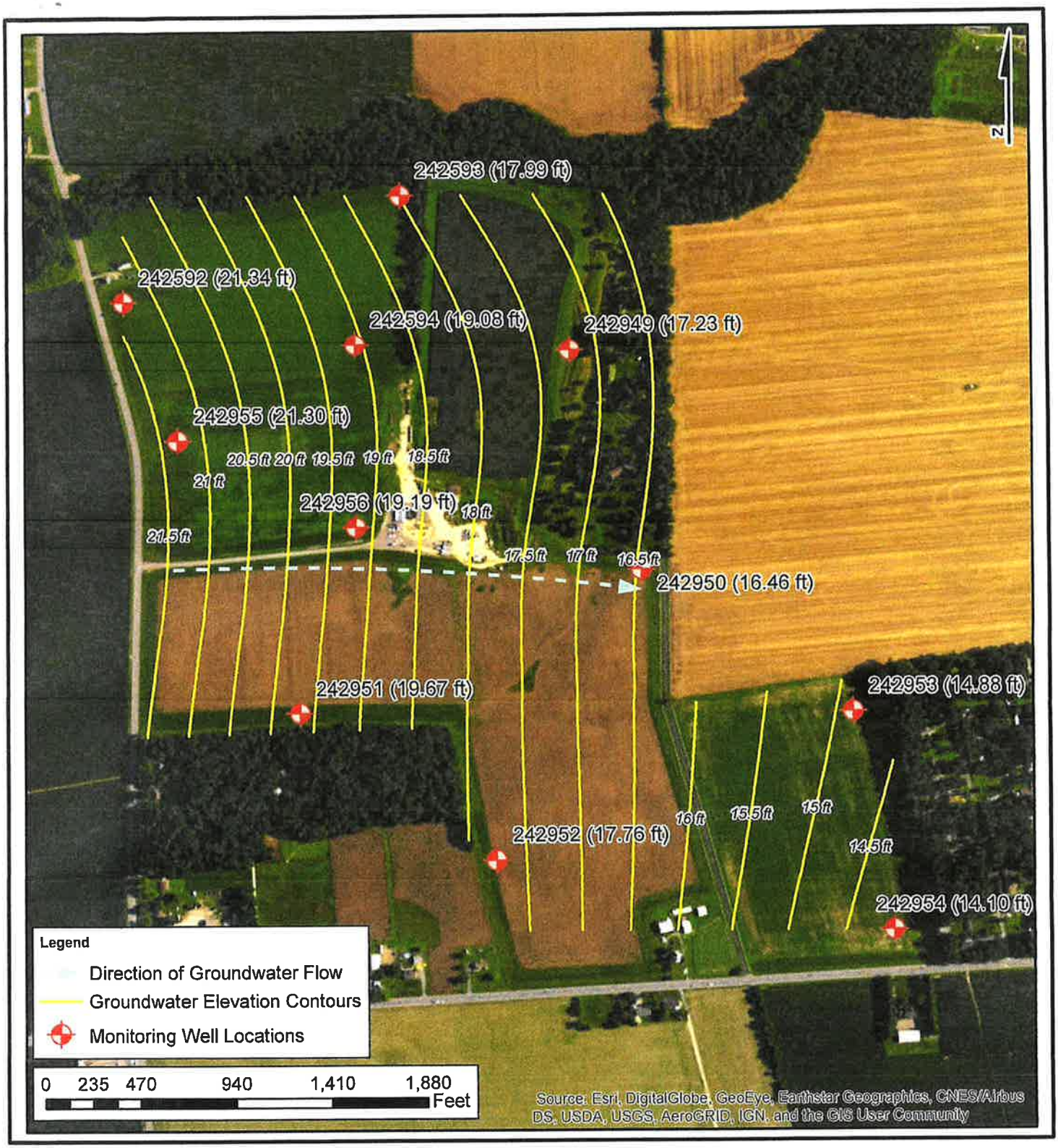
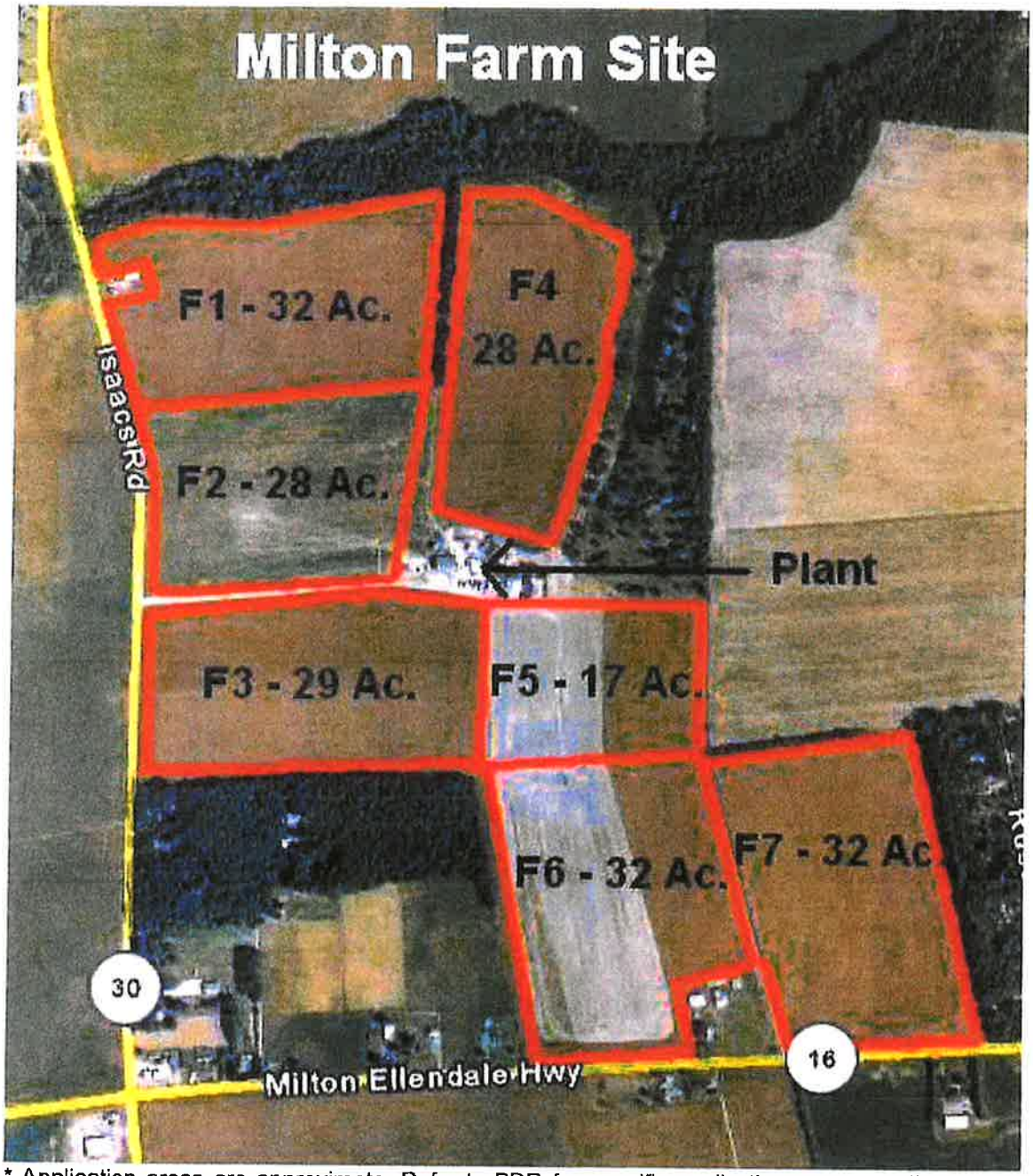


Date: 08/2017	**GROUNDWATER FLOW SKETCH**	DESIGNED BY: CSP	DUFFIELD ASSOCIATES Soil, Water & the Environment
SCALE: AS SHOWN	CLEAN DELAWARE	DRAWN BY: CSP	5400 LIMESTONE ROAD WILMINGTON, DE 19808-1232 TEL. (302)239-6634 FAX (302)239-8485
PROJECT NO. 11191.EA	**Milton Farm 14227 Isaacs Road**	CHECKED BY: SFC	OFFICES IN PENNSYLVANIA, SOUTHERN DELAWARE, MARYLAND AND NEW JERSEY
SHEET: ATTACHMENT 1	MILTON~SUSSEX COUNTY~DELAWARE	FILE: 11191.EA.GW_Flow_Sketch.mxd	EMAIL: DUFFIELD@DUFFNET.COM

SITE LOCATIONS:

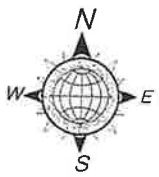
Milton Farm Site: This site consists of approximately 216 acres of land located east of Route 30 (Isaacs Road) and north of Route16 (Milton-Ellendale Highway) approximately 1 mile northwest of Milton.

Tax parcel numbers: 2-35-14.00-1.00, 2-35-14.00-2.00, 2-35-14.00-3.00, 2-35-14.00-60.00



* Application areas are approximate. Refer to PDR for specific application areas. Buffer zones as specified in Section 138.2 of Part III, (B), of the Guidance and Regulations Governing The Land Treatment of Wastes shall be maintained when applying materials regulated under this permit.

MILTON FARM
SCALE = 1:400



LEGEND

GSE = GROUND SURFACE ELEVATION
TCE = TOP OF CASING ELEVATION
 # mg/L BOLD = TESTING DATE: MAY/JUNE 2013
 # mg/L *BOLD + ITALICIZED* = TESTING DATE: SEPTEMBER 2013
BLACK = < 10 mg/L NO_3 + NO_2
RED = > 10 mg/L NO_3 + NO_2

NOTES:

1. **ALL RESULTS SHOWN ARE NO_3 + NO_2, EPA METHOD 353.2.**
2. **OBSERVATION WELLS LABELED "TO BE ABANDONED" WERE NOT SAMPLED DURING EITHER RECENT SAMPLING EVENTS**
3. **WELLS TO BE ABANDONED DISCUSSED WITH DNREC AND CLIENT.**

TITLE: **MONITORING WELL WATER QUALITY SAMPLING**

PROJECT: **CLEAN DELAWARE, LLC**

ATLANTIC RESOURCE MANAGEMENT, INC.
Post Office Box 869
Ocean View, DE 19970
(302) 539-2029
Fax: (302) 539-4601
DE@atlanticresource.net
ENVIRONMENTAL CONSULTANTS

PARCEL SIZE: AS SHOWN
SURVEYED BY: ALL AVAILABLE INFO.
DRAWN BY: J.T. MOORE
CHECKED BY: L. ERICKSON
JOB #: 57A-09A-0913-MW
SCALE: AS NOTED
TAX MAP: AS NOTED
DATE: NOVEMBER 13, 2013

SHEET NO: 1

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
Milton Farm			
235-6.00-25.00	Well(s) > 300 feet; Farm with Improvement per zoning	Not Sampled as of: 2/17/2014	
235-6.00-25.05	Well(s) > 300 feet; Residential, per zoning	N/A	
235-6.00-28.09	Well(s) > 300 feet; Farm per zoning	N/A	
235-7.00-7.00	Well(s) > 300 feet; Agricultural	N/A	
235-7.00-8.00	Well(s) > 300 feet; Agricultural	N/A	
235-13.00-6.05	Well(s) > 300 feet; Agricultural	N/A	
235-14.00-1.00	Dwelling - Well location to be determined/ Clean Delaware Operations / Monitoring Wells	NO_3 = 6.56 mg/L / Date Sampled: 11/19/2013 / Lab ID: L4836080-1 / Monitoring Wells	
235-14.00-2.00	Agricultural/ Clean Delaware Operations/ Monitoring Wells	Monitoring Wells Data May-June/ September/ December - see plan	
235-14.00-3.00	Dwelling - Visible 4" Well No ID/ Clean Delaware Operations Center - Visible 6" pvc Well No ID/ Brick Dwelling - Well based on all available information/ Monitoring Wells	**Hudson Dwelling:** NO_3 = 14.3 mg/L / Date Sampled: 11/19/2013 / Lab ID: L4836078-1 / **Commercial Op Ctr:** NO_3 = 2.17 mg/L / Date Sampled: 11/19/2013 / Lab ID: L4836079-1 / **Brick Dwelling:** NO_3 = 40.4 mg/L / Date Sampled: 11/21/2013 / Lab ID: L4837786 / Monitoring Wells Data May-June/ September/ December - see plan	**Hudson Dwelling**: NO_3 = 12.9 mg/L / Date Sampled: 11/19/2013 / ELS Sample Number: 131026-004 **Commercial Op Ctr:** NO_3 = 2.28 mg/L / SO_4^{2-} = < 0.75 mg/L / Date Sampled: 11/19/2013 / ELS Sample Number: 1311026-005
235-14.00-4.00	Well(s) > 300 feet; Agricultural	N/A	
235-14.00-60.00	Monitoring Wells Only - November 2013 Sampling	Monitoring Wells Data May-June/ September/ December - see plan	
235-14.00-61.00	Well(s) > 300 feet; Farm with Home site per zoning	Not Sampled as of: 2/17/2014	
235-14.00-61.01	Residential, - well location to be determined	NO_3 = 16.7 mg/L / Date Sampled: 11/21/2013 / Lab ID: L4837787 NO_3 = 11 mg/L pre treatment and 0 mg/L post treatment Date Sampled = 8/1/16	
235-14.00-61.02	Residential, Visible pvc Well Permit # 88736	NO_3 =9.46 mg/L Date Sampled 12/30/2013 Lab ID: L4875980-1	
235-14.00-62.00	Wooded Vacant per zoning	N/A	
235-14.00-63.00	Residential, Visible 2" pvc Well (tag unreadable)	NO_3 = 4.57 mg/L / Date Sampled: 11/20/2013 / Lab ID: L4836267	NO_3 = 4.73 mg/L / Date Sampled: 11/20/2013 / ELS Sample Number: 1311026-010
235-14.00-64.00	Residential, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-77.00	Well(s) > 300 feet; Agricultural	N/A	
235-14.00-78.00	Vacant per zoning - abandoned home site - structures removed	N/A	
235-14.00-79.00	Residential, per zoning	NO_3 = 9.78 mg/L / Date Sampled: 11/21/2013 / Lab ID: L4837785	
235-14.00-80.00	Residential, per zoning	NO_3 = 9.54 mg/L / Date Sampled: 11/21/2013 / Lab ID: L4837784	
235-14.00-81.00	Vacant per zoning	N/A	
235-14.00-83.00	Residential, per zoning	Not Sampled as of: 2/17/2014	
235-14.00-83.01	Well(s) > 300 feet; Agricultural	N/A	
235-14.00-133.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014 NO_3 = 12 mg/L pre treatment 0 mg/L post treatment Date sampled 8/10/16	
235-14.00-134.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-135.00	Residential, MH, Visible 4" pvc Well Permit # 86367	Not Sampled as of: 2/17/2014	
235-14.00-136.00	Residential, MH, Visible 2" pvc Well Permit # 89594	NO_3 = 40.5 mg/L / Date Sampled: 11/21/2013 / Lab ID: L4837791 NO_3 = 25 mg/L Pre treatment and 0, and 3 mg/L post treatment Date Sampled - 8/1/16 and 8/8/16	NO_3 = 32.1 mg/L / Date Sampled: 11/21/2013 / ELS Sample Number: 1311026-013
235-14.00-137.00	Residential, MH per zoning, Visible 2" pvc Well Permit # 87049	NO_3 = 37.5 mg/L / Date Sampled: 11/21/2013 / Lab ID: L4837790 NO_3 = 4.20 mg/L Date Sampled 12/30/13 Lab ID: L4875980-4 NO3 = 15 mg/L pre treatment, 0 ppm post treatment Date Sampled 8/9/16	NO_3 = 29.1 mg/L / SO_4^{2-} = 1.23 mg/L / Date Sampled: 11/21/2013 / ELS Sample Number: 1311026-012
235-14.00-138.00	Residential, vacant, home removed, well in pumphouse	Not Sampled as of: 2/17/2014	
235-14.00-139.00	Residential, visible well in back	NO_3 = 51.5 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-8	
235-14.00-140.00	Residential, well location based on available information	pled: 01/28/2014 / Lab ID: L4909504-3 NO_3 - 13 mg/L pre treatment, 0 mg/L post treatment Date Sampled 8/2/16	
235-14.00-141.00	Residential, MH, well location to be determined	33.4 NO3 = mg/L and 2.28 after treatment / Date Sampled 3/13/15 NO3 = 14 mg/L pre treatment and 3 mg/L post treatment Date Sampled 8/22/16	
235-14.00-142.00	Residential, MH, well location to be determined	34.6 N03 = mg/L and 3.23 after treatment / Date Sampled 3/13/15 NO3 = 15 mg/L pre treatment and 2 mg/L post treatment Date Sampled 8/22/16	
235-14.00-143.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-144.00	Residential, MH, well location to be determined	pled: 11/21/2013 / Lab ID: L4837789 NO3 = 12 mg/L pre treatment 0 mg/L post treatment Date Sampled 8/2/16	

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
235-14.00-145.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014 NO_3 = 11 mg/L pre treatment and 0 mg/L post treatment Date sampled 8/2/16	
235-14.00-146.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-147.00	Residential, MH, well location to be determined	pled: 11/21/2013 / Lab ID: L4837788 NO3 = 15 mg/L pre treatment, 4 mg/L post tre	NO_3 = 25.9 mg/L / SO_4^{2-} = 19.5 mg/L / Date Sampled: 11/21/2013 / ELS Sample Number: 1311026-011
235-14.00-148.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-149.00	Vacant per zoning	N/A	
235-14.00-150.00	Residential, MH, Visible 2" pvc Well Permit # 91231	ed: 12/11/2013 / Lab ID: L4862218-7 NO_3 = 20.0 mg/L pre treatment 0 mg/L post treatment Data Sampled 8/1/16	
235-14.00-151.00	Residential, MH, vis. 2" PVC well, ID # 81909	Not Sampled as of: 2/17/2014	
NOTE: SPREADSHEET USES ZONING INFORMATION AS OF 2/17/2014 ONLINE (http://sussexcountyde.gov/tax-information). CONCENTRATION ON PROPERTIES W			
WELLS WITHIN NOVEMBER 2013 AREA OF INTEREST - IMMEDIATELY CONTIGUOUS			

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
WELLS WITHIN NOVEMBER 2013 AREA OF INTEREST - IMMEDIATELY SURROUNDING			

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
235-14.00-35.00	Residential	Not Sampled as of: 2/17/2014	
235-14.00-36.00	General Residential	Not Sampled as of: 2/17/2014	
235-14.00-37.00	General Residential, visible pvc well, no tag	NO_3 = 25.5 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-8 NO_3 = 14 mg/L pre treatment 0 mg/L post treatment mg/L and 10 mg/L pre treatment and 0 mg/L post treatment Date Sampled 8/8/16	
235-14.00-61.03	Residential, well location to be determined	NO_3 = 14.2 mg/L / Sampled by John Workman	
235-14.00-61.04	Residential, Visible Well # 224312	NO_3 = 16.4 mg/L / Sampled by John Workman	
235-14.00-61.05	Residential, well location to be determined	NO_3 = 8.2 mg/L / Sampled by John Workman	
NOTE: SPREADSHEET USES ZONING INFORMATION AS OF 2/17/2014 ONLINE (http://sussexcountyde.gov/tax-information). CONCENTRATION ON PROPERTIES V			

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
Milton Farm Radius Annex II			
235-14.00-10.00	Commercial/ Residential, 4" pvc well, no id	NO_3= 23.3 mg/L Date Sampled 01/28/2014 Lab ID: L4909504-4	
235-14.00-11.00	Residential, single dwelling, approx. well per owner	NO_3= 9.52 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-13	
235-14.00-12.00	Residential, single dwelling, well per owner	NO_3= 9.84 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-12	
235-14.00-13.00	Residential, single dwelling, 4"pvc well # 212554	Not Sampled as of: 2/17/2014	
235-14.00-15.00	Vacant	N/A	
235-14.00-15.01	Vacant	N/A	
235-14.00-15.02	Residential, single dwelling, 4"pvc well # 219113	NO_3= 12.5 mg/L Date Sampled 01/28/2014 Lab ID: L4909504-1	
235-14.00-15.03	Vacant	N/A	
235-14.00-16.00	Residential, single dwelling, 4"pvc well # 212555	NO_3= 23.8 mg/L Date Sampled 12/30/2013 Lab ID: L4875980-11	
235-14.00-17.00	Vacant	Not Sampled as of: 2/17/2014	
2-35-14.00-17.01	General Residential - home demolished/ removed prior to 12/30/2013	Not Sampled as of: 2/17/2014	
235-14.00-18.00	General Residential - home demolished/ removed prior to 12/30/2013	Not Sampled as of: 2/17/2014	
235-14.00-19.00	Vacant	N/A	
235-14.00-20.00	Residential, single dwelling, vs 2" PVC well, no id	Not Sampled as of: 2/17/2014	
235-14.00-21.00	Residential, single dwelling, 2" pvc well, no id	NO_3= 14.8 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-10	
235-14.00-22.00	Residential, single dwelling, 2" pvc well, no id	Not Sampled as of: 2/17/2014	
235-14.00-23.00	Residential, single dwelling, vis 2" PVC well, no id	NO_3 = 45.7 mg/L / Date Sampled 12/30/2013 Lab ID: L875980-6 $N0_3$ = 14 mg/L pre treatment 0 mg/L post treatment Date Samples 8/2/16	
235-14.00-25.00	Residential, MH, vis well #1551571	Not Sampled as of: 2/17/2014 $N0_3$ = 15 mg/L pre treatment and 4 mg/L post treatment Date Sampled 8/8/16	
235-14.00-27.00	Vacant	N/A NO3 = 5 mg/L pre treatment 0 mg/L post treatment Date Sampled 8/2/16	
235-14.00-27.01	Vacant	N/A	
235-14.00-28.00	Residential, MH, well per owner under SE shed	NO_3 = 17.6 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-7	
235-14.00-29.00	Residential, MH, septic in front	Not Sampled as of: 2/17/2014	
235-14.00-30.00	Residential, MH	Not Sampled as of: 2/17/2014	
235-14.00-31.00	Mixed Residential/ Commercial	N/A	
235-14.00-32.00	Mixed Residential/ Commercial	Not Sampled as of: 2/17/2014	
235-14.00-33.00	General Residential	Not Sampled as of: 2/17/2014	
235-14.00-34.00	Vacant	N/A	

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
		WELLS WITHIN NOVEMBER 2013 AREA OF INTEREST - IMMEDIATELY CONTIGUOUS	
		Milton Farm Radius Annex I	
235-14.00-26.00	Residential, MH vis. 4" PVC well # 155156	NO_3 = 53.5 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-5 NO_3 = 13 mg/L pre treatment 2 mg/L post treatment Date Sampled 8/1/16	
235-14.00-38.00	Residential with Improvement, vis. 2" PVC well # 79022	NO_3 = 6.70 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-3	
235-14.00-39.00	Residential, per zoning	Not Sampled as of: 2/17/2014	
235-14.00-40.00	Residential, single dwelling per zoning	Not Sampled as of: 2/17/2014	
235-14.00-41.00	Vacant per zoning	N/A	
235-14.00-41.01	Vacant per zoning	N/A	
235-14.00-42.00	Vacant per zoning	N/A	
2-35-14.00-43.00	Residential, single dwelling per zoning, well per owner (old)	NO_3 = 23.9 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-3	
235-14.00-43.01	Residential, single dwelling per zoning	Not Sampled as of: 2/17/2014	
235-14.00-43.02	Residential, single dwelling per zoning, well in pumphouse	NO_3 = 14.6 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-5	
235-14.00-43.03	Residential, single dwelling per zoning, well in pumphouse	NO_3 = 32.3 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-4 NO_3 = 18 mg/L pre treatment 3 mg/L post treatment Date Sampled 8/1/16	
235-14.00-43.04	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-44.00	Vacant per zoning	N/A	
235-14.00-45.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-46.00	Residential, MH, well location to be determined, septic likely in front	Not Sampled as of: 2/17/2014	
235-14.00-47.00	Residential, single dwelling per zoning	Not Sampled as of: 2/17/2014	
235-14.00-48.01	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-49.00	Residential, single dwelling per zoning	Not Sampled as of: 2/17/2014	
235-14.00-49.01	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-50.00	Residential, MH, vis. 2" PVC well # 92342	NO_3 = 46.1 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-2, 8/21/16 NO_3 = 15 mg/L pre treatment, 0 mg/L post treatment	
235-14.00-50.01	Residential, MH, vis. 2" PVC well, ID # 92341	NO_3= 51.0 mg/L Date Sampled 01/28/2014 Lab ID: L4909504-2	
235-14.00-51.00	Residential, single dwelling per zoning, well location to be determined	NO_3 = 50.0 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-6, 8/2/16 NO_3 25 mg/L pre treatment, 0 mg/L post treatment	
235-14.00-52.00	Residential, MH, well under lighthouse	Not Sampled as of: 2/17/2014 NO_3 = 13 mg/L pretreatment unable to test post treadtment as house is abandoned Date Sampled 8/8/16	
235-14.00-52.01	Vacant per zoning	N/A	
235-14.00-53.00	Residential, single dwelling per zoning	Not Sampled as of: 2/17/2014	
235-14.00-54.00	Vacant per zoning	N/A	
235-14.00-55.00	Residential, vis. 4" PVC well # 230756	NO_3= 23.4 mg/L Date Sampled 01/28/2014 Lab ID: L4909504-5 NO3 = 16 mg/L pre treatment 0 mg/L post treatment Sample Date 8/3/16	
235-14.00-56.00	Residential, MH, well location to be determined	Not Sampled as of: 2/17/2014	
235-14.00-57.00	Residential, single dwelling, well in front no ID	NO_3 = 9.52 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-1	
235-14.00-57.01	Residential, MH, vis. 2" PVC well # 104712	Not Sampled as of: 2/17/2014	
235-14.00-58.00	Residential, single dwelling, well per owner	NO_3 = 18.5 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-2	
235-14.00-58.01	Residential, MH, well per owner	NO_3 = 7.90 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-10	
235-14.00-93.00	vis 4" dom. well, no tag and visible 6" ag. Well, permit # 225722	AG Well NO_3 = 6.90 mg/L / Date Sampled: 12/11/2013 / Lab ID: L4862218-9 Domestic Well NO3= 24.5 mg/L / Date Sampled 12/30/2013 Lab ID: L4875980-9	
NOTE: SPREADSHEET USES ZONING INFORMATION AS OF 2/17/2014 ONLINE (http://sussexcountyde.gov/tax-information). CONCENTRATION ON PROPERTIES V			

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
		WELLS WITHIN NOVEMBER 2013 AREA OF INTEREST - IMMEDIATELY CONTIGUOUS	

Tax Map #	Pertinent Well Information	NO3 Results / Date Sampled / Lab ID	DNREC SAMPLING: NO3 Results / Date Sampled / ELS Sample Number
WELLS WITHIN NOVEMBER 2013 AREA OF INTEREST - IMMEDIATELY CONTIGUOUS			

State Permit Number: AGU 1702-S-03
Effective Date: January 1, 2017
Expiration Date: December 31, 2021

AUTHORIZATION TO OPERATE A LAND TREATMENT SYSTEM

FOR THE

AGRICULTURAL UTILIZATION OF SLUDGE AND WASTE PRODUCTS

1. Pursuant to the provisions of 7 Del. C., §6003

   Clean Delaware, LLC.
   P. O. Box 123
   Milton, Delaware 19968-0123

   is hereby granted a permit to operate a land treatment system for:

   - the agricultural utilization of stabilized sludge generated in the treatment of wastewater in Delaware and other land treatable wastes approved by the Department of Natural Resources and Environmental Control;
   - the agricultural utilization of lime stabilized septage and holding tank waste; and,
   - approved wastewater treatment residuals.

   This permit is limited to the application of above materials to the application site(s) designated in this permit.

2. The application rates, monitoring requirements and other permit conditions are set forth in Parts I, II and III hereof.

Bryan A. Ashby

Bryan A. Ashby, Program Manager
Surface Water Discharges Section
Division of Water
Department Of Natural Resources
and Environmental Control

12/30/16
Date Signed

EXM

'It's like living in a cesspool,' Sussex County wonders how far dirty water has spread

Maddy Lauria, The News Journal Published 11:18 a.m. ET April 20, 2018 | Updated 12:50 p.m. ET April 26, 2018

(Photo: Jason Minto, The News Journal)

For nearly five years, Rebecca Woolman's laundry room has been overtaken by a water treatment system. Without it, what comes out of her well wouldn't be safe to drink.

The cumbersome reverse osmosis system was delivered shortly after Clean Delaware LLC, which installs and pumps septic systems and hauls waste, discovered high levels of nitrate in the groundwater beneath the fields it uses to dispose of millions of gallons of sludge every year.

"They got us fresh water right away," Woolman said, pointing to her 5-year-old grandson who was a baby when the contamination was first discovered.

High levels of nitrate in drinking water (https://www.epa.gov/nutrient-policy-data/estimated-nitrate-concentrations-groundwater-used-drinking) are known to cause the potentially fatal blue baby syndrome, which inhibits the blood's ability to carry oxygen. Nitrate contamination has also been increasingly linked to other health impacts such as thyroid cancer, gastrointestinal issues, miscarriages and birth defects.

It is also a widespread pollutant, especially in southern Delaware, where scientific studies have linked it to historical agricultural practices and faulty septic systems when combined with the vulnerable nature of the state's generally sandy, shallow groundwater system.

Sussex County has long been known to have nitrate in its groundwater, but exactly how many places have dangerous levels can be hard to pinpoint and can change with land use and groundwater flow. The state's most recent watershed assessment (http://www.dnrec.delaware.gov/swc/wa/Documents/WAS/Updated%20305b%20and%20303d%20reports/Final%202016%20IR%20with%20appendices%228-17.pdf) found that in 30,000 samples collected statewide between fall 2013 and fall 2015, about 4.5 percent had unsafe levels of nitrates—all of which were in Sussex County.

Water quality data on public water systems (https://drinkingwater.dhss.delaware.gov/), which serve about 82 percent of the state's population, are readily available online, and those systems are required to ensure safe drinking water by both federal and state regulations. But for the other 18 percent of people using private wells (http://dhss.delaware.gov/dhss/dph/hsp/privdw.html), it's up to the homeowner to keep tabs on whether they are drinking dirty water.

. Fullscreen

The groundwater contamination under fields used by Clean Delaware LLC was not discovered until Milton residents voiced concerns with high nitrates in their water. A network of monitoring wells around its Milton-area fields, as well as additional wells at two other sites near Ellendale and Harbeson.

There is no data available to say exactly where that pollution came from, or how long people nearby may have been drinking contaminated water before Clean Delaware offered treatment systems.

Clean Delaware, which has operated since 1992 and employs about 40 people, takes muddy semi-solid waste produced by the company's portable toilet business as well as residential septic tanks, restaurant grease traps, municipal wastewater treatment systems, chicken plants, vegetable processing and even Dogfish Head's nearby brewery and spreads it on farm fields as a fertilizer.

Waste collected by Clean Delaware is treated at the site solely with lime – most of the sludge is already treated through filters and biological processes in septic tanks and treatment plants before it is hauled in – with the intention of killing any remaining harmful bacteria.

Woolman and more than two dozen other families living near those fields received treatment systems shortly after the pollution was discovered, but not everyone is content with that solution.

"It's like living in a cesspool," said Zane Edwards, who lives a few doors down from Woolman and said that some days the stench is overwhelming. "It's just not right."

Edwards and Annie Bishop have lived in their home on Russell Street for 20 years, and claim that when they moved in, their water was clean and safe to drink. They said they refuse to drink the water now, even with the treatment system provided by Clean Delaware.

Buy Photo

Zane Edwards of Milton holds a pan that he uses to feed his cats covered with salt residue from the water filtration system. Clean Delaware had water filtration system installed on Zane's property after nitrate levels were found to be too high, in the farm areas where Clean Delaware sprays their waste. *(Photo: Jason Minto, The News Journal)*

While that system does reduce nitrates, which they said they appreciate, Edwards and Bishop said they are worried that the salt the system needs to run is eating away at their plumbing, caused their water heater to fail and could pose health problems for their pets.

"We're pretty concerned," Bishop said. "It just needs to be taken care of."

When Clean Delaware and the state Department of Natural Resources and Environmental Control tested Edwards' and Bishop's water in early 2014, their well's nitrate level had risen to more than 50 milligrams per liter, Bishop said. That is more than five times the safe drinking water limit.

"Having clean drinking water would be good," Bishop said. "But it's going to take a while. DNREC told us it would never be cleared up in my lifetime."

Buy Photo

Annie Bishop of Milton talks about how the nitrate levels at her home were found to be too high because Clean Delaware was spraying their waste in the farm fields near her house. *(Photo: Jason Minto, The News Journal)*

It is unclear if dangerous levels of nitrate existed before Clean Delaware began its operations, but General Manager Gerry Desmond said the company was willing to take responsibility for the pollution and make sure their close neighbors had a safe supply of drinking water.

"We're trying to be successful, we're not trying to be criminal," he said. "We know the water basically runs east, but that doesn't mean that the water coming on to the property isn't always above the drinking limits set by the EPA. But [we knew the water that was leaving the site] was even higher. So, we're going to say, 'we need to address this.'"

Down to the data

When the first round of test results came back from Clean Delaware's new monitoring wells several years ago, most revealed nitrate concentrations higher than the federal safe drinking water standard of 10 milligrams per liter.

The highest level recorded was 342 milligrams per liter in the groundwater below one of the main application areas near Milton along Del. 30, according to monitoring reports submitted to the state. The most recent tests taken from that same well earlier this year show it has decreased to 121 milligrams per liter, which is still 12 times the legal limit.

Desmond said he was surprised when he saw those initial results.

"We were actually in disbelief," he said. "We said, 'This is bad. We have to make a plan.'"

DNREC told the company it had to stop using one of the Milton-area fields closest to the nearby homes, and Clean Delaware almost immediately dropped one of its largest customers because of that reduction in land, Desmond said.

Company and state officials tested nearby homes in all three towns in case the contamination was traveling offsite, and found at least 28 homes had potentially dangerous levels of nitrate.

Steven Gamski of Milton had a water filter system installed at his home in Milton by Clean Delaware, after nitrate levels were found to be too high, in the farm areas where Clean Delaware sprays their waste. *(Photo: Jason Minto, The News Journal)*

High nitrate levels found in those first well tests led DNREC to issue Clean Delaware a violation notice in 2014, accusing the company of polluting the groundwater by overapplying nutrients to the fields.

State and company officials said Clean Delaware's response to the pollution, including changes in where and how much sludge is spread, have led to a trend of decreasing nitrate levels at most of the sites, said Virgil Holmes, director of DNREC's Division of Water.

"We're seeing what we had hoped to see," Holmes said. "They implemented some measures and we worked with them to change some of their practices. They've cut back on the material they're bringing back to the site. And now we're seeing some reduction in nitrates in the monitoring wells."

Those measures include taking some land near Milton and Ellendale completely out of rotation, increasing buffers, reducing the amount of sludge spread and increasing monitoring.

Desmond said the company has cut about 50 percent of its customer base – mostly municipal customers such as Milton and Lewes – and has started to shift its business focus to trucking waste out of state. A massive fire at the Milton site in 2015 also forced the company to replace equipment. Desmond said they also added additional storage capacity.

The company still land applies hundreds of tons of waste from septic tanks, portable toilets and other sources to about 100 remaining acres on the Milton property.

Quarterly monitoring data confirm that levels have dropped significantly in most of the Milton-area monitoring wells. Still, eight of 11 wells continue to show nitrate concentrations above the safe drinking water standard and a handful of wells have shown some increasing levels of nitrates since 2013, according to a groundwater monitoring summary submitted to DNREC in March.

Nitrate concentrations in the Harbeson and Ellendale sites' wells also have drastically decreased in recent years. That is partly due to the fact that DNREC said Clean Delaware could no longer use the New Market site to the east of Ellendale, which still has nitrate levels above the safe drinking water standard. Clean Delaware's most recent annual report stated that no sludge was applied to the Harbeson site last year.

Where nitrate concentrations have decreased, that pollution has not magically disappeared. It has moved somewhere else in the system.

Holmes said it would be expected that as it moves through the groundwater system, it becomes more diluted and broken down.

"As it's migrating, it is occupying a much bigger area, so it reduces the nutrients as it moves," he said.

The company also hit its highest level of enterococcus in most of the Milton site's wells in summer 2017. Enterococcus is used as an indicator to signal the presence of harmful bacteria that could cause gastrointestinal illnesses.

DNREC issued another violation notice in fall 2017 for putting too much waste on the fields and other technical permit violations. DNREC Surface Water Discharges Section Manager Brian Ashby said that notice has been resolved.

No fines or penalties were issued to Clean Delaware for the violation notices issued in 2014 and 2017.

Lingering concerns

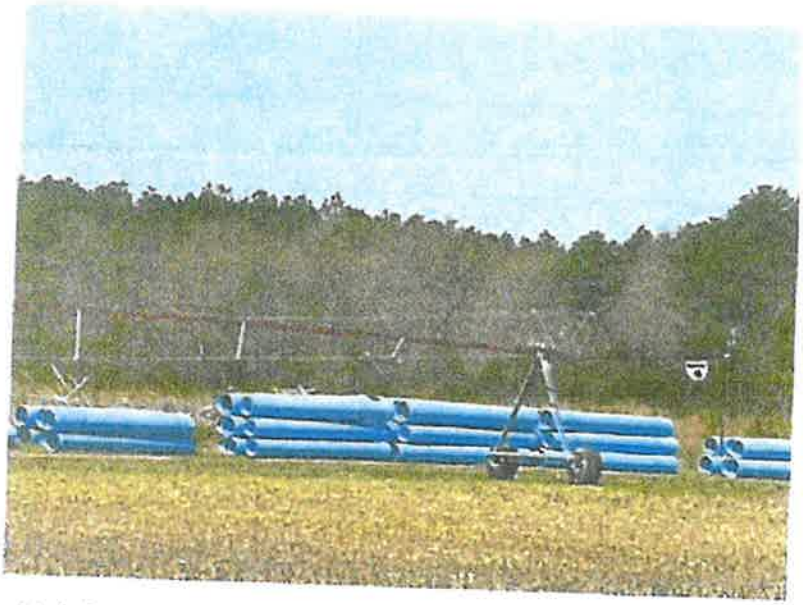
Sussex County residents Andrea Green and Anthony Scarpa are not so sure that DNREC is keeping such a close eye on Clean Delaware, which disposed 409.8 tons of waste on nearly 100 acres near Milton last year.

About a year ago, Green and Scarpa formed a group called Keep Our Wells Clean (http://keepourwellsclean.org/) after learning that Allen Harim Foods was partnering with Artesian Resources Corp. (/story/news/local/2017/11/30/sussex-residents-worry-poultry-wastewater-taint-their-water/907251001/) to dispose of millions of gallons of wastewater on more than 1,000 acres surrounding the Clean Delaware site.

Keep Our Wells Clean has appealed DNREC's approval of the project, which will be heard by the state Environmental Appeals Board (https://dnrec.alpha.delaware.gov/environmental-appeals-board/) on May 22.

Previous violations at the chicken processing plant in Harbeson (/story/news/local/2018/03/28/allen-harim-faces-241-000-fine-previous-water-pollution/467802002/) raised red flags for Green and Scarpa, who have continually questioned in public meetings whether the chicken producer and state officials can be trusted to protect the groundwater from further contamination.

"They do nothing as far as enforcement until they're absolutely forced to," he said. "It's always business as usual. Let's not worry about disrupting people's jobs."



Artesian Resources Corp. is constructing a large wastewater storage lagoon just north of the Clean Delaware site, which will take processed wastewater from Allen Harim's Harbeson poultry processing plant. Neighbors worry that spraying waste on hundreds of acres of farm land around the site could lead to more pollution. *(Photo: Jason Minto, The News Journal)*

They worry that once the Artesian/Allen Harim project is online, water sprayed on a large field across the street from Clean Delaware will eventually make its way into the groundwater system and travel east, where it will push the existing contamination toward people's homes, and possibly even the public water supply of the Town of Milton.

Whether that is what would happen remains unclear. Retired U.S. Geological Survey hydrologist Judy Denver said an extensive groundwater study would be needed to determine whether Clean Delaware really did cause the contamination, and other studies would be needed to determine how Artesian's new partnership with Allen Harim could impact a highly complicated system.

Title 15
DEPARTMENT OF AGRICULTURE

Subtitle 20 SOIL AND WATER CONSERVATION

15.20.07 Agricultural Operation Nutrient Management Plan Requirements

Authority: Agriculture Article, §§ 8-801 to 8-806, Annotated Code of Maryland

Notice of Final Action

[ ]

On December 13, 2016, the Secretary of Agriculture adopted amendments to Regulation .02 under COMAR 15.20.07 Agricultural Operation Nutrient Management Plan Requirements that incorporates by reference changes to the Maryland Nutrient Management Manual on nutrient application requirements. This action, which was proposed for adoption in 43:22 Md. R. 1254 (October 28, 2016), has been adopted with the nonsubstantive changes below.

Effective Date:

Attorney General's Certification

In accordance with State Government Article, §10-113, Annotated Code of Maryland, the Attorney General certifies that the following changes do not differ substantively from the proposed text. The nature of the changes and the basis for this conclusion are as follows:

The following changes correct a spelling error and provide two cross-references to clarify an exception to the winter prohibition against the application of nutrients to agricultural land and nutrient management standards governing emergency applications of organic fertilizer.

E. Prohibition against Winter Application

1. Except as provided in subsections E.2, E.3 and E.4, after July 1, 2016, a person may not make a winter application of a nutrient source to agricultural land.

2. a. The prohibition against making a winter application after July 1, 2016 does not apply to a nutrient source that originates from:

(i) A dairy or livestock operation with less than 50 animal units; or

(ii) A municipal wastewater treatment plant with a design flow capacity of less than 0.5 million gallons per day.

b. This exception to the general prohibition referenced in subsection E.1 expires after the winter application that ends on February 28, 2020.

3. The prohibition against making a winter application does not apply to potash, liming materials, or manure deposited directly by livestock. A person may make a winter application of certain nutrients for greenhouse production and for certain vegetable crops, small fruit crops, small grain crops, and cool season grass sod production listed in the

Maryland Nutrient Management Manual Section I-B.
4. Applications required in emergency situations due to an imminent overflow of a storage facility from on farm generated organic fertilizer shall be managed as provided in III D.2 in consultation with the Maryland Department of Agriculture. Operators in such situations shall contact the MDA regional nutrient management representative for guidance. Operators will be required to enter into an agreement of intent with the Soil Conservation District or private entity that is a certified Technical Service Provider approved by NRCS.

JOSEPH BARTENFELDER
Secretary of Agriculture

NUTRIENT APPLICATION REQUIREMENTS

Attached Document:

Source: Maryland Department of Agriculture 2016
Regulatory Citation: COMAR 15.20.07.02

I. GENERAL GUIDELINES

A. This document addresses (1) Setbacks for Nutrient Application, (2) Application Timing for all nutrients, organic and chemical, and (3) Temporary Field Stockpiling (staging) of Organic Materials. Application of nutrients may vary depending on the crop, season, nutrient source, and weather conditions. A person applying nutrients shall use best management practices, including following these "Nutrient Application Requirements," to maximize plant utilization efficiency as described in Section I-B of the *Maryland Nutrient Management Manual*, and minimize the potential for nutrient movement to sensitive areas and losses to surrounding water bodies, including surface and groundwater.

B. This document does not supersede Maryland Department of the Environment Animal Feeding Operations regulations in COMAR 26.08.01 and 26.08.03.09, or the Maryland Department of the Environment Sewage Sludge Management regulations in COMAR 26.04.06 regarding the requirements for sewage sludge storage, buffer zones, and the incorporation of sewage sludge into the soil by the end of each working day.

C. All materials that provide primary crop nutrients shall be included in, and managed by, a Nutrient Management Plan. These materials include chemical fertilizer, organic materials such as animal manure, sewage sludge, food processing wastes/residuals, spray irrigation from wastewater treatment plants, other waste streams containing nutrients, and soil conditioners/amendments.

D. These Nutrient Application Requirements shall be followed by certified consultants in the development of nutrient management plans, and by operators and applicators during plan implementation in order to comply with COMAR 15.20.08.05H and .05I

II. SETBACKS FOR NUTRIENT APPLICATION

A. "Nutrient Application Setback" means a vegetated area of a prescribed width where nutrient-containing material may not be applied, as measured from the edge of surface water, including perennial and intermittent streams. An intermittent stream means a stream or the reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and ground water discharge. Surface water does not include:

1. Ephemeral streams (defined as streams which flow only in direct response to precipitation in the immediate watershed and which have a channel bottom that is always above the local water table);
2. Irrigation and treatment ditches, as defined under "waters" in COMAR 15.20.08.03(B)(39), and
3. Field ditches, which, for purposes of this exception, are defined as channelized waterways that, as provided in the USDA-NRCS National Cooperative Soil Survey, are not within:
   a. A floodplain soil mapping unit;
   b. A hydric soil unit and mapped as a narrow, elongated feature in a fluvial/floodplain position; or
   c. A soil mapping unit that has a "B" slope class or steeper.

B. Effective January 1, 2014, a person who uses nutrients shall implement the following nutrient application setback requirements:

1. An application of crop nutrients using a broadcast method (e.g., spinners, splashers) either with or without incorporation requires a 35-foot setback.
2. A directed spray application or the injection of crop nutrients requires a 10-foot setback.
3. Excepting perennial forage crops grown for hay or pasture, vegetation in the 10-foot setback area may not include plants that would be considered part of the crop grown in the field.
4. Pastures and hayfields are subject to a 10-foot nutrient application setback.
5. Nutrients may not be applied mechanically within the setback. Except as provided in subsection II.B.6, livestock shall be excluded from the setback to prevent direct deposition of nutrients within the setback.
6. As an alternative to fencing livestock from the setback area, a person shall work with the soil conservation district to develop and implement a Soil Conservation and Water Quality Plan. The plan shall include Best Management Practices (BMPs) such as stream crossings, alternative watering facilities, pasture management or other MDA-approved BMPs that are considered to be equally protective of water quality and stream health.
7. As an alternative to a nutrient application setback, MDA may approve other BMPs that it finds equally protective of water quality and stream health.
8. Sacrifice lots (less than 75% grass or grass legume mix) shall maintain a 35-foot setback.

C. Operators are responsible for sediment and erosion control of stream crossing areas. Operators shall move livestock from one side of the stream to the other side only through stream crossings designed to prevent erosion and sediment loss. Operators shall gate crossing areas wider than 12 feet. Operators may allow livestock controlled access to streams for watering in accordance with USDA-NRCS Field Office Technical Guide standards and specifications.

III. APPLICATION TIMING

A. The consultant, applicator, operator, and the certified farm operator shall comply with the following management requirements when recommending or applying nutrients throughout the year. These requirements separately address the use of (1) chemical fertilizers and (2) organic fertilizers. An organic fertilizer is derived from either a plant or animal product, and contains carbon, and one or more elements other than hydrogen and oxygen that are essential for plant growth. The consultant, applicator, operator, and certified farm operator shall follow the nutrient application recommendations for crops as specified in the Maryland Nutrient Management Manual Section I-B. Nutrients shall be applied as close to plant nutrient uptake period as possible.

B. Spring and Summer (March 1 through September 9)

1. A person may make a nutrient application during the spring-summer time period for an existing crop or a crop to be planted either during this time period or in the fall provided that, for each such crop, the rates and applications are made in accordance with recommendations found in Section I-B of the Maryland Nutrient Management Manual.
2. Nutrient application is prohibited when the soil is saturated, when the ground is covered with snow greater than one inch, or when the ground is hard-frozen greater than two inches.
3. Organic nutrient sources shall be injected or incorporated as soon as possible, but no later than 48 hours after application, except those farm operations that choose to manage their farms to obtain the benefits of no-till farming will not be required to incorporate.

a. MDA reserves the right to require incorporation of organic nutrient sources on a case by case basis.

C. Fall Application (September 10 through December 15)

1. Chemical Fertilizers

A person may make a fall application of a chemical fertilizer for an existing crop or a crop to be planted during this time period provided that, for each such crop, the rates and applications are made in accordance with recommendations found in Section I-B of the Maryland Nutrient Management Manual.

2. Organic Fertilizers

a. General Rules for Fall Application of Organic Sources

(i) Excepting poultry litter, a person may make a fall application of an organic nutrient source for an existing crop or a crop to be planted either during this time period or the following spring (before June 1) provided that, for each such crop, the rates and applications are made in accordance with paragraph 2(b) of this subsection and the recommendations found in Section I-B of the *Maryland Nutrient Management Manual*.

(ii) A person may make a fall application of poultry litter for an existing crop or a crop to be planted during this time period provided that, for each such crop, the rates and applications are made in accordance with paragraph 2(b) of this subsection and the recommendations found in Section I-B of the Maryland Nutrient Management Manual.

b. General Conditions Relating to the Fall Application of Organic Nutrient Sources

(i) A person may make a fall-application on pasture land, hay-land or other acreage under vegetative cover.

(ii) Organic nutrient sources shall be injected or incorporated as soon as possible, but no later than 48 hours after application, except those farm operations that choose to manage their farms to obtain the benefits of no-till farming will not be required to incorporate.

(a) MDA reserves the right to require incorporation of organic nutrient sources on a case by case basis

(iii) A person making a fall-application of an organic nutrient source to fallow cropland shall plant a cover crop as soon as possible after application. The cover crop planting shall occur no later than November 15; and

(iv) The rate of nutrient application shall be determined based on recommendations outlined in Section I-B of the Maryland Nutrient Management Manual using either nitrogen or phosphorus–based criteria.

(v) If the application is phosphorus-based, the phosphorus application rate:

(aa) For a fall-seeded crop, shall be based on the phosphorus recommendations for that crop;

(bb) For crops to be planted the following spring (no later than June 1), may not exceed the one year crop removal rate of phosphorus for the spring-planted crop;

(cc) Shall follow the provisions of the Phosphorus Site Index, as they may otherwise apply; and

(dd) Shall result in an application rate of plant available nitrogen not exceeding 50 lbs. per acre.

(vi) If the application is nitrogen-based, the rate of application for a fall-seeded crop shall be based on recommendations for plant available nitrogen as outlined in Section I-B of the Maryland Nutrient Management Manual. If the application is related to a crop that is to be planted the following spring (before June 1), the application of nitrogen may not exceed 50 lbs. of plant available nitrogen per acre.

(vii) Nutrient application is prohibited when the soil is saturated, when the ground is covered with snow greater than one inch, or when the ground is hard-frozen greater than two inches.

3. Emergency Situations

Applications required in emergency situations due to an imminent overflow of a storage facility shall be managed in consultation with the Maryland Department of Agriculture. Operators in such situations shall contact the MDA regional nutrient management representative for guidance.

D. Winter Application (December 16 through February 28 of the following year)

1. Chemical Fertilizer

As a general rule, a person may not make a winter application of a chemical fertilizer to cropland. However, for small grains and perennial forage crops, a person may apply nitrogen at green-up when tillering begins as recommended in the Maryland Nutrient Management Manual section I-B. In addition, a person may apply certain nutrients for greenhouse production and for other vegetable and small fruit crops listed in the Maryland Nutrient Management Manual Section I-B. The restriction on the application of chemical fertilizers during winter also does not apply to potash or liming materials.

2. Organic Fertilizer

a. A person may make a winter application of an organic nutrient source to cropland only if:

(i) The operation has inadequate storage (i.e the storage capacity will be exceeded before the March 1 winter application restriction);

(ii) The nutrient source is non-stackable; and

(iii) There is no other reasonable option to manage it.

b. Any such application shall be made in accordance with Section I-B of the Maryland Nutrient Management Manual.

c. Operators and generators of organic nutrient sources shall make plans for adequate storage to eliminate the need for a winter application before deadlines described in III. E.

d. The following restrictions apply to any such winter application:

(i) Nutrient application is prohibited during the winter if the organic nutrient source is stackable (equal to or less than 60 percent moisture content, such as poultry litter) or adequate storage is available.

(ii) Nutrient application is prohibited when the soil is saturated, when the ground is covered with snow greater than one inch or when the ground is hard-frozen greater than two inches.

(iii) Nutrient application is prohibited to land with a slope greater than 7 percent.

(iv) Rates of application shall be minimized and available acreage used to the greatest extent practical. In no case shall the application rate per acre exceed the one-year phosphorus removal rate or 50# of plant available nitrogen per acre for the next harvested crop. Any winter applied nutrients will be deducted from the recommendations of the next harvested crop.

(v) Winter applications shall be made on existing vegetative cover, small grain crops, or established hay fields and pastures and maintained as such until March 1st .

(vi)A setback of at least 100 feet from all surface waters shall be maintained, unless best management practices providing water quality protection equivalent to such a setback are in place. (Surface water is defined as any permanent or intermittent, continuous, physical conduit for transporting water. Shovel ditches and water leads are not included as surface waters for purposes of this policy.

(vii) Applications required in emergency situations due to an imminent overflow of a storage facility from on farm generated organic fertilizer shall be managed in consultation with the Maryland Department of Agriculture. Operators in such situations shall contact the MDA regional nutrient management representative for guidance. Operators will be required to enter into an agreement of intent with the Soil Conservation District or private entity that is a certified Technical Service Provider approved by NRCS.

E. Prohibition against Winter Application

1. Except as provided in subsections E.2 [and], E.3 and E.4, after July 1, 2016, a person may not make a winter application of a nutrient source to agricultural land.

2. a. The prohibition against making a winter application after July 1, 2016 does not apply to a nutrient source that originates from:

(i) A dairy or livestock operation with less than 50 animal units; or

(ii) A municipal wastewater treatment [plan] plant with a design flow capacity of less than 0.5 million gallons per day.

b. This exception to the general prohibition referenced in subsection E.1 expires after the winter application that ends on February 28, 2020.

3. The prohibition against making a winter application does not apply to potash, liming materials, or manure deposited directly by livestock. A person may make a winter application of certain nutrients for greenhouse production and for certain vegetable crops, small fruit crops, small grain crops, and cool season grass sod production listed in the Maryland Nutrient Management Manual Section I-B.

4. Applications required in emergency situations due to an imminent overflow of a storage facility from on farm generated organic fertilizer shall be managed AS PROVIDED IN III D.2 [and] in consultation with the Maryland Department of Agriculture. Operators in such situations shall contact the MDA regional nutrient management representative for guidance. Operators will be required to enter into an agreement of intent with the Soil Conservation District or private entity that is a certified Technical Service Provider approved by NRCS.

IV. TEMPORARY FIELD STOCKPILING (STAGING) FOR STACKABLE ORGANIC NUTRIENT SOURCES (EQUAL TO OR LESS THAN 60% MOISTURE CONTENT)

A. General Provisions

1. When other immediate use options and alternatives are not available, temporary field stockpiling (staging) of organic nutrient sources is allowed. Temporary field stockpiling (staging) provides greater environmental protection than a fall or winter application of nutrients or applying nutrients too far ahead of normal planting time and crop uptake.

2. To minimize the duration of temporary field stockpiling (staging), operators shall coordinate with integrators to schedule cleanouts as close to spring planting as possible, thereby providing a source of nutrients that is in phase with crop nutrient needs.

3. Existing storage shall be fully used prior to stockpiling material in the field.

4. Any material staged in a temporary field stockpile shall be land applied in the first spring season following the placement of the stockpile.

B. The temporary field stockpiling (staging) shall be located:

1. If a vegetated buffer is not in place, at least 100 feet from any surface water as defined in COMAR 15.20.08.03(B)(39) and any irrigation or treatment ditches; and if a vegetated buffer is in place, at least 35 feet from any such water;
2. At least 100 feet from wells, springs, and wetlands; however, if the well is located down gradient from the temporary field stockpiling (staging) area, at least 300 feet from the well;
3. At least 200 feet from any residence outside the operator's property;
4. Outside flood prone areas and areas subject to ponding;
5. If located on more than a 3 percent grade slope and no diversion installed, no farther than 150 feet from the top of the slope.

C. Poultry litter and other materials shall be stacked at least 6 feet high and peaked to prevent precipitation from soaking into the pile.

D. Materials shall be field stockpiled (staged) temporarily in a manner that prevents nutrient runoff. Temporary field stockpiling (staging) locations for subsequent piles should stay at the same location, rather than be moved from place to place.

F. All nutrients shall be removed from the temporary field (staged) stockpile and the ground area thoroughly scraped or cleaned when the application of the nutrients takes place.

G. Temporary field stockpile (staged) areas shall be restored to its original condition and, if necessary, reseeded with grass or an agronomic crop to facilitate nutrient uptake.